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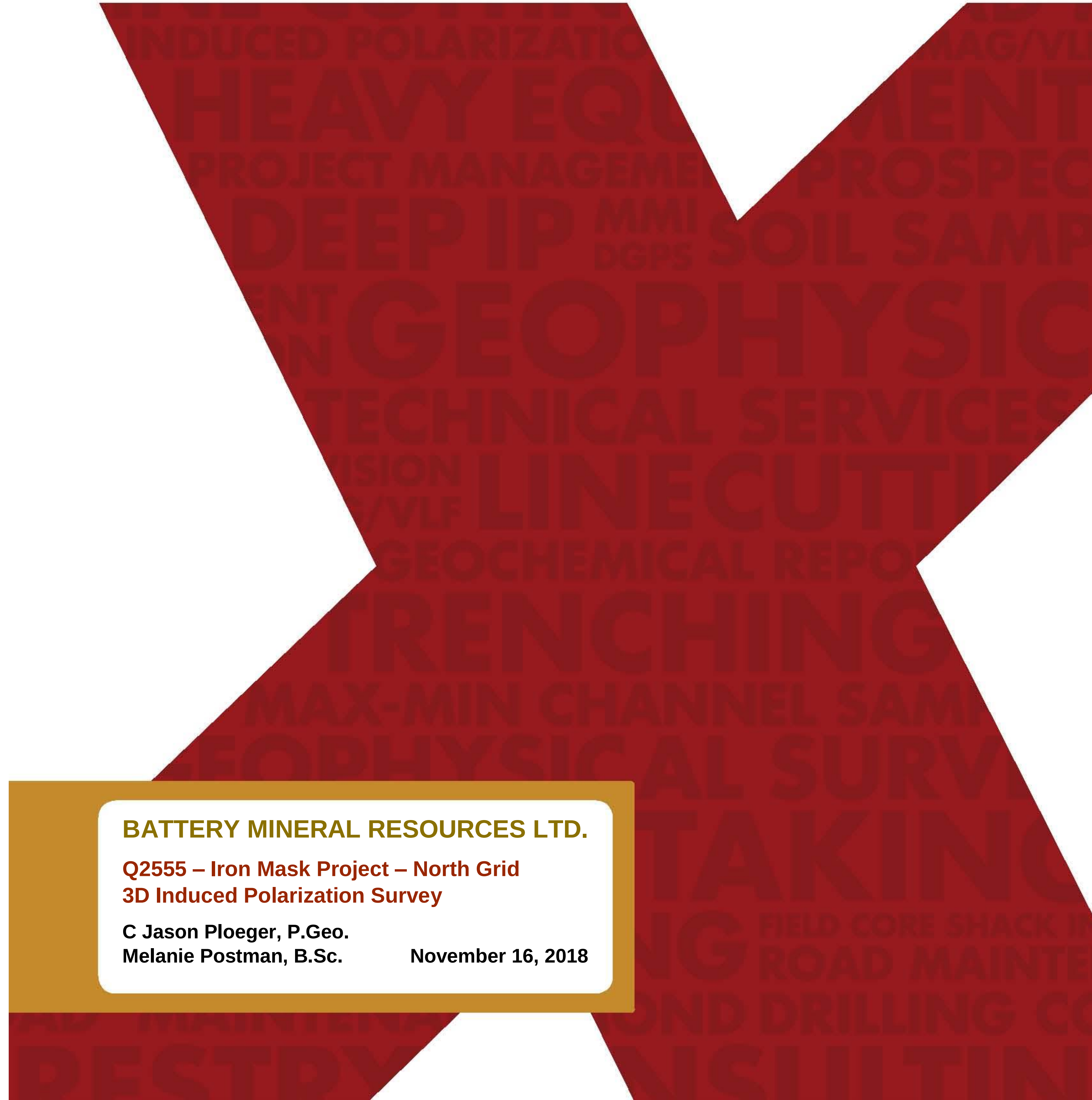

BATTERY MINERAL RESOURCES LTD.

Q2555 – Iron Mask Project – North Grid
3D Induced Polarization Survey

C Jason Ploeger, P.Geo.
Melanie Postman, B.Sc. November 16, 2018

Abstract

CXS was contracted to perform a detailed 3D Distributed IP survey on the Iron Mask Project - North Grid. The survey was designed to perform a detailed multidirectional investigation over the Cobalt Shaft area.

The 3D Distributed IP survey highlighted and defined the mineralized zone that has been previously explored. The survey also indicated the presence of crosscutting features including a structural feature resulting in an offset to the magnetite skarn. The signature produced over the cobalt shaft also appeared to be present on the other side of the offset.

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3D Distributed Array Induced Polarization Survey

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1. SURVEY DETAILS

1.1 PROJECT NAME

This project is known as the **Iron Mask Project – North Grid**.

1.2 CLIENT

Battery Mineral Resources Ltd.

Level 36
Governor Phillip Tower
1 Farer Place
Sydney
Australia

1.3 OVERVIEW

During the summer of 2018, CXS performed a detailed 3D distributed array induced polarization (3D IP) survey for Battery Mineral Resources Limited over the Cobalt Shaft, located on the Iron Mask North Grid. An infinite was placed 2.5 kilometres north of the survey area at 450069E, 5173449N. Twenty logger locations were used with two orthogonal 50 metre dipoles at each logger site. A total of 5.95-line kilometres of current injection was performed at an injection interval of 50 metres. The survey was performed between August 27th, 2018 and August 31st, 2018.

1.4 OBJECTIVE

Earlier in 2018, a pole-dipole 2D induced polarization survey was performed over the Iron Mask North grid. Near the Cobalt Shaft there was speculation of a second, subparallel system. The objective of the 3D IP survey was to detail the subsurface chargeability and resistivity in 3 dimensions, to determine if any subparallel event exists.

1.5 SURVEY & PHYSICAL ACTIVITIES UNDERTAKEN

Survey/Physical Activity	Dates	Total Days in Field	Total Line Kilometres
3D Distributed IP	August 27th, 2018 to August 31st, 2018	5	5.95

Table 1: Survey and Physical Activity Details

1.6 SUMMARY OF RESULTS, CONCLUSIONS & RECOMMENDATIONS

The 3D IP survey highlighted and defined the mineralized zone that has been previously explored. The survey also indicated the presence of crosscutting features including a structural feature resulting in an offset to the magnetite skarn. The cobalt shaft observed signature also appears to be present on the other side of the offset.

1.7 CO-ORDINATE SYSTEM

Projection: UTM zone 17N
Datum: NAD83
UTM Coordinates near center of grid: 451078 Easting, 5170714 Northing

2. SURVEY LOCATION DETAILS

2.1 LOCATION

The Iron Mask Project is located approximately 53 km northwest of Sudbury, Ontario.

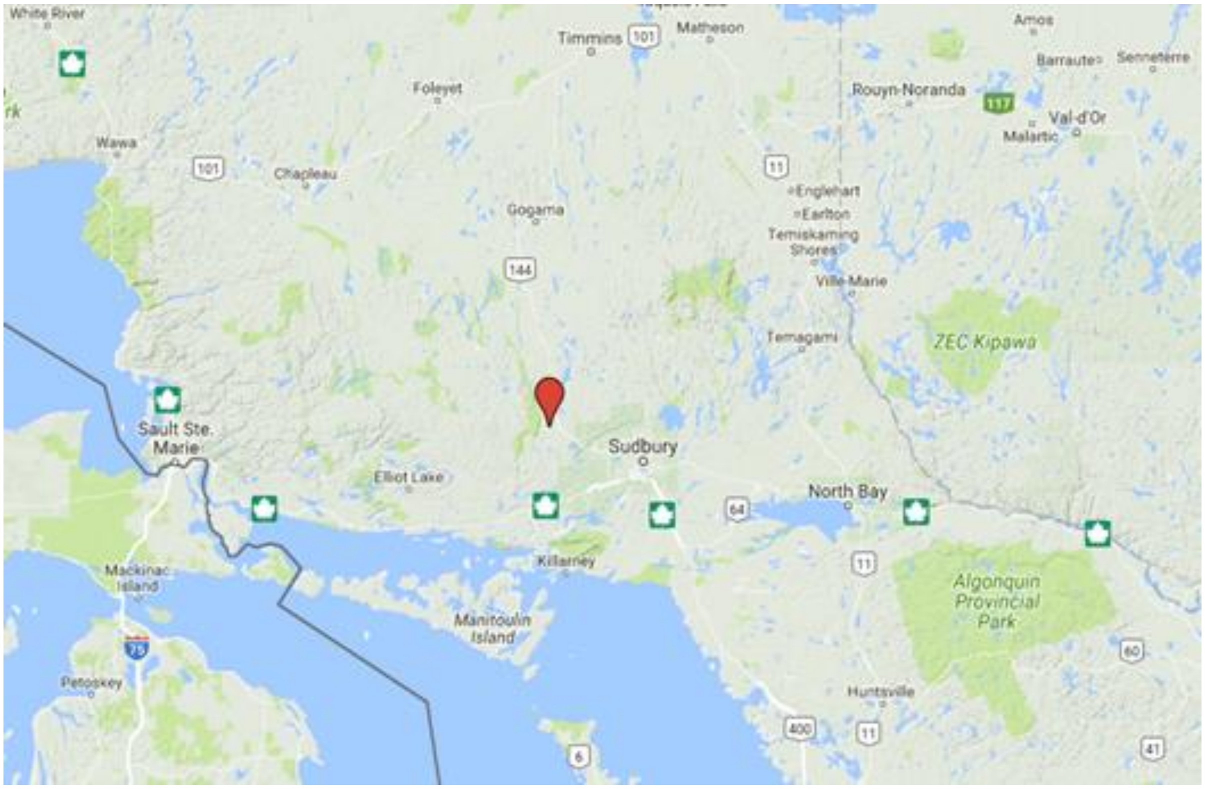


Figure 1: Location of the Iron Mask North Grid (Map data ©2018 Google)

2.2 ACCESS

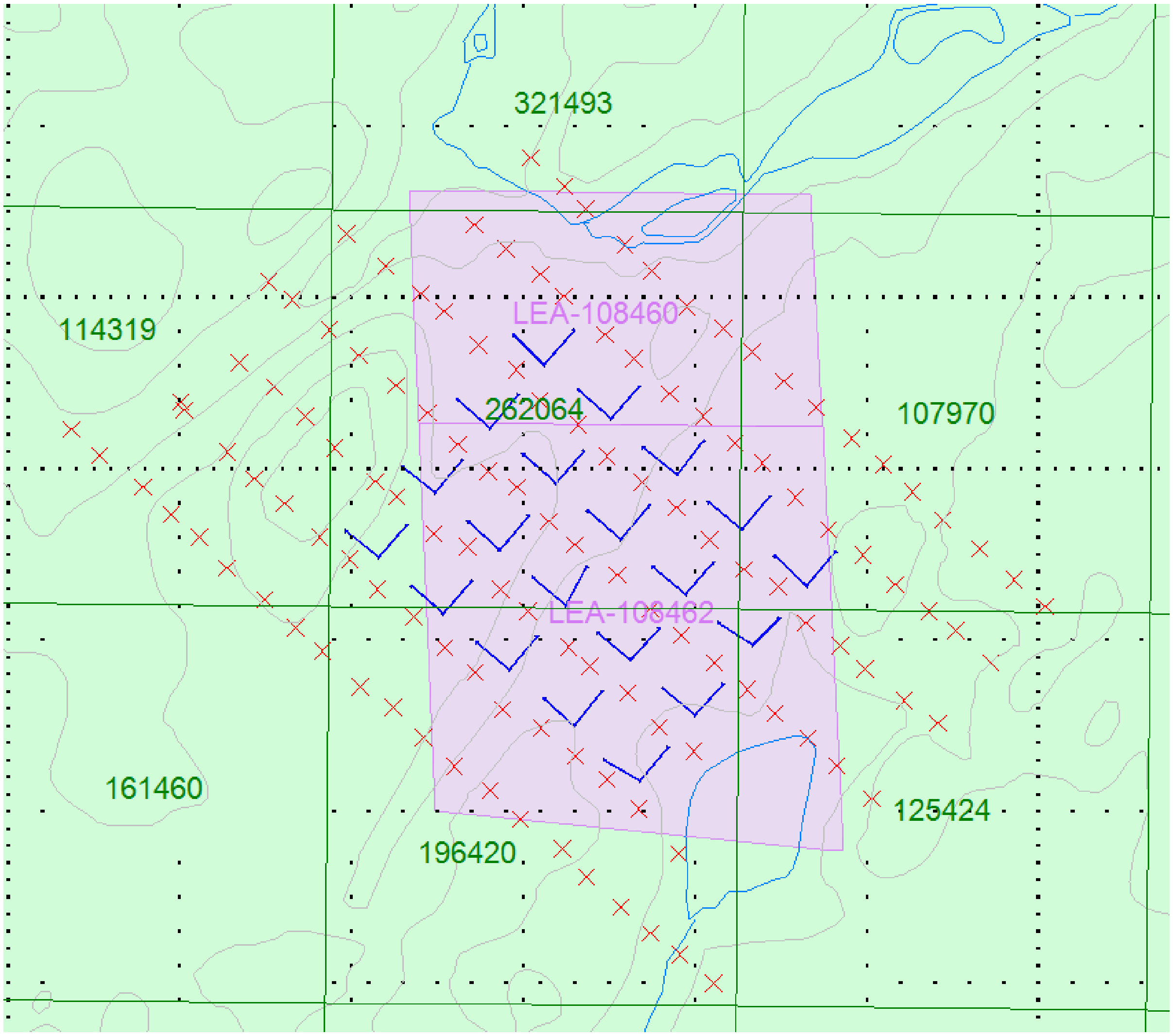
Access to the property was via a 4x4 pickup truck and ATV’s. Highway #144 was travelled north from Sudbury. 2 kilometres north of the town of Cartier, the municipal dump road was travelled west for 6km to the start of the grid. Access to the southern extent of the grid was via an ATV trail that passes all the way through the center of the grid.

2.3 MINING CLAIMS

The survey area covers a portion of mining claims 107970, 125424, 196420, 262064, 114319, 161460 and 321493 a portion of leases LEA-108460 and LEA-108462 located in Hart Township, within the Sudbury Mining Division.

Cell Number	Provincial Grid Cell ID	Ownership of Land	Township
LEA-108460		John Brady	Hart
LEA-108462		John Brady	Hart
107970	41I12J299	John Brady	Hart
125424	41I12J319	John Brady	Hart
196420	41I12J318	John Brady	Hart
262064	41I12J298	John Brady	Hart
114319	41I12J297	John Brady	Hart
161460	41I12J317	John Brady	Hart
321493	41I12J278	Battery Mineral Resources Limited	Hart

Table 2: Mining Lands and Cells Information



<u>Figure 2: Operational Claim Map with 3D IP Electrode Sites – Red=Transmit – Blue=Read Dipole</u>

2.4 PROPERTY HISTORY

The Iron Mask Property has been the focus of a significant amount of exploration in very specific areas for a variety of commodities since the 1920's. Exploration in the Harty and Hess Townships focused on magmatic sulphide deposits in "offset dikes," and exploration in the central Hess and Moncrief Twp. focused on base metals and uranium in Huronian Sediments and the Nipissing Diabase.

- **1929: Iron Mask Cobalt Silver Mines Company or Nickel Hill Syndicate:** Nickel Hill drilled 2000ft of diamond drilling including 2 holes intersected high-grade Cobalt-Nickel mineralisation at 120ft & 160ft depths. A rock grab sample from a 2m wide zone within a 60m zone that assayed **16.9% Co and 7.3% Ni** The Company sank the Iron Mask Shaft and removed a 6-ton sample at an average grade of **15% Co**. They completed 610m of diamond drilling, but logs and assays are not available

- **1954 A. Laundry**: sunk the Cobalt Shaft and discovered Cobalt – No production records

- **1955: Mongul Mining Corp.:** Drilled eleven holes at the Cobalt Shaft, with the best intercept containing **8.06% Zn** (Hinzer and Dunbar, 2002). The company also drilled one hole at the Iron Mask Shaft (Dunbar and Hinzer, 2007)

- **1957-1959 Alcourt Mines Limited:** Completed trenching and drilling of five holes (378m) in Ermatinger Twp. to sample the Huronian-Archean contact for Uranium (Champion Bear, 2003)

- **1960: Geological Survey of Canada:** Flew an Airborne Magnetic survey that identified a 10km long Aeromagnetic anomaly (Dunbar and Hinzer, 2007)

- **1961-1968: A. Lacelle:** Drilled 7 DC holes for 377m, with no assays reported (Lacelle, 1961; 1962; 1968)

- **1965: Salem Explorations Ltd.:** Completed a program of Electromagnetic survey, trenching and drilled 4 DC holes.

- **1965 Salem Explorations Ltd.:** Gravity survey by Keevil Mines (Tagliamonte, 1965)

- **1973: Jar Vin Magnetite Syndicate:** Completed trenching with a plugger hole sampling program (5 holes) in the Iron Mask Shaft area (Dunbar and Hinzer, 2007)

- **1979: B.P. Minerals Limited:** Conducted geological mapping, sampling, & a ground Radiometric survey (Dunbar and Hinzer, 2007)

- **1985: Jedburgh Resources Ltd:** Completed a ground magnetometre survey that outlined strong, 200m-long anomalies coincident with the Iron Mask and Cobalt Shaft locations. The program also included mapping, trenching, and a diamond drilling program across the Cobalt and Iron Mask Shaft areas, and the Henri Zone (Dunbar and Hinzer, 2007)

- **1987: John Brady:** Completed Prospecting and sampling - a sample from a pit near a Salem Explorations drillhole returned **8.9% Co and 5.6% Ni** (Hinzer and Dunbar, 2002)

- **1997: Brady - Frederick W. Breaks (Consulting Geologist):** Reported on described backhoe excavations by Brady at the Iron Mask Shaft that exposed Magnetite-Cobaltite-Chalcopyrite mineralized zones hosted in Quartz Veins and Skarn. The report includes an estimate that this was where 6 tons of material grading **15% Co** was mined (Smith, 2016)

- **1997: Canmine Resources Corp:** Reported a chip sample that contained **11.3% Co** and a grab sample that contained **21.3% Co and 6.19% Ni** from the Cobra Prospect (Hinzer and Dunbar, 2002)

- **1997: W. Meyer, OGS Resident Geologist:** Reported for Romarco Minerals Inc. on Cobalt-Nickel mineralized zone at the Iron Mask and Cobalt Shafts (about 1km apart along a NE strike trend), where grab samples collected by J. Brady assayed up to **21.3% Co, 6.2% Ni, and 7.5% Cu**. The Co-Ni-Cu mineralization was hosted in a Skarn up to 10m thick developed in the Espanola Formation Limestone directly adjacent to a Diabase Sill contact. The mineralized zones were interpreted as the result of a regional hydrothermal system (Smith, 2016)

- **1997: R. Melcher:** Completed a limited rock sampling that included 18 rock grab samples (from the mineralized Skarn Zone). The best 5 samples assayed **1.3%-4.8% Co over widths of 0.6m-1.0m** (with four samples that assayed **2.3%-4.9% Ni)** and two grab samples assayed **16.1-20.9% Co**

- **1998-2003: Champion Bear:** In November 1998 completed a 1,500 line-km Helicopter-borne Magnetic and Electromagnetic survey in November 1998. From October 1998 to October 2000, the company completed detailed geological mapping near the Magnetite and Cobalt Shafts as well as 1,567m of DC drilling to test sulphide Skarns zones at Iron Mask and Cobalt Shaft and the Hess Offset Dyke. In 2003, Champion Bear reported **1.6m grading 16.9% Co, 7.3% Ni, 2g/t) Au** at the Cobra Prospect. (Dunbar and Hinzer, 2007; Smoler and Alexander, 2008)

2.5 GENERAL REGIONAL/LOCAL GEOLOGICAL SETTINGS

The project area contains:

1 Nipissing Diabase, that varies between diabase, gabbro, and amphibolite sub-types. Historic drilling data indicate the Nipissing Diabase in the area is layered, but a clear spatial zonation, or distinct map-view pattern, in the sub-types of the Nipissing Diabase has not been established.
2 Lorrain Formation, that comprises green and pebbly arenites.
3 Gowganda Formation as clast-rich to clast-poor diamictites and sandstones. Clasts in the diamictites are polylithic, typically comprise felsic to intermediate intrusive rocks, and are sometimes oriented into poorly developed foliations. The diamictite matrix is typically dark green and fine grained. The internal stratigraphy of the Gowganda formation in the project area is complex, and

likely comprises many lobes of diamictite deposited in a debris flow dominated depositional environment.

4 Serpent Formation, as quartz-feldspar and calcareous arenite. This unit was only sporadically observed in the field.
5 Espanola Limestone, as well bedded limestone and dolomite (?) layers. The Espanola Formation has been the main target of previous exploration, as it is locally Zn-Ag-Co mineralized.
6 Massive to deformed Archean felsic intrusive rocks, that form the basement rocks in the area, and typically comprise relatively large potassium feldspar and quartz crystals.

Based on the historic data and the current mapping, the Iron Mask North project is interpreted to be hosted in an outlier sub-basin of the larger Huronian Basin. The available data indicate that normal faults transected the Archean basement and likely controlled deposition of Huronian Group sediments into a NE-trending graben. These faults also likely controlled emplacement of the Nipissing Diabase, and were inverted during later deformation. This structural and stratigraphic architecture indicates the sub-basin was hydrological sealed and may have been a closed system during hydrothermal alteration and mineralization. This closed basin architecture is interpreted as conducive to cobalt mineralization in the Proterozoic.

<u>Mineralized Rocks</u>

Known mineralized zones are hosted in the Espanola Limestone, Nipissing Diabase, Serpent Formation (calcareous portions), and the Gowganda Formation. However, only the Espanola Limestone and Nipissing Diabase are known to locally host ore-grade concentrations of cobalt.

The cobalt-mineralized Espanola Limestone formation (Cobalt Shaft) occurs at the contact with Nipissing Diabase, and is interpreted as a zinc skarn system. Immediately adjacent to the cobalt mineralized zone in the Espanola Limestone, the Nipissing Diabase contains semi-massive to massive magnetite mineralized zones, that may be classified as endoskarn. The known cobalt mineralized Nipissing Diabase (Magnetite (or Iron Mask) Shaft) contains cobaltite as disseminated blebs in a chlorite matrix, that may also be classified as an endoskarn type of mineralized zone.

2.6 TARGET OF INTEREST

The targeting for the survey was a historic location known as the Cobalt Shaft. Historically large cobalt assays were recovered from this shaft area. The survey was designed to model the chargeability and resistivity in 3 dimensions to create a better model of the known mineralization.

3. PLANNING

3.1 EXPLORATION PERMIT/PLAN

The exploration program was designed to use a historic grid and no new survey lines were required to be established for this program. The 3D Induced Polarization survey was performed over mining claims and leases held by John Brady and mining claims held by Battery Mineral Resources Limited. This required plans are PL-17-10737 and PL-17-10736, for the entire area of the survey coverage.

3.2 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 50-metre dipole lengths (grid north-south and grid east-west). Current injections were planned at 50-metre intervals along the historic cut lines. The infinite was planned far from the survey location to achieve a pole-dipole array scenario. A theoretical depth of 245 metres was obtained from the software with this layout.

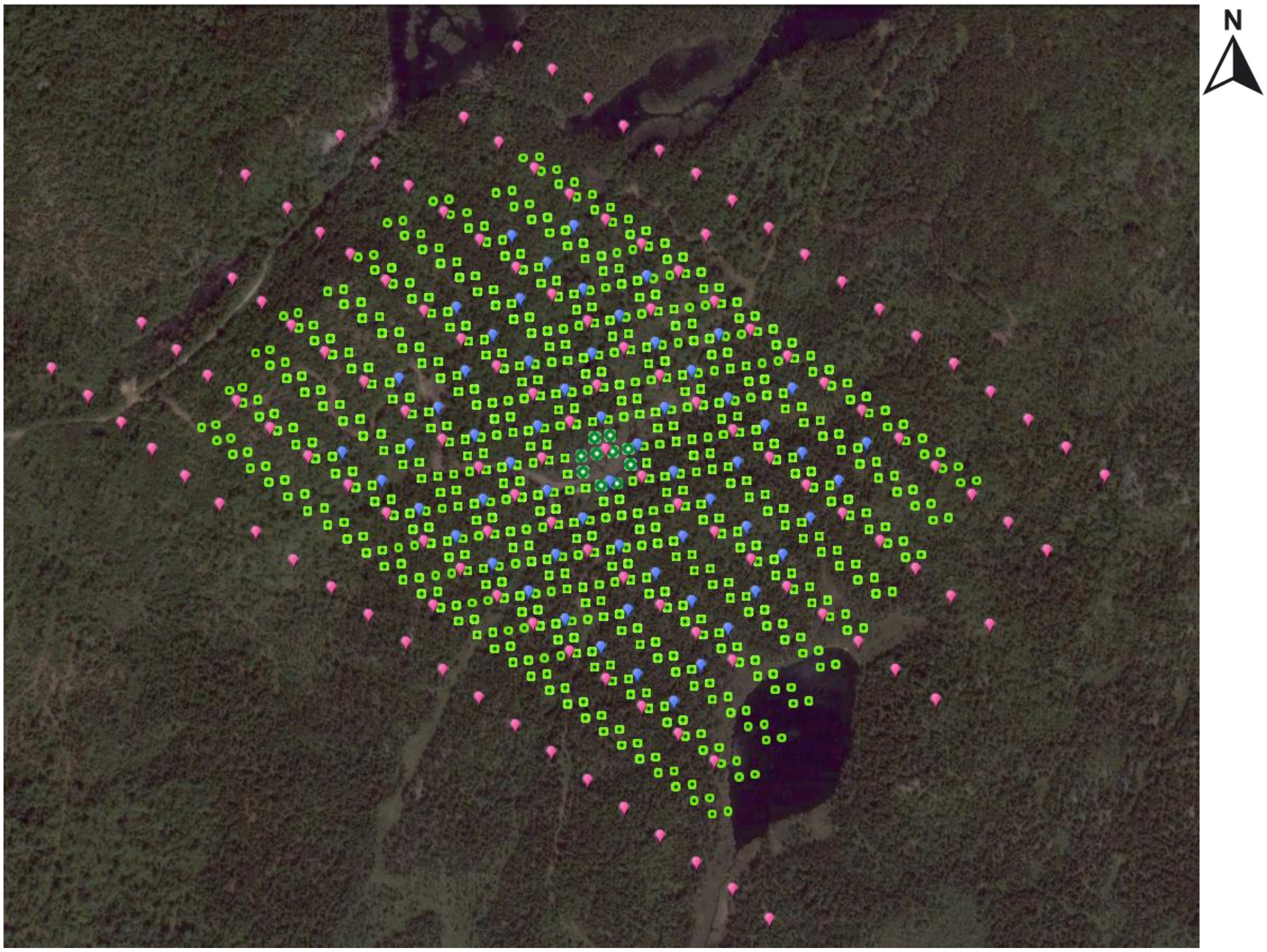


Figure 3: Survey Design Model Looking Down – Red=Current Injection, Blue=Receiver Electrodes, Green=Theoretical Data Point (©2018 Google, Image ©2018 DigitalGlobe)

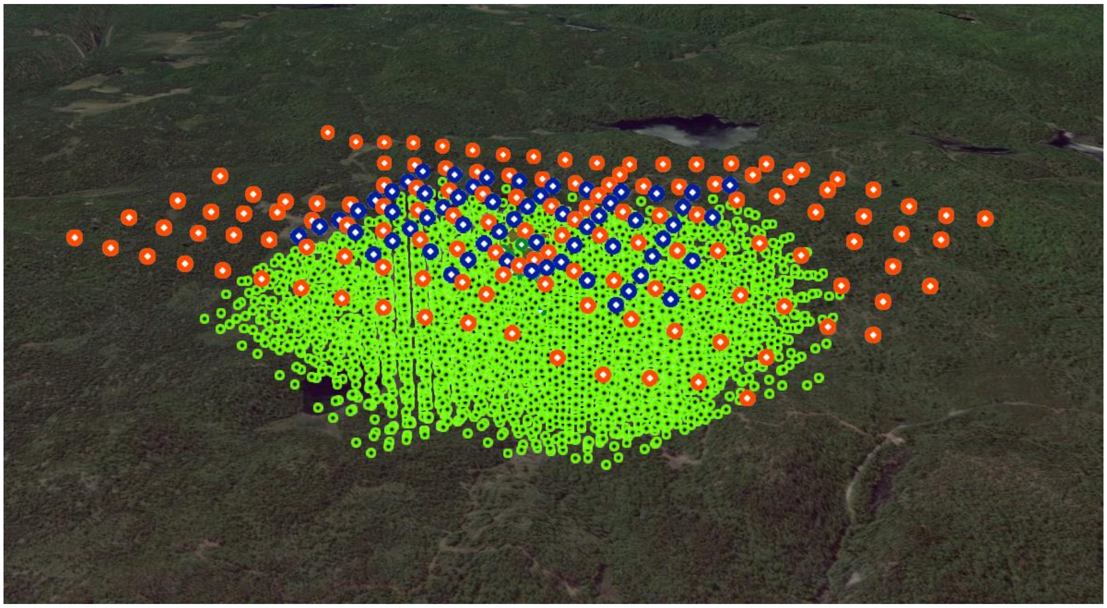


__Figure 4: Survey Design Model Looking Southwest – Red=Current Injection, Blue=Receiver Electrodes, Green=Theoretical Data Point (©2018 Google, Image ©2018 DigitalGlobe)__

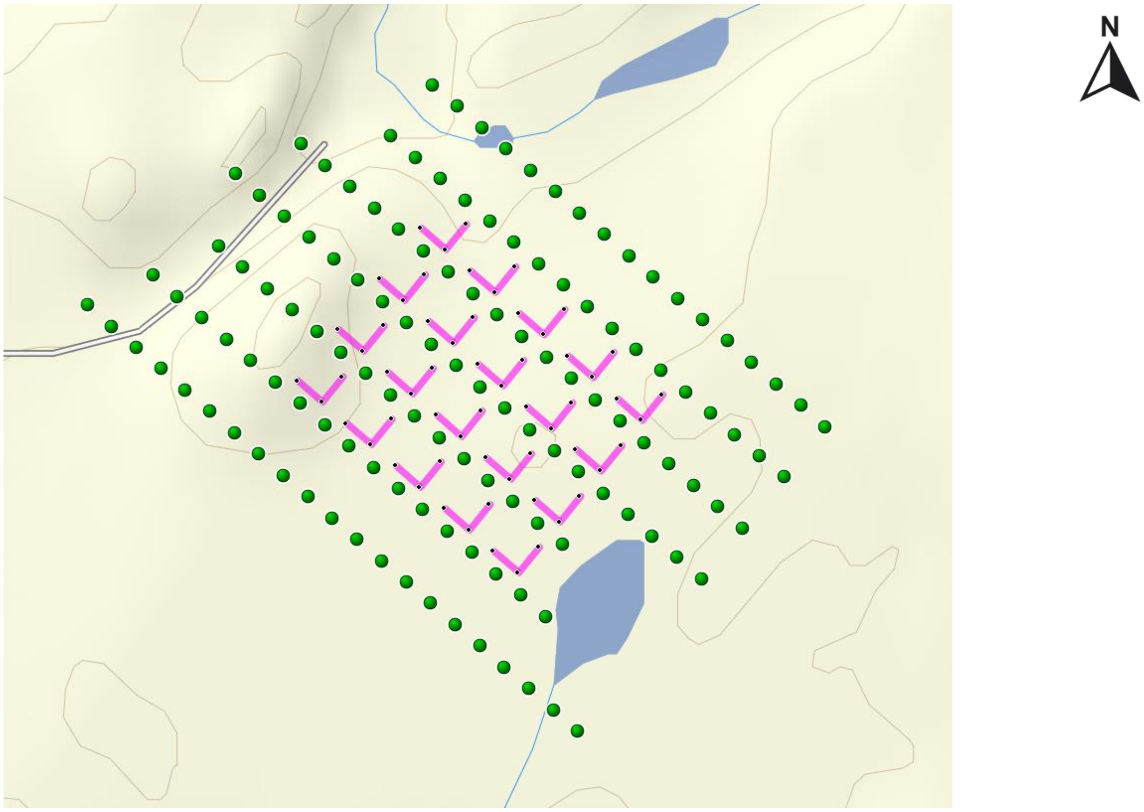


__Figure 5: Planned Survey Layout – Green Circles=Current Injections, Pink Lines=Dipoles, Black Dots=Read Electrodes__

4. SURVEY WORK UNDERTAKEN

4.1 SUMMARY

CXS was contracted to perform a 3D IP survey over the Cobalt Shaft Area on the Iron Mask Project. The crew began to occupy the site in late August at which time they were able to complete the survey.

A total length of 5.95 kilometres was covered with 126 injected current points for this 3D Distributed Induced Polarization survey occurring between August 27th, 2018 to August 31st, 2018. Collected GPS locations were applied to the electrode field locations. The survey area footprint was 0.6 km^2 (600x1000m).

4.2 SURVEY GRID

The original Iron Mask North grid consisted of 34.25 kilometres of previously established grid lines. The grid lines were spaced at 100-metre increments going from Line 0E (southwest) to Line 3200E (northeast), with stations picketed at 25-metre intervals along these lines from 500S (southeast) to 500N (northwest). The N40°E baseline began in the southwest at 0E and extended to 3200E.

The 3D IP survey was conducted over lines 0E through 600E of the original Iron Mask North Grid. The cut survey lines were used for current lines, with current being injected at 50 metre intervals. The orthogonal read dipoles were designed as 50m dipoles between the current lines.

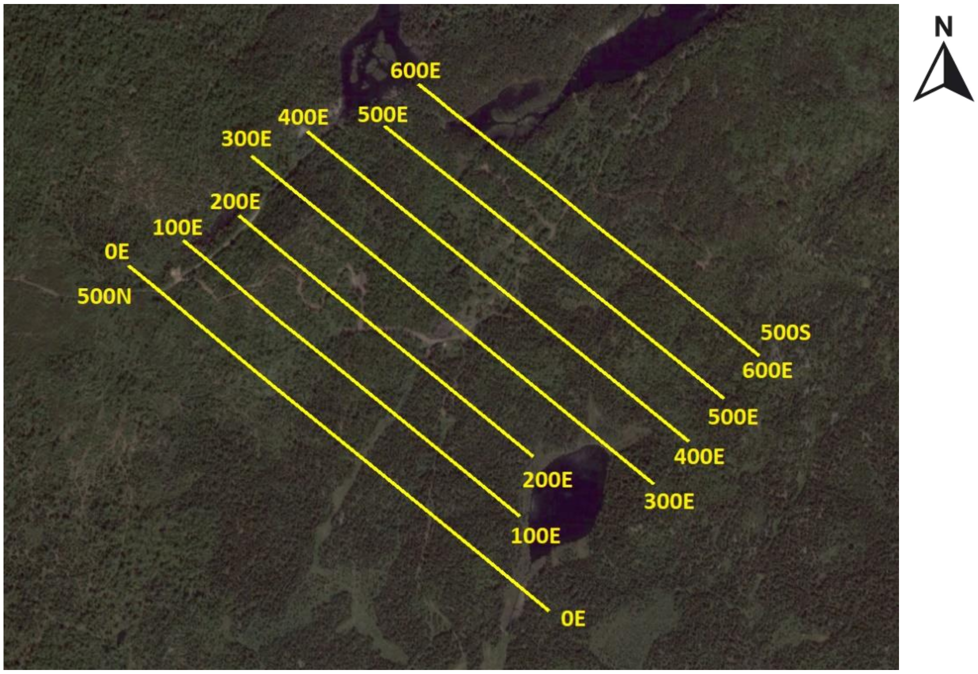


Figure 6: Previously Cut Survey Grid Image (©2018 Google, Image ©2018 DigitalGlobe)

4.3 SURVEY SETUP

20 receivers were placed in 20 previously selected locations in between the grid lines. Each receiver was connected to 2 relatively orthogonal, ~50-metre dipoles (grid north-south and grid east-west). The coordinates of the read electrodes were recorded by GPS and are listed in Table 4. Due to field conditions exact locations and directions were not always achieved. The infinite was located approximately 3.1 kilometres north from the centre of the survey area at 449873E, 5173505N to achieve a pole-dipole array scenario. The survey layout covered a footprint of 0.6 km^2 with dimensions 0.6km (X) x 1.0km (Y).

Read Electrode	UTM X (m)	UTM Y (m)
402-P1	450794	5170727
402-P2	450832	5170696
402-P3	450864	5170733
403-P1	450870	5170662
403-P2	450907	5170630
403-P3	450940	5170668
404-P1	450946	5170597
404-P2	450984	5170565
404-P3	451016	5170603
405-P1	451025	5170531
405-P2	451060	5170500
405-P3	451092	5170539
406-P1	451095	5170460
406-P2	451136	5170435
406-P3	451169	5170474
407-P1	451163	5170543
407-P2	451201	5170512
407-P3	451233	5170548
408-P1	451087	5170608
408-P2	451125	5170577
408-P3	451158	5170613
409-P1	451012	5170673
409-P2	451049	5170640
409-P3	451074	5170684
410-P1	450936	5170738
410-P2	450972	5170705
410-P3	451006	5170744
411-P1	450859	5170802
412-P1	450924	5170880
412-P2	450961	5170847
412-P3	450994	5170886
413-P1	451000	5170816
413-P2	451038	5170782
413-P3	451070	5170820
414-P1	451075	5170750
414-P2	451114	5170717
414-P3	451147	5170756
415-P1	451151	5170685
415-P2	451190	5170653
415-P3	451222	5170690
416-P1	451228	5170620
416-P2	451267	5170594
416-P3	451298	5170625
417-P1	451293	5170697
417-P2	451331	5170663
417-P3	451364	5170702
418-P1	451216	5170760
418-P2	451255	5170729
418-P3	451287	5170767
419-P1	451140	5170824
419-P2	451179	5170793
419-P3	451211	5170832
420-P1	451065	5170891
420-P2	451102	5170858
420-P3	451135	5170895
421-P1	450989	5170955

411-P2	450897	5170772	421-P2	451025	5170921
411-P3	450929	5170809	421-P3	451059	5170961

Table 3: Receiver Electrode Coordinates

4.4 DATA ACQUISITION

CXS began acquiring data on August 29th, 2018. Current injection sites were injected along the historic grid lines at approximately 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 126 current injection locations.

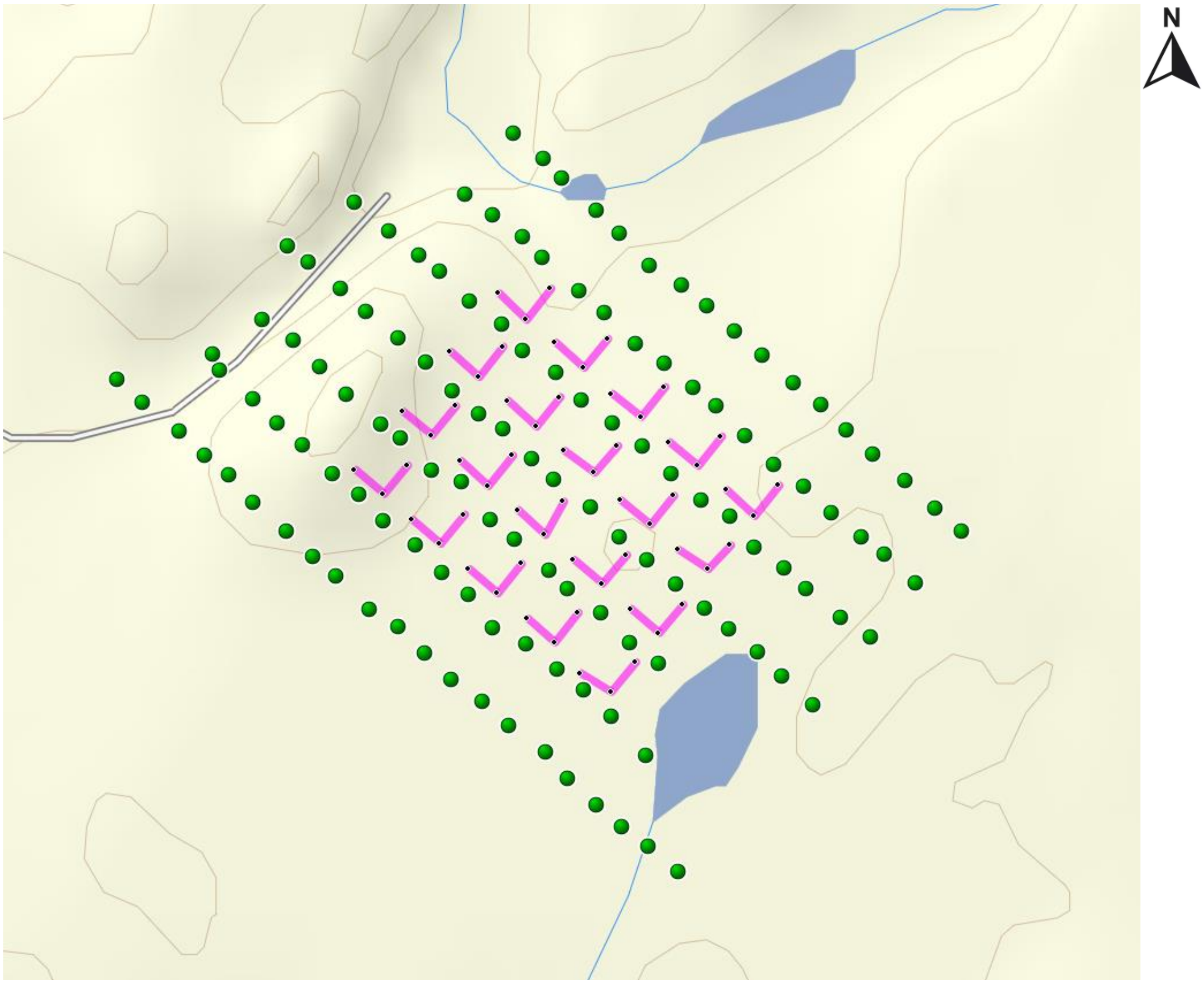


Figure 7: Field Survey Layout with Injection Sites (green dots) in Mapsource

Figure 8: Receiver Dipole Orientations on Google Earth (©2018 Google, Image ©2018 DigitalGlobe)

Figure 9: Topographical Relief with the Survey Deployment Looking Southwest (Image ©2018 DigitalGlobe, ©2018 Google)

4.5 SURVEY LOG

3D IP Survey Log

Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
August 27, 2018	Mobilize to Levack. Locate survey area. Begin establishing logger sites and infinite.	-	-	-	-
August 28, 2018	Continue to establish logger and infinite site.	-	-	-	-
August 29, 2018	Finish setting up survey and begin survey.	0E	500S	500N	1000
		100E	350S	100S	250
		27 Injections			**1250**
August 30, 2018	Continue survey.	100E	100S	450N	550
		200E	300S	400N	700
		300E	500S	450N	950
		400E	500S	400N	900
		500E	500S	100S	400
		74 Injections			**3500**

3D IP Survey Log					
Date	**Description**	**Line**	**Min Extent**	**Max Extent**	**Total Survey (m)**
August 31, 2018	Complete survey as designed. Recover all equipment and demob.	500E	100S	300N	400
		600E	500S	300N	800
		25 Injections			**1200**
Total	**5.95 Line Kilometres / 126 Injections**				

Table 4: 3D IP Survey Log

4.6 PERSONNEL

Crew Member	**Position**	**Resident**	**Province**
Bruce Lavalley	Crew Chief	Britt	Ontario
Claudia Moraga	Transmitter Operator	Britt	Ontario
Neil Jack	Transmitter Operator	Kirkland Lake	Ontario
Kris Kapostins	IP Technician	Larder Lake	Ontario
Andrew Johnson	IP Technician	Kirkland Lake	Ontario
C Jason Ploeger	Senior Geophysicist	Larder Lake	Ontario
Melanie Postman	Junior Geophysicist	Larder Lake	Ontario

Table 5: CXS Induced Polarization Personnel

4.7 FIELD NOTES: CONDITION AND CULTURE

The average weather over the five field days was 14 degrees Celsius, with rain for the first two and a half days. This resulted in wet conditions for most of the survey.

No significant culture was encountered in this survey area. The only culture of note was a historic shaft/pit and some diamond drill casings. Topographical features and ground characteristics along the read dipoles and current injection lines are noted in the following two tables (Table 6 & 7, respectively).

Logger Field Notes
(Soil/Topography/Vegetation/Culture
notes on dipoles and corresponding electrodes P1/P2/P3)

404	**Soil**	P1 rocky – P2/P3 rocky / mossy
	Topo	P1 slope east & incline – P2/P3 flat
	Veg	All electrodes surrounded by mix bush – Creek between P2 to P1
405	**Soil**	P1 rocky – P2/P3 rocky / mossy
	Topo	P1 downhill – P2/P3 flat
	Veg	All electrodes surrounded by mix bush
406	**Soil**	All electrodes are in mossy/rocky ground
	Topo	P1/P2 flat – P3 slope south & incline
	Veg	P1 pine – P2/P3 mix bush
409	**Soil**	P1 rocky / outcrop – P2 rocky / mossy – P3 rocky / muddy
	Topo	P2 up & down
	Veg	P1 beside creek / alder / mix bush – P2/P3 mix bush
	Culture	P3 beside drill trail & shaft nearby
	Other	Original location of P3 changed due to large outcrop
410	**Soil**	P2/P3 sand / boulders – P2 to P1 rocky
	Topo	Both P2 to P1 & P2 to P3 slightly uphill
	Veg	P2 to P1 balsam – P2 to P3 mixed
	Culture	P2 to P1 crosses road 5m N of logger – P2 to P3 crosses road 5m E
411	**Soil**	All electrodes in rocky soil
	Topo	P1 top of hill – P2 slope E & incline – P3 flat
	Veg	All electrodes surrounded by mix bush
	Culture	P2 beside drill trail
412	**Soil**	P1 wet / mossy – P2 rocky – P3 sand / boulders
	Topo	P2 to P1 slight downhill – P2 to P3 side hill
	Veg	P2 to P1 mix (alder/birch/ash) – P2 to P3 mix (birch/pine/balsam)

Logger Field Notes (Soil/Topography/Vegetation/Culture notes on dipoles and corresponding electrodes P1/P2/P3)		
413	**Soil**	All electrodes in rocky soil
	Topo	P2 to P1 very rough, slight uphill – P2 to P3 slight uphill
	Veg	P2 to P1 balsam – P2 to P3 mixed (pine/balsam/birch)
414	**Soil**	P1/P3 sand / boulders – P2 wet / mossy / in swamp
	Topo	P2 to P3 flat
	Culture	P2 to P3 road runs parallel 10m N – P2 to P1 cross road 15m N of logger
415	**Soil**	P1 rocky – P2 rocky / mossy – P3 rocky / mossy / boulders
	Topo	P1 up & down – P2/P3 flat
	Veg	All electrodes in mix bush – P1 beside a small creek
416	**Soil**	P1 rocky – P2 top of rock / rocky – P3 mossy / rocky
	Topo	P1 flat – P3 smooth downhill (S)
	Veg	P1 balsam – P2/P3 mix bush
	Culture	P2 road nearby
417	**Soil**	P1 rocky / mossy – P2 rocky – P3 top of rocky area
	Topo	P1 flat – P2 flat at top of hill – P3 uphill
	Veg	All electrodes surrounded by mix bush
418	**Soil**	P1/P2 rocky / mossy – P3 swampy / mossy
	Topo	All electrodes in flat ground
	Veg	P1/P2 mix bush – P3 pine
419	**Soil**	P1 large outcrop – P3 wet / mossy
	Topo	P2 to P3 flat
	Culture	P2 to P1 cross road 5m N of logger – P2 to P3 road runs parallel 5-20m N – trench 20N/10W of P1
	Other	P1 moved due to large outcrop

Logger Field Notes
(Soil/Topography/Vegetation/Culture
notes on dipoles and corresponding electrodes P1/P2/P3)

420	**Soil**	All electrodes in sandy ground with boulders
	Topo	P2 to P1 rough (up & down) – P2 to P3 moderate uphill
	Veg	P2 to P1 mix bush (balsam/pine/birch) – P2 to P3 mix bush
421	**Soil**	P1 very rocky / mossy – P2/P3 rocky
	Topo	P1 up/down – P2 downhill S – P3 downhill E
	Veg	All electrodes surrounded by mix bush

Table 6: Logger Electrode & Dipole Field Notes

Current Electrode	UTM X (m)	UTM Y (m)	Ground & Surrounding Area Characteristics
Line 0E			
500N	450474	5170846	Spongy Marsh
450N	450507	5170815	Out of the marsh, good soil
400N	450557	5170778	Steep rocky uphill
350N	450590	5170746	Top of incline, very rocky
300N	450623	5170720	Top of outcrop, very rocky
250N	450655	5170684	Incline down, somewhat rocky
200N	450699	5170647	Flat and still rocky
150N	450735	5170614	Bottom of gully, rocky with some tallus
100N	450766	5170587	Down off a high patch, going into swamp
50N	450810	5170545	Up on high rocky ground
0	450849	5170521	Edge of outcrop, good soil
50S	450884	5170486	Rocky marsh
100S	450920	5170452	Rocky, higher ground
150S	450962	5170424	Swamp
200S	450997	5170391	Out of swamp and onto rocky ground
250S	451046	5170356	Rocky ground
300S	451074	5170323	Rocky ground
350S	451114	5170288	Rocky ground
400S	451148	5170258	Edge of marsh
450S	451183	5170233	Edge of creek with small pond
500S	451222	5170199	Rocky ground
L100E			

Current Electrode	UTM X (m)	UTM Y (m)	Ground & Surrounding Area Characteristics
450N	450601	5170878	Swamp
400N	450611	5170857	Edge of swamp
350N	450656	5170819	Rocky ground
300N	450687	5170788	Rocky ground
250N	450722	5170759	Edge of big outcrop
200N	450763	5170720	Rocky ground
150N	450798	5170694	Edge of outcrop
100N	450830	5170659	Rocky ground
50N	450873	5170627	Rocky ground
0	450909	5170591	Rocky ground
50S	450959	5170551	Swamp
100S	450976	5170519	Drill pad
150S	451021	5170497	Rocky spots
200S	451061	5170464	Wet marshy ground
250S	451101	5170432	Rocky ground
300S	451139	5170400	Rocky ground
350S	451176	5170368	Beside small lake
L200E			
400N	450669	5170923	Rocky ground
350N	450710	5170895	Steep rocky ground
300N	450746	5170861	Steep rocky ground
250N	450781	5170824	Rocky – top of hill
200N	450828	5170785	Steep downhill
150N	450853	5170767	Rocky ground
100N	450896	5170724	Edge of drill pad
50N	450935	5170709	Rocky ground
0	450974	5170659	Rocky ground
50S	451006	5170633	Swampy
100S	451053	5170592	Little rocky and swampy
150S	451078	5170569	Little rocky
200S	451122	5170538	Little rocky
250S	451159	5170498	Mossy swamp
300S	451199	5170470	Mossy swamp
L300E			
450N	450704	5171018	Bottom of cliff - tallus
400N	450731	5170997	Bottom of cliff near creek

Current Electrode	UTM X (m)	UTM Y (m)	Ground & Surrounding Area Characteristics
350N	450774	5170962	Large outcrop
300N	450809	5170932	Side of outcrop
250N	450852	5170897	On top of big outcrop
200N	450889	5170865	Edge of the swamp and rocky
150N	450924	5170828	Rocky downhill
100N	450959	5170797	Rocky downhill
50N	450993	5170778	Rocky ground
0	451030	5170738	Rocky ground
50S	451060	5170711	Tx area – Cobalt shaft area
100S	451110	5170676	Rocky with some swamp
150S	451148	5170636	Rocky ground
200S	451184	5170605	Rocky ground
250S	451223	5170573	Rocky ground
300S	451261	5170542	Uphill and rocky
350S	451293	5170514	Swampy on lake shore
400S	451332	5170485	Swampy on lake shore
450S	451365	5170453	Flat near lake
500S	451406	5170415	Rocky with stumps on incline
L400E			
400N	450794	5171074	Broken rocks in valley
350N	450840	5171036	Hillside and rocky
300N	450881	5171004	Outcrop and rocky
250N	450908	5170983	Hillside and rocky
200N	450948	5170944	Rocky
150N	450992	5170915	Broken rock and boulders
100N	451019	5170879	Flat and Rocky
50N	451064	5170851	Flat and Rocky
0	451098	5170814	Small swampy area
50S	451139	5170784	Next to a trench
100S	451179	5170754	Close to swamp and trail
150S	451217	5170717	Rocky ground
200S	451257	5170682	Rocky ground
250S	451297	5170662	Wet and marshy
300S	451329	5170620	Rocky ground
350S	451369	5170593	Flat and Rocky
400S	451398	5170566	Flat and Rocky
450S	451444	5170529	Flat and Rocky

Current Electrode	UTM X (m)	UTM Y (m)	Ground & Surrounding Area Characteristics
500S	451483	5170503	Flat and Rocky
L500E			
300N	450943	5171084	Rocky hillside
250N	450980	5171056	Rocky hillside
200N	451020	5171027	Tallus
150N	451047	5171001	Tallus hillside
100N	451095	5170956	Rocky hillside
50N	451129	5170928	Rocky hillside
0	451171	5170887	Flat area next to trail
50S	451210	5170861	Near trench and drilling
100S	451247	5170830	Swamp
150S	451279	5170806	Swamp
200S	451317	5170766	Swamp
250S	451356	5170729	Rocky side of hill
300S	451396	5170699	Top of hill, outcrop
350S	451433	5170665	Rocky side of hill
400S	451473	5170633	Flat and rocky
450S	451504	5170611	Flat and rocky
500S	451545	5170573	Top of hill, rocky
L600E			
300N	451009	5171163	Rocky ground
250N	451048	5171129	Some clay
200N	451073	5171103	Rocky ground next to Pond
150N	451119	5171061	Rocky ground next to Pond
100N	451150	5171031	Good ground
50N	451191	5170989	Area of deadfall
0	451233	5170963	Rocky ground
50S	451267	5170936	Rocky ground
100S	451304	5170902	Mossy swamp
150S	451341	5170871	Rocky ground
200S	451383	5170835	Swamp
250S	451420	5170805	Rocky ground
300S	451453	5170773	Rocky ground
350S	451489	5170740	Rocky ground
400S	451532	5170706	Rocky ground
450S	451572	5170670	Rocky ground

Current Electrode	UTM X (m)	UTM Y (m)	Ground & Surrounding Area Characteristics
500S	451608	5170639	Rocky ground

Table 7: Current Injection Field Notes

4.8 SAFETY

Canadian Exploration Services Ltd 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
August 27, 2018	Truck and trailer safety and safety checks for mobilization.
August 28, 2018	High voltage signs. Infinite running down public access road. Ensure wire is hung high and signs posted at all crossings.
August 29, 2018	Wet conditions create dangerous conditions in bush.
August 30, 2018	ATV safety. PPE / Drive according to conditions, check fluids, suspension, tire pressure.
August 31, 2018	Weekly review.

Table 8: Daily Safety Topics

5. INSTRUMENTATION & METHODS

5.1 INSTRUMENTATION[1]

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.

5.2 THEORETICAL BASIS

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 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.

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[1] Refer to appendix B for instrument specifications.

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 50m 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 7 historic grid lines striking at 310 degrees used for power locations. Along each line the power transmits were injected at approximately every 50m. The maximum theoretical depth obtained was approximately 245 metres. The second current electrode (the infinite) was stationary for the entire survey at 449873E, 5173505N. The infinite was approximately 3.1km north 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.

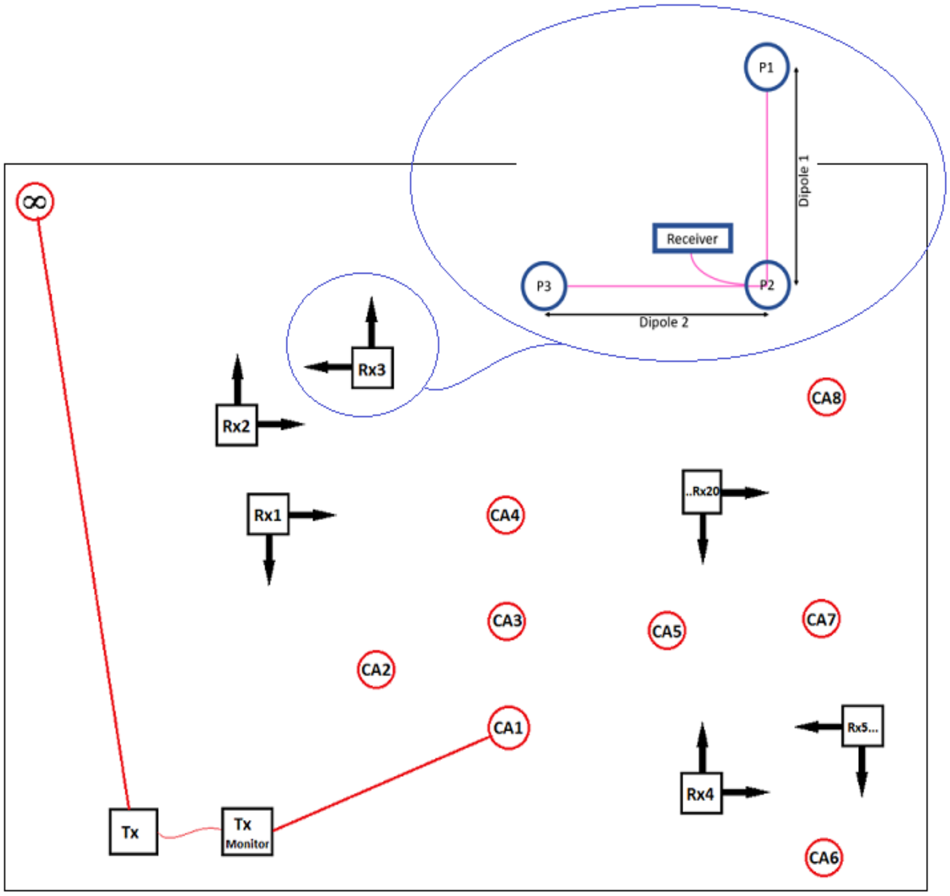


Figure 10: 3D Distributed IP Configuration

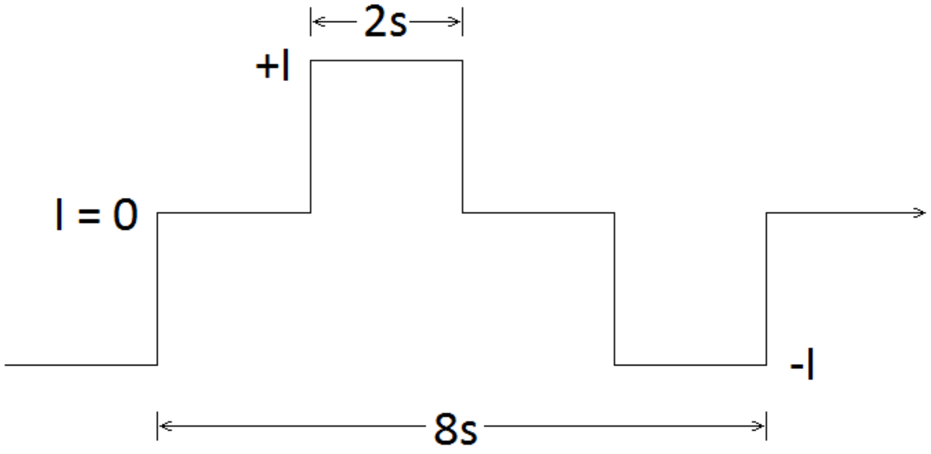


Figure 11: Transmit Cycle Used

6. QUALITY CONTROL & PROCESSING

6.1 FIELD QUALITY CONTROL

Daily field quality control steps consist of the following:

1. Resistivity checks – the resistivity of each dipole is recorded in the field pre- and post-acquisition to ensure dipoles are connected to the receiver properly and the electrode is well contacted with the ground.

2. GPS checks – internal GPS of each receiver is checked that they are placed in the proper position. GPS and injection file time stamps are checked to confirm correlation.

3. Data check – data is dumped daily, and it is confirmed that the number of GPS points matches the number of injection files.

4. Backup – a second current monitor records the transmit cycles continuously throughout every acquisition day. If necessary, the backup is used.

5. Repeats – repeats of lines/data are taken if necessary.

6.2 PROCESSING

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

1. Import positions – GPS coordinates are imported into each corresponding current injection file (IAB) and receiver file (VMN) using the Fullwave Viewer Software.

2. GPS check – the imported positions are confirmed on Google Earth.

3. Synchronization check – in case of GPS lags or different time settings the synchronization of the files is checked to determine they match (Figure 12).

4. Prosys output – a complete .bin file is output from the Fullwave Viewer software.

5. Data quality control – values are viewed in the complete .bin file. Accepted values with a normal M1-M20 range will have a proper transmit cycle, a smooth curve, and a high amplitude low frequency narrow peak (Figure 13). Unaccepted values with an abnormal M1-M20 range (Figure 14, red circle) will not have proper signals (Figure 15). These abnormal values are 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 are removed in the following step.

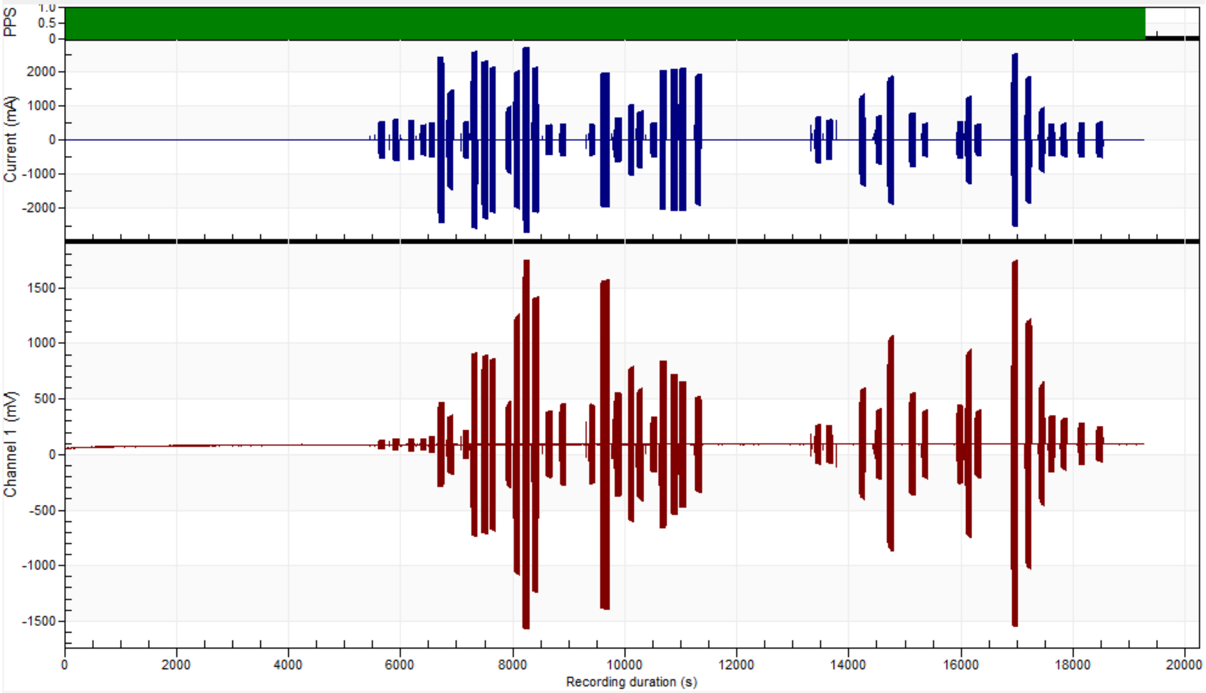
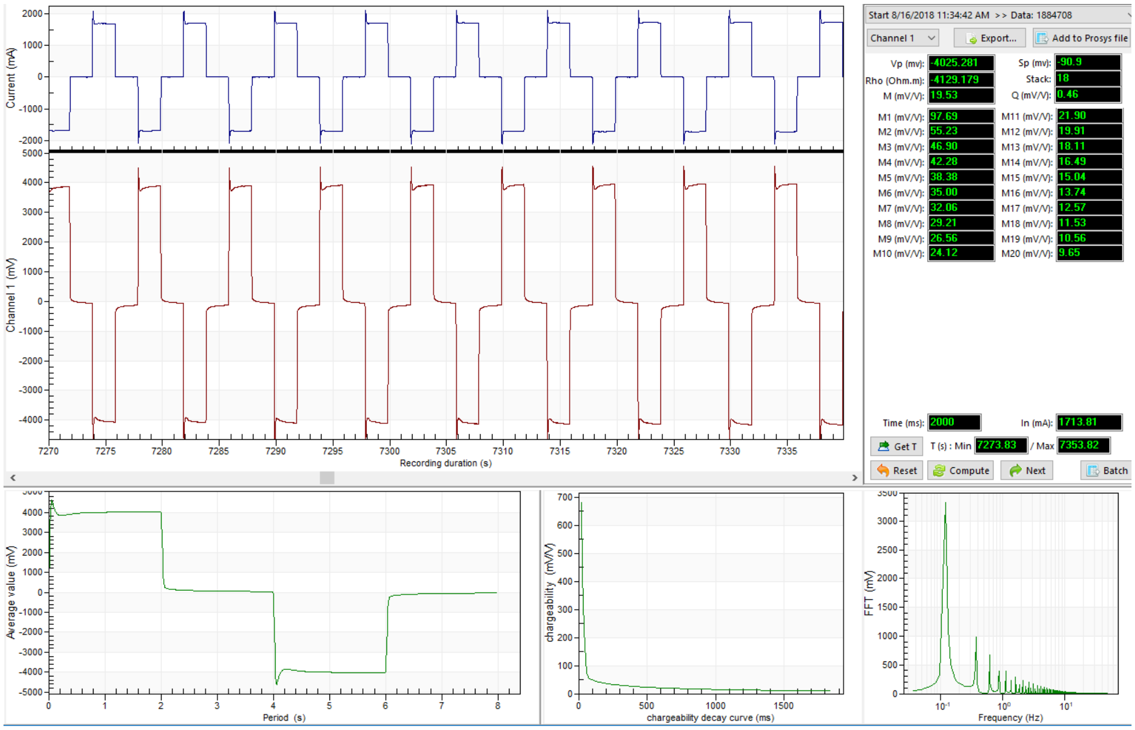


Figure 12: Receiver recordings (red) synchronized with the current injections (blue)



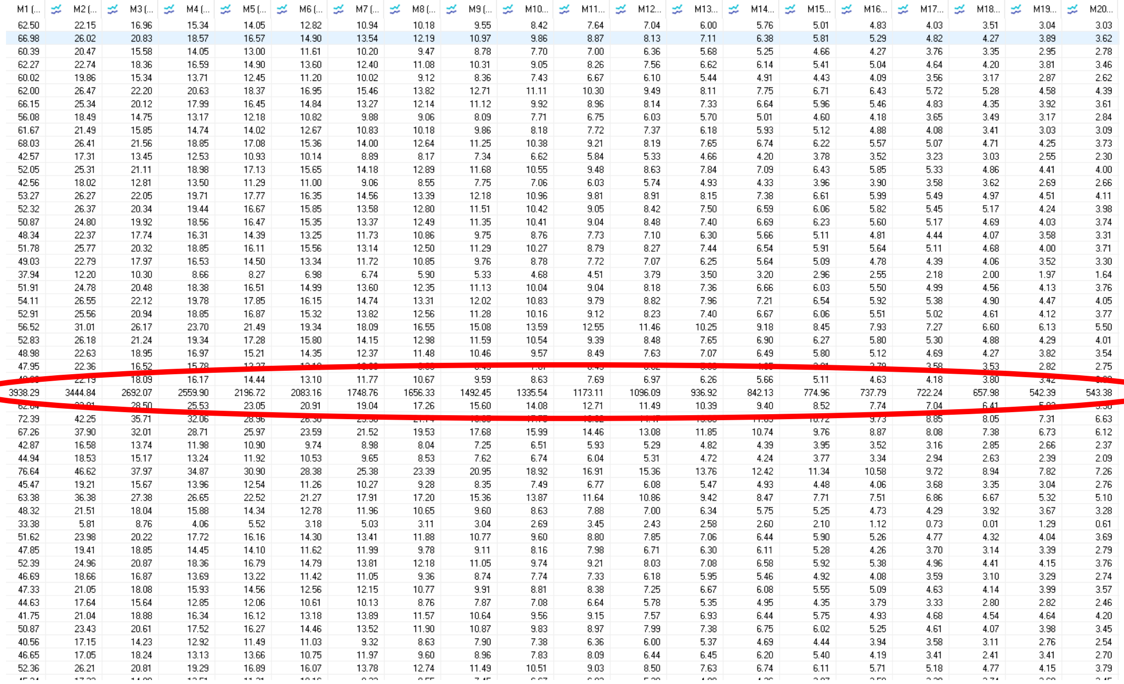
Start 8/16/2018 11:34:42 AM >> Data: 1884708

Vp (mv): -4025.281
Sp (mv): -90.9
Rho (Ohm.m): -4129.179
Stack: 18
M (mV/V): 19.53
Q (mV/V): 0.46

M1 (mV/V):	97.69	M11 (mV/V):	21.90
M2 (mV/V):	55.23	M12 (mV/V):	19.91
M3 (mV/V):	46.90	M13 (mV/V):	18.11
M4 (mV/V):	42.28	M14 (mV/V):	16.49
M5 (mV/V):	38.38	M15 (mV/V):	15.04
M6 (mV/V):	35.00	M16 (mV/V):	13.74
M7 (mV/V):	32.06	M17 (mV/V):	12.57
M8 (mV/V):	29.21	M18 (mV/V):	11.53
M9 (mV/V):	26.56	M19 (mV/V):	10.56
M10 (mV/V):	24.12	M20 (mV/V):	9.65

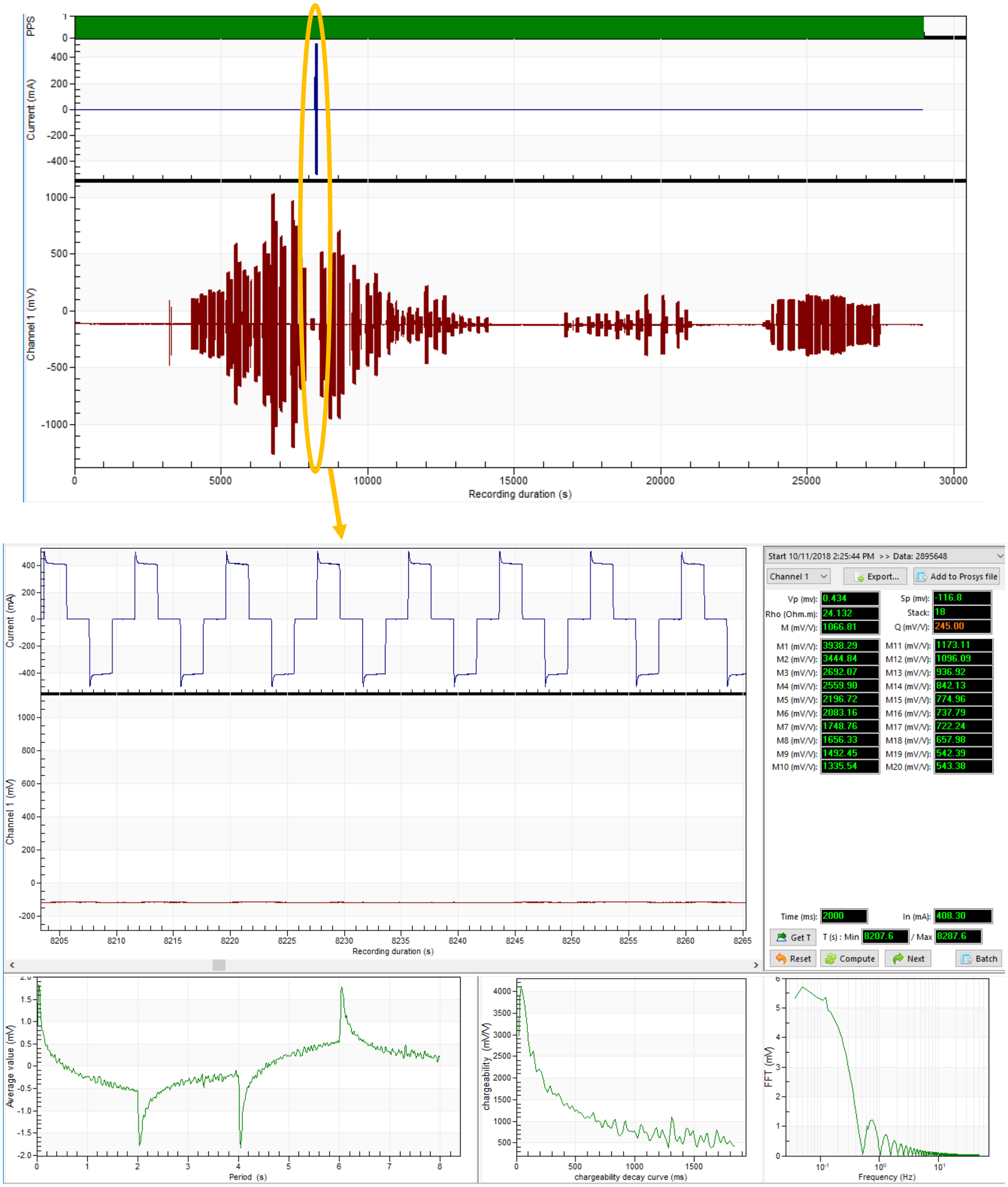
Time (ms): 2000
In (mA): 1713.81
T (s) : Min 7273.83 / Max 7353.82

Figure 13: Good 90 second transmit/read pair. Injection (blue), read signal (red), transmit signal (bottom left), decay curve (bottom centre), FFT (bottom right).



M1 (...	M2 (...	M3 (...	M4 (...	M5 (...	M6 (...	M7 (...	M8 (...	M9 (...	M10...	M11...	M12...	M13...	M14...	M15...	M16...	M17...	M18...	M19...	M20...
62.50	22.15	16.96	15.34	14.05	12.82	10.94	10.18	9.55	8.42	7.64	7.04	6.00	5.76	5.01	4.83	4.03	3.51	3.04	3.03
66.98	26.02	20.83	18.57	16.57	14.90	13.54	12.19	10.97	9.86	8.87	8.13	7.11	6.38	5.81	5.29	4.82	4.27	3.89	3.62
60.39	20.47	15.58	14.05	13.00	11.61	10.20	9.47	8.78	7.70	7.00	6.36	5.68	5.25	4.66	4.27	3.76	3.35	2.95	2.78
62.27	22.74	18.36	16.59	14.90	13.60	12.40	11.08	10.31	9.05	8.26	7.56	6.62	6.14	5.41	5.04	4.64	4.20	3.81	3.46
60.02	19.86	15.34	13.71	12.45	11.20	10.02	9.12	8.36	7.43	6.67	6.10	5.44	4.91	4.43	4.09	3.56	3.17	2.87	2.62
62.00	26.47	22.20	20.63	18.37	16.95	15.46	13.82	12.71	11.11	10.30	9.49	8.11	7.75	6.71	6.43	5.72	5.28	4.58	4.39
66.15	25.34	20.12	17.99	16.45	14.84	13.27	12.14	11.12	9.92	8.96	8.14	7.33	6.64	5.96	5.46	4.83	4.35	3.92	3.61
56.08	18.49	14.75	13.17	12.18	10.82	9.88	9.06	8.09	7.71	6.75	6.03	5.70	5.01	4.60	4.18	3.65	3.49	3.17	2.84
61.67	21.49	15.85	14.74	14.02	12.67	10.83	10.18	9.86	8.18	7.72	7.37	6.18	5.93	5.12	4.88	4.08	3.41	3.03	3.09
68.03	26.41	21.56	18.85	17.08	15.36	14.00	12.64	11.25	10.38	9.21	8.19	7.65	6.74	6.22	5.57	5.07	4.71	4.25	3.73
42.57	17.31	13.45	12.53	10.93	10.14	8.89	8.17	7.34	6.62	5.84	5.33	4.66	4.20	3.78	3.52	3.23	3.03	2.55	2.30
52.05	25.31	21.11	18.98	17.13	15.65	14.18	12.89	11.68	10.55	9.48	8.63	7.84	7.09	6.43	5.85	5.33	4.86	4.41	4.00
42.56	18.02	12.81	13.50	11.29	11.00	9.06	8.55	7.75	7.06	6.03	5.74	4.93	4.33	3.96	3.90	3.58	3.62	2.69	2.66
53.27	26.27	22.05	19.71	17.77	16.35	14.56	13.39	12.18	10.96	9.81	8.91	8.15	7.38	6.61	5.99	5.49	4.97	4.51	4.11
52.32	26.37	20.34	19.44	16.67	15.85	13.58	12.80	11.51	10.42	9.05	8.42	7.50	6.59	6.06	5.82	5.45	5.17	4.24	3.98
50.87	24.80	19.92	18.56	16.47	15.35	13.37	12.49	11.35	10.41	9.04	8.48	7.40	6.69	6.23	5.60	5.17	4.69	4.03	3.74
48.34	22.37	17.74	16.31	14.39	13.25	11.73	10.86	9.75	8.76	7.73	7.10	6.30	5.66	5.11	4.81	4.44	4.07	3.58	3.31
51.78	25.77	20.32	18.85	16.11	15.56	13.14	12.50	11.29	10.27	8.79	8.27	7.44	6.54	5.91	5.64	5.11	4.68	4.00	3.71
49.03	22.79	17.97	16.53	14.50	13.34	11.72	10.85	9.76	8.78	7.72	7.07	6.25	5.64	5.09	4.78	4.39	4.06	3.52	3.30
37.94	12.20	10.30	8.66	8.27	6.98	6.74	5.90	5.33	4.68	4.51	3.79	3.50	3.20	2.96	2.55	2.18	2.00	1.97	1.64
51.91	24.78	20.48	18.38	16.51	14.99	13.60	12.35	11.13	10.04	9.04	8.18	7.36	6.66	6.03	5.50	4.99	4.56	4.13	3.76
54.11	26.55	22.12	19.78	17.85	16.15	14.74	13.31	12.02	10.83	9.79	8.82	7.96	7.21	6.54	5.92	5.38	4.90	4.47	4.05
52.91	25.56	20.94	18.85	16.87	15.32	13.82	12.56	11.28	10.16	9.12	8.23	7.40	6.67	6.06	5.51	5.02	4.61	4.12	3.77
56.52	31.01	26.17	23.70	21.49	19.34	18.09	16.55	15.08	13.59	12.55	11.46	10.25	9.18	8.45	7.93	7.27	6.60	6.13	5.50
52.83	26.18	21.24	19.34	17.28	15.80	14.15	12.98	11.59	10.54	9.39	8.48	7.65	6.90	6.27	5.80	5.30	4.88	4.29	4.01
48.98	22.63	18.95	16.97	15.21	14.35	12.37	11.48	10.46	9.57	8.49	7.63	7.07	6.49	5.80	5.12	4.69	4.27	3.82	3.54
47.95	22.36	16.52	15.78	13.27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.79	3.58	3.53	2.82	2.75
[illegible]	22.19	18.09	16.17	14.44	13.10	11.77	10.67	9.59	8.63	7.69	6.97	6.26	5.66	5.11	4.63	4.18	3.80	3.42	[illegible]
3938.29	3444.84	2692.07	2559.90	2196.72	2083.16	1748.76	1656.33	1492.45	1335.54	1173.11	1096.09	936.92	842.13	774.96	737.79	722.24	657.98	542.39	543.38
62.64	[illegible]	28.50	25.53	23.05	20.91	19.04	17.26	15.60	14.08	12.71	11.49	10.39	9.40	8.52	7.74	7.04	6.41	[illegible]	[illegible]
72.39	42.25	35.71	32.06	28.96	26.30	[illegible]	21.14	[illegible]	[illegible]	[illegible]	14.47	[illegible]	[illegible]	10.72	9.73	8.85	8.05	7.31	6.63
67.26	37.90	32.01	28.71	25.97	23.59	21.52	19.53	17.68	15.99	14.46	13.08	11.85	10.74	9.76	8.87	8.08	7.38	6.73	6.12
42.87	16.58	13.74	11.98	10.90	9.74	8.98	8.04	7.25	6.51	5.93	5.29	4.82	4.39	3.95	3.52	3.16	2.85	2.66	2.37
44.94	18.53	15.17	13.24	11.92	10.53	9.65	8.53	7.62	6.74	6.04	5.31	4.72	4.24	3.77	3.34	2.94	2.63	2.39	2.09
76.64	46.62	37.97	34.87	30.90	28.38	25.38	23.39	20.95	18.92	16.91	15.36	13.76	12.42	11.34	10.58	9.72	8.94	7.82	7.26
45.47	19.21	15.67	13.96	12.54	11.26	10.27	9.28	8.35	7.49	6.77	6.08	5.47	4.93	4.48	4.06	3.68	3.35	3.04	2.76
63.38	36.38	27.38	26.65	22.52	21.27	17.91	17.20	15.36	13.87	11.64	10.86	9.42	8.47	7.71	7.51	6.86	6.67	5.32	5.10
48.32	21.51	18.04	15.88	14.34	12.78	11.96	10.65	9.60	8.63	7.88	7.00	6.34	5.75	5.25	4.73	4.29	3.92	3.67	3.28
33.38	5.81	8.76	4.06	5.52	3.18	5.03	3.11	3.04	2.69	3.45	2.43	2.58	2.60	2.10	1.12	0.73	0.01	1.29	0.61
51.62	23.98	20.22	17.72	16.16	14.30	13.41	11.88	10.77	9.60	8.80	7.85	7.06	6.44	5.90	5.26	4.77	4.32	4.04	3.69
47.85	19.41	18.85	14.45	14.10	11.62	11.99	9.78	9.11	8.16	7.98	6.71	6.30	6.11	5.28	4.26	3.70	3.14	3.39	2.79
52.39	24.96	20.87	18.36	16.79	14.79	13.81	12.18	11.05	9.74	9.21	8.03	7.08	6.58	5.92	5.38	4.96	4.41	4.15	3.76
46.69	18.66	16.87	13.69	13.22	11.42	11.05	9.36	8.74	7.74	7.33	6.18	5.95	5.46	4.92	4.08	3.59	3.10	3.29	2.74
47.33	21.05	18.08	15.93	14.56	12.56	12.15	10.77	9.91	8.81	8.38	7.25	6.67	6.08	5.55	5.09	4.63	4.14	3.99	3.57
44.63	17.64	15.64	12.85	12.06	10.61	10.13	8.76	7.87	7.08	6.64	5.78	5.35	4.95	4.35	3.79	3.33	2.80	2.82	2.46
41.75	21.04	18.88	16.34	16.12	13.18	13.89	11.57	10.64	9.56	9.15	7.57	6.93	6.44	5.75	4.93	4.68	4.54	4.64	4.20
50.87	23.43	20.61	17.52	16.27	14.46	13.52	11.90	10.87	9.83	8.97	7.99	7.38	6.75	6.02	5.25	4.61	4.07	3.98	3.45
40.56	17.15	14.23	12.92	11.49	11.03	9.32	8.63	7.90	7.38	6.36	6.00	5.37	4.69	4.44	3.94	3.58	3.11	2.76	2.54
46.65	17.05	18.24	13.13	13.66	10.75	11.97	9.60	8.96	7.83	8.09	6.44	6.45	6.20	5.40	4.19	3.41	2.41	3.41	2.70
52.36	26.21	20.81	19.29	16.89	16.07	13.78	12.74	11.49	10.51	9.03	8.50	7.63	6.74	6.11	5.71	5.18	4.77	4.15	3.79

Figure 14: Output .bin file viewed in Prosys. Larger abnormal M1-M20 values circled in red.



Start 10/11/2018 2:25:44 PM >> Data: 2895648

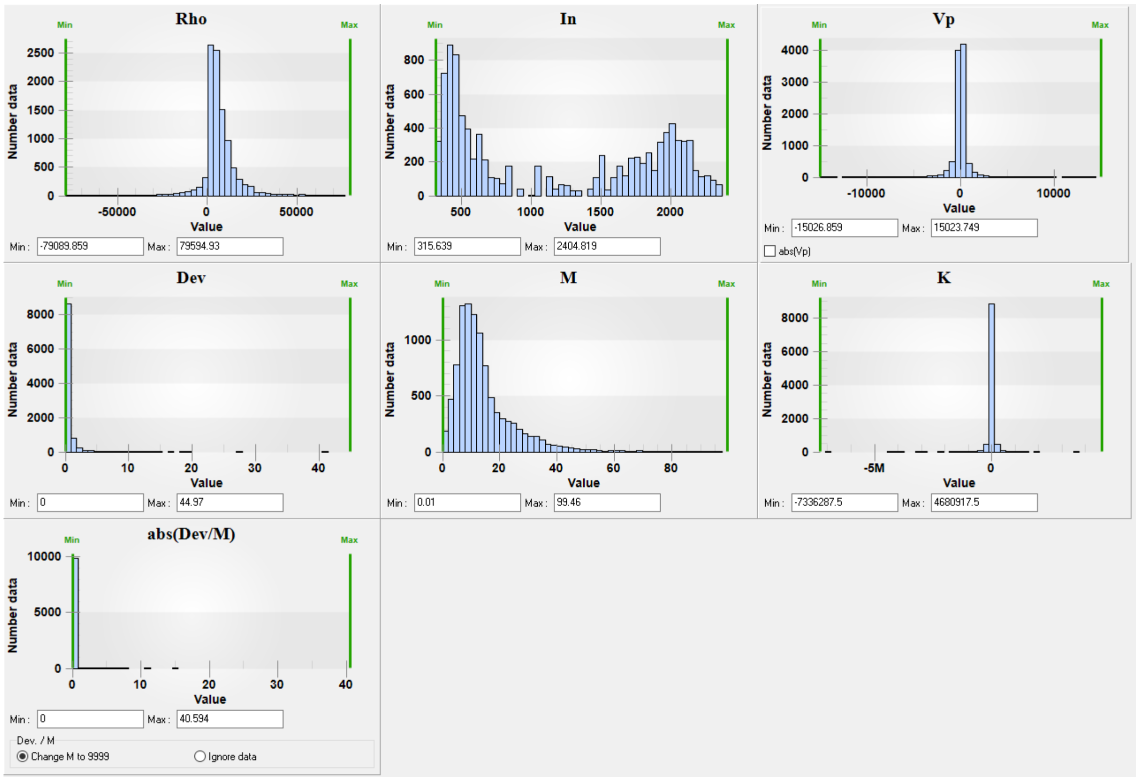
Vp (mv): 0.434
Rho (Ohm.m): 24.132
M (mV/V): 1066.81
Sp (mv): -116.8
Stack: 18
Q (mV/V): 245.00

M1 (mV/V): 3938.29
M2 (mV/V): 3444.84
M3 (mV/V): 2692.07
M4 (mV/V): 2559.90
M5 (mV/V): 2196.72
M6 (mV/V): 2083.16
M7 (mV/V): 1748.76
M8 (mV/V): 1656.33
M9 (mV/V): 1492.45
M10 (mV/V): 1335.54
M11 (mV/V): 1173.11
M12 (mV/V): 1096.09
M13 (mV/V): 936.92
M14 (mV/V): 842.13
M15 (mV/V): 774.96
M16 (mV/V): 737.79
M17 (mV/V): 722.24
M18 (mV/V): 657.98
M19 (mV/V): 542.39
M20 (mV/V): 543.38

Time (ms): 2000
In (mA): 408.30
T (s) : Min 8207.6 / Max 8287.6

Figure 15: 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 are filtered out (Figure 16).



Rho — Min : -79089.859 Max : 79594.93

In — Min : 315.639 Max : 2404.819

Vp — Min : -15026.859 Max : 15023.749

☐ abs(Vp)

Dev — Min : 0 Max : 44.97

M — Min : 0.01 Max : 99.46

K — Min : -7336287.5 Max : 4680917.5

abs(Dev/M) — Min : 0 Max : 40.594

Dev. / M

● Change M to 9999 ○ Ignore data

Figure 16: Filtering options

3D viewing of the raw calculated chargeability and resistivity results was observed in Geosoft Oasis (Figures 17-20; Y=North). Calculated report points from acquisition were recorded at a maximum depth of approximately 430 metres depth.

A total of 4534 filtered data points was collected from this 3D IP survey configuration over a period of 3 days.

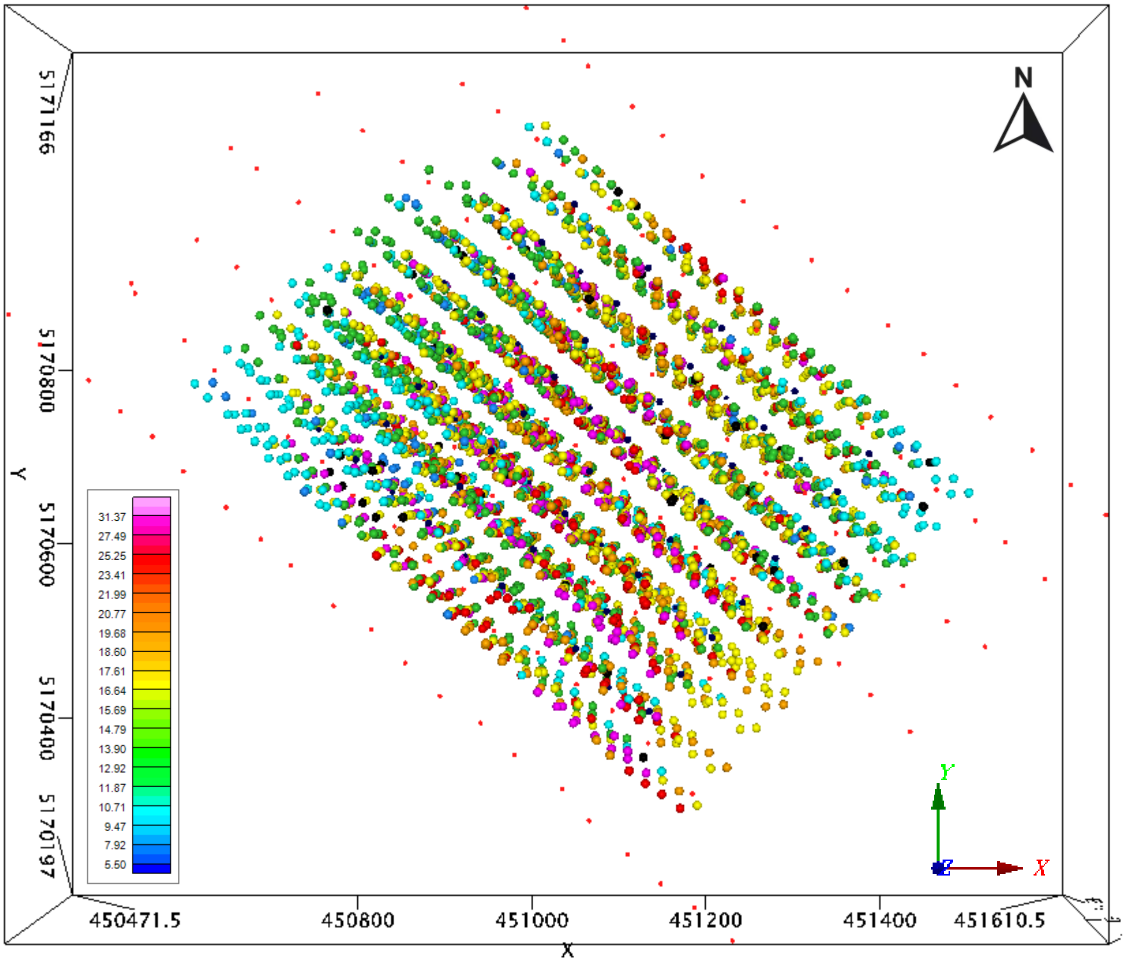


Figure 17: Top view of the raw calculated chargeability data points with transmit locations (red dots)

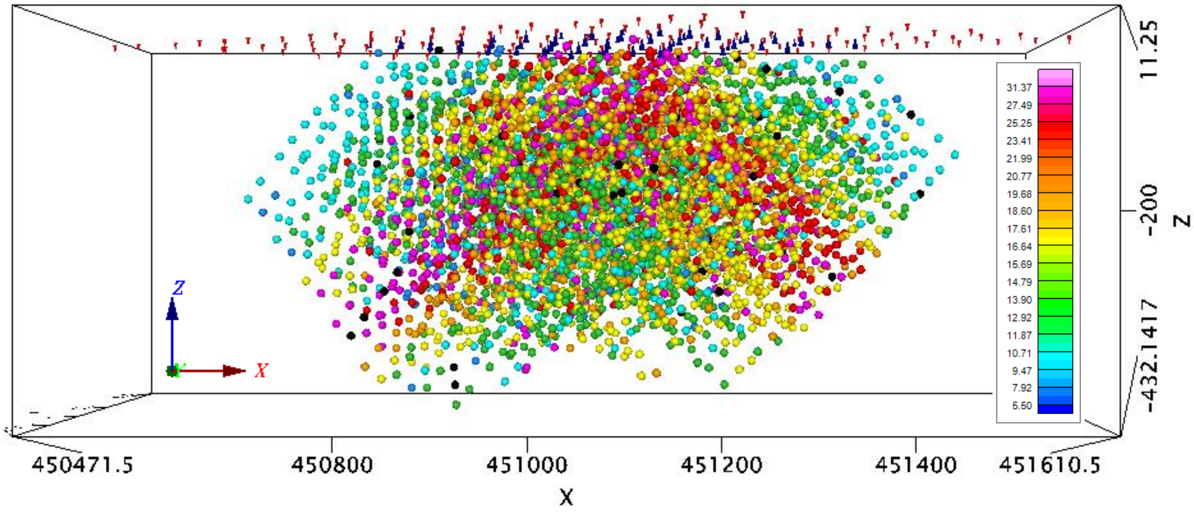


Figure 18: Side view of the raw calculated chargeability data points facing north

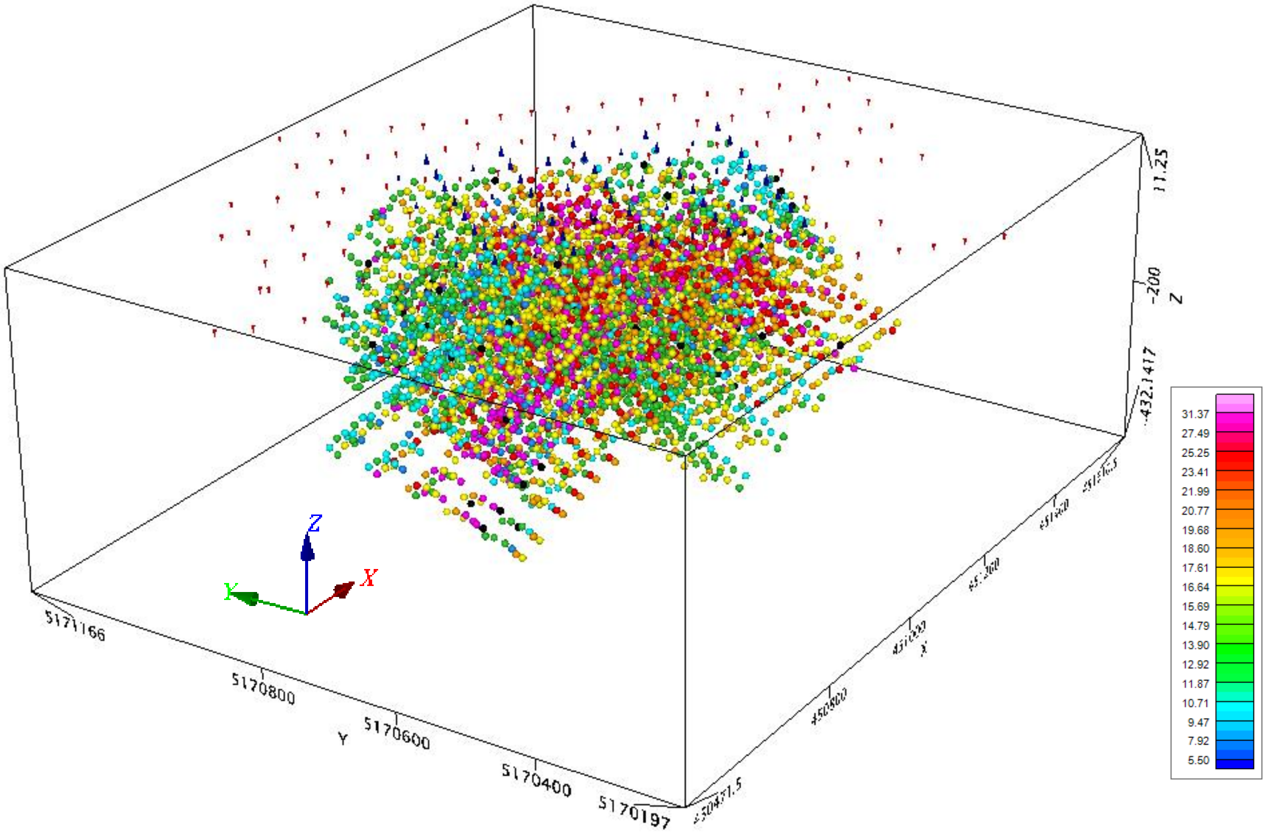


Figure 19: Raw calculated chargeability data points with survey layout

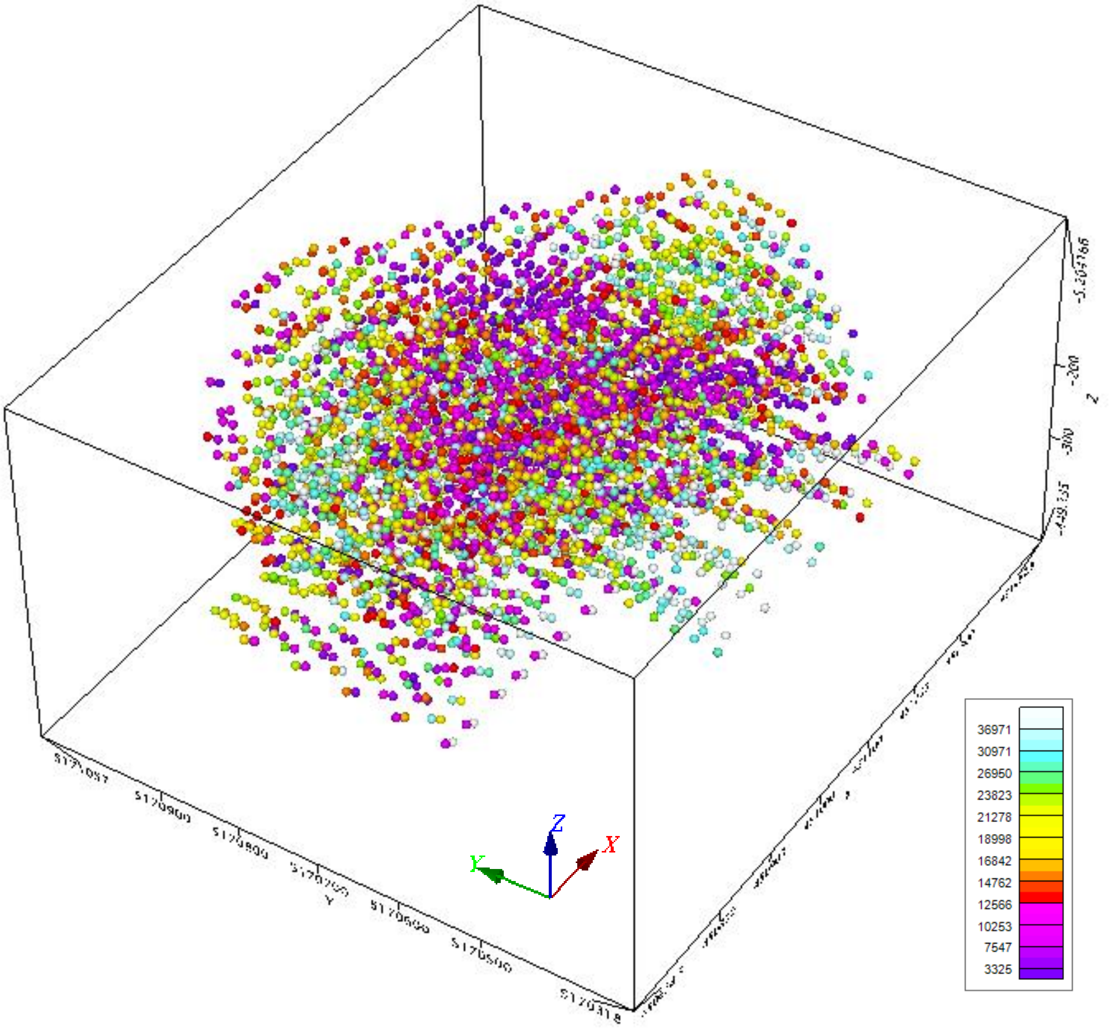
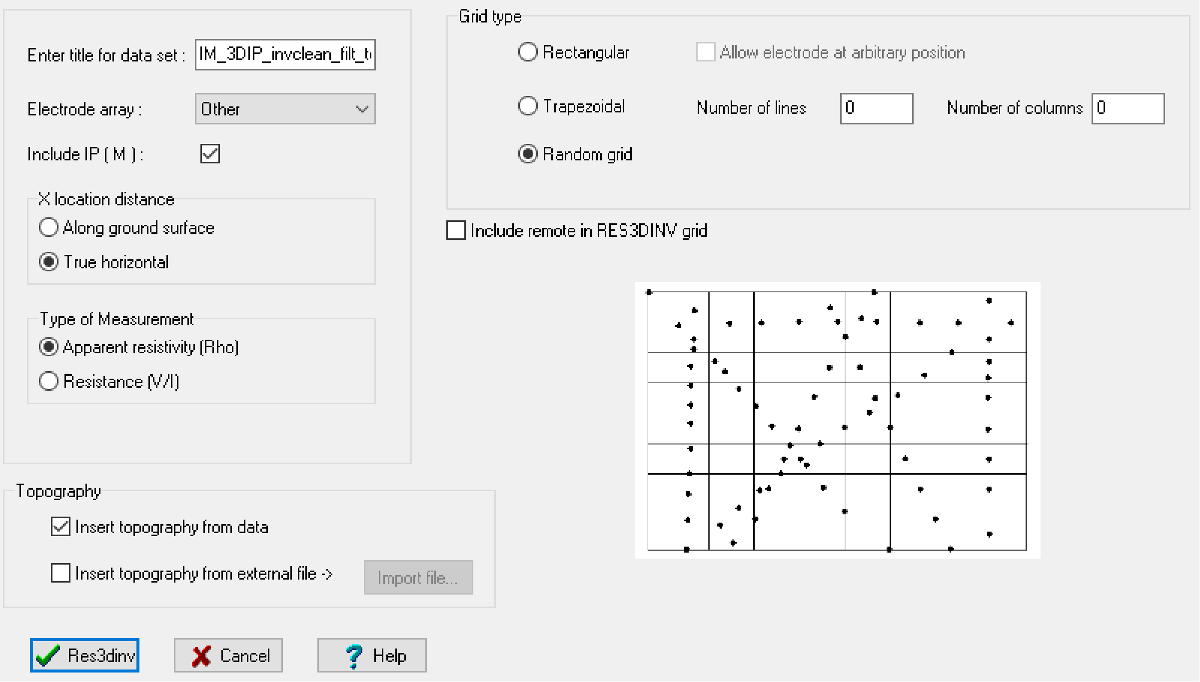


Figure 20: Raw calculated resistivity data points

6.3 INVERSION

Inversions of the filtered data was done in RES3DINV Professional version 3.14.19. RES3DINV 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.


Enter title for data set : IM_3DIP_invclean_filt_t

Electrode array : Other

Include IP (M) : ☑

X location distance
○ Along ground surface
● True horizontal

Type of Measurement
● Apparent resistivity (Rho)
○ Resistance (V/I)

Topography
☑ Insert topography from data
☐ Insert topography from external file ->

Grid type
○ Rectangular ☐ Allow electrode at arbitrary position
○ Trapezoidal Number of lines 0 Number of columns 0
● Random grid

☐ Include remote in RES3DINV grid

Figure 21: Export settings selection from Prosys to RES3DINV

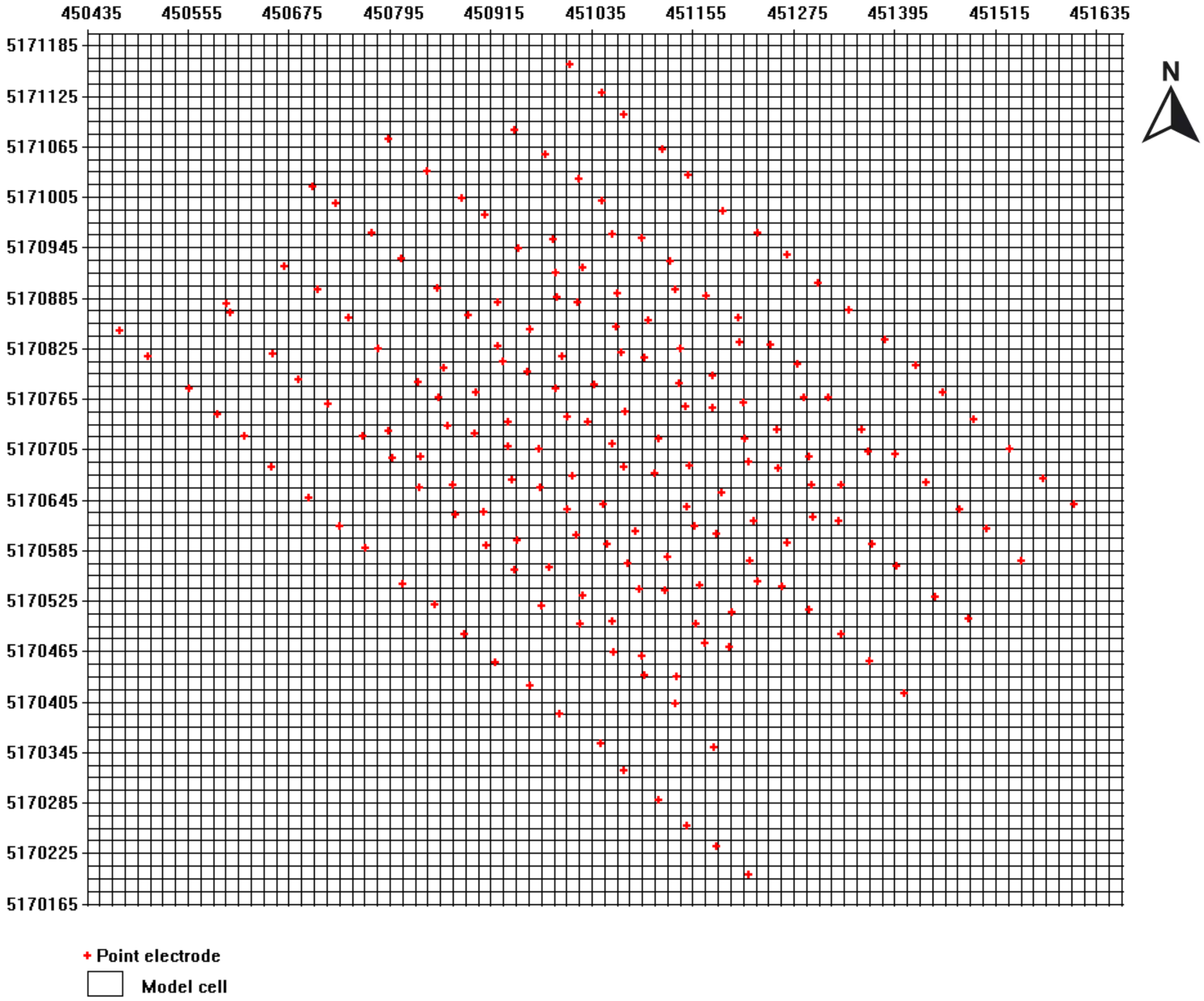
Model grid settings were chosen based on the infinite locations and the dipole lengths. A uniform cell size was chosen to be ¼ or 1/5 of the dipole length, in this survey case a cell size of 15m was used (Figure 22). To reduce edge artifacts a few cells extension was added. Manual edits to the cell uniformity may be necessary 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 10, 25, 40, 55, 75, 100, 125, 160, 200, 250, 310, and 385 metres.

The theoretical maximum depth obtained from the Fullwave Designer was 245 metres. Calculated report points from acquisition were recorded at a maximum depth of approximately 430 metres depth. However, a maximum depth of 385 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 depth in between the theoretical and calculated maximum depths was used.

Important inversion parameters used for the creation of the model are described in Table 10[2].

---

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



<u>Figure 22: Uniform 15m model cell size – model viewer in RES3DINV</u>

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 1st 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 9: Inversion Parameter 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 model overlaid in Google Earth is seen in Figures 23 and 24, respectively.

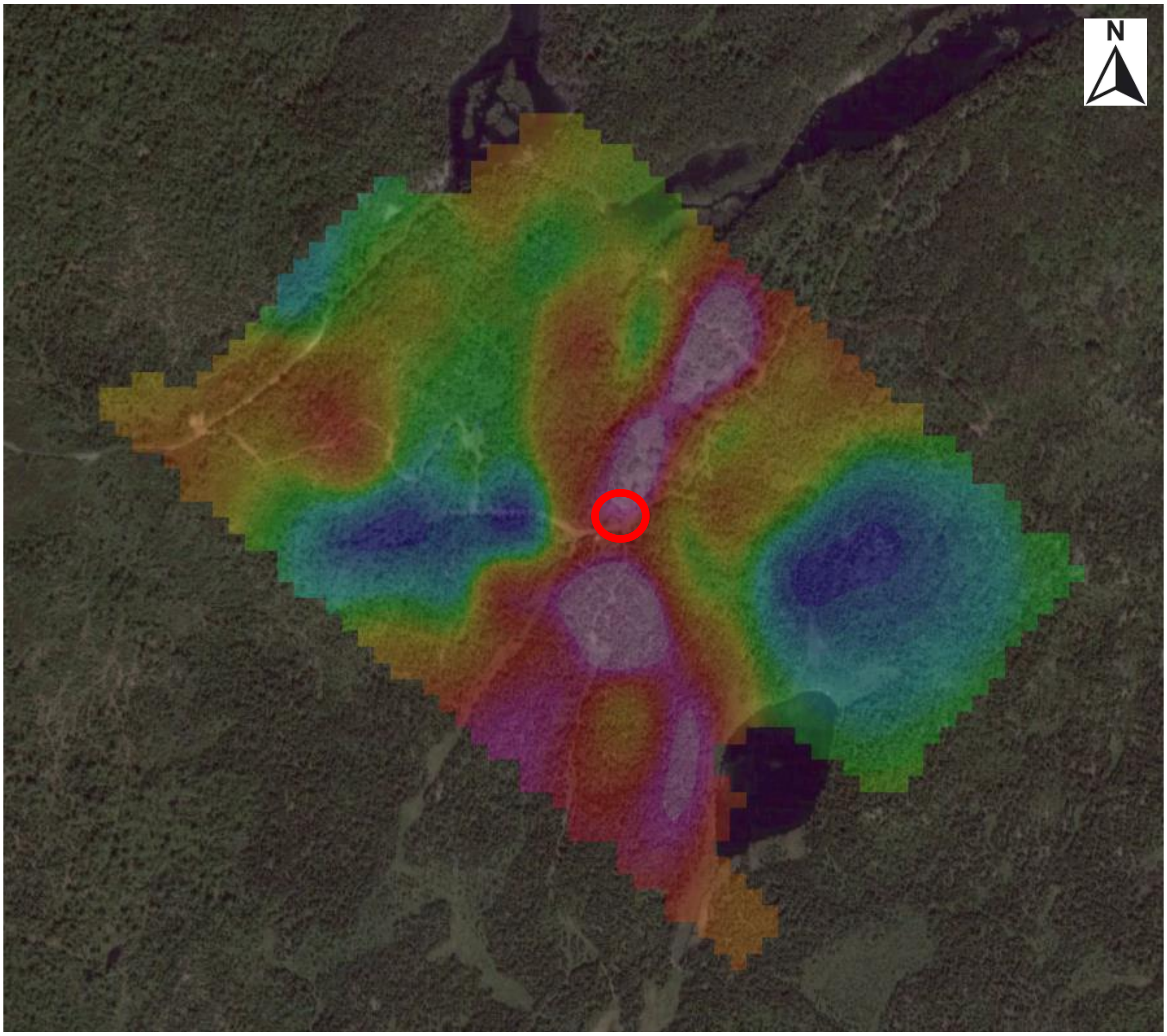


Figure 23: Chargeability grid (350m MSL) overlaying Google Earth. Red circle represents a trench. (©2018 Google, Image ©2018 DigitalGlobe)

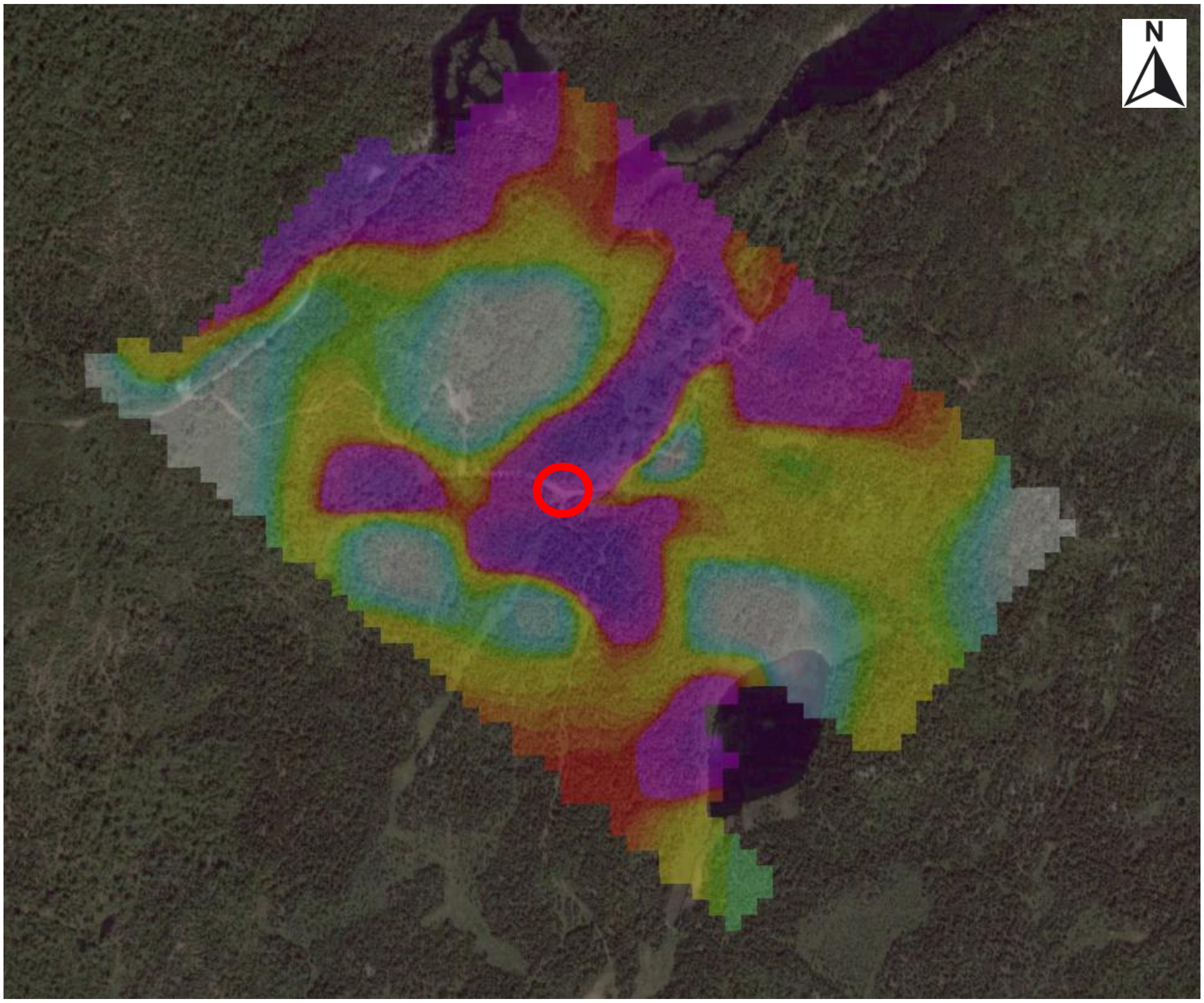


Figure 24: Resistivity grid (350m MSL) overlaying Google Earth. Red circle represents a trench. (©2018 Google, Image ©2018 DigitalGlobe)

7.2 INTERPRETATIONS[3]

Targeting of the 3D IP array was based on previous field observations and historic data. Historically surveys were designed so that the survey lines crossed the magnetite skarn perpendicularly. Field observations indicated that there may be additional cross-cutting features that may have been sub-parallel to the historic surveys. It was decided to perform a detailed 3D IP survey over the Cobalt Shaft area to explore for these features. Historically the magnetite skarn was observed to be a chargeability high and a resistivity low.

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

---

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

Below is an example of the 3D chargeability model at 25mV/V and 30mV/V superimposed on a 250 metre MSL chargeability slice (Figure 25 and 26).

The main chargeability anomaly appears to correlate with the known path of the manetite skarn which strikes at approximately 40 degrees across the survey area. A north-south (80-85 degrees) weaker chargeability anomaly is seen near the site of the Cobalt shaft. Slightly south-west of the Cobalt shaft there also appears to be a north-south offset in the magnetite skarn.

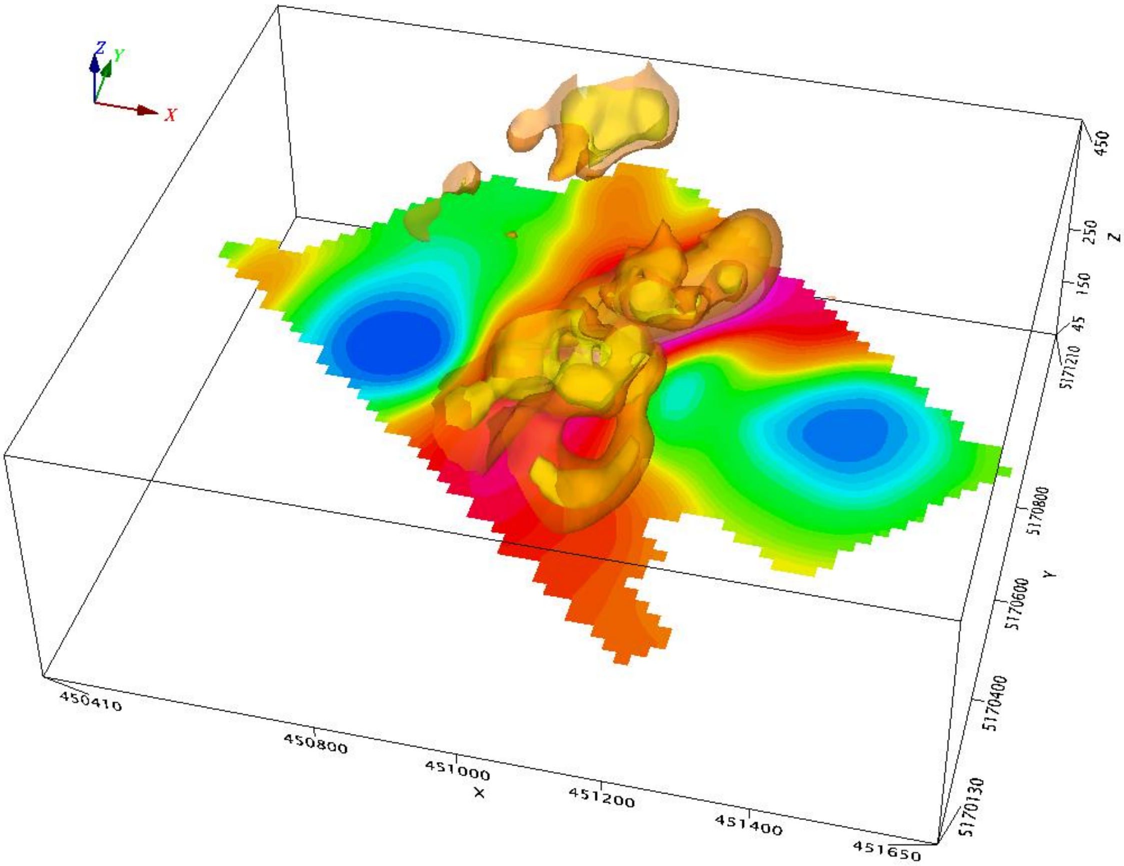


Figure 25: 3D chargeability isosurfaces with 250m MSL slice (orange/yellow isosurface = 25/30 mV/V)

The offset noted indicates the presence of a structural feature. This feature may follow the 80-85-degree chargeability anomaly; however, it is presumed that it falls perpendicular to the magnetite skarn.

The 80-85-degree chargeability anomaly most likely represents a mineralized alteration system that crosses the surveys area. The association with this system and the cobalt shaft may indicate that the interaction of the 80-85-degree anomaly and the magnetite skarn may be the source of the cobalt mineralization.

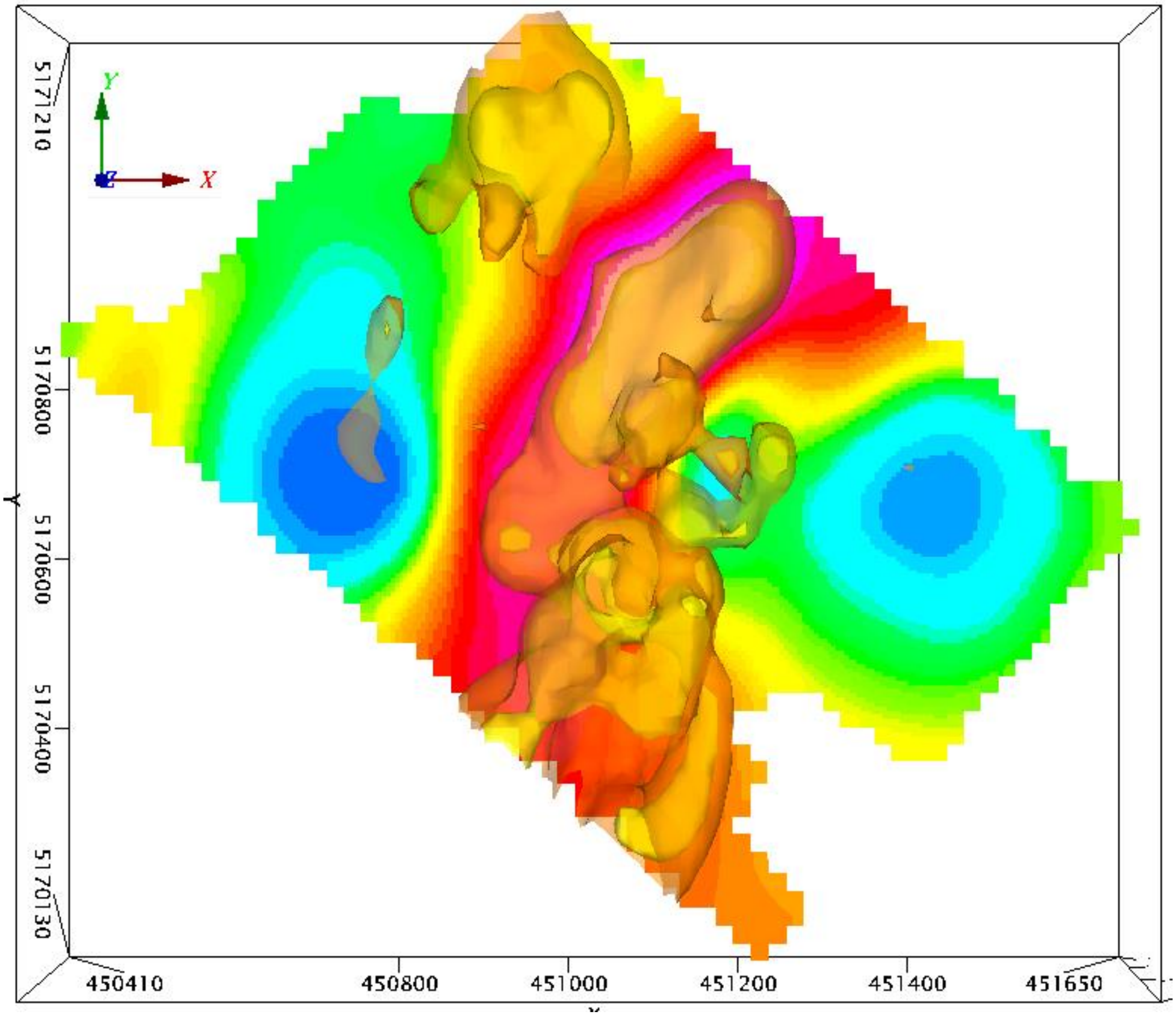


Figure 26: Top view of the 3D chargeability isosurfaces with 250m MSL slice (orange/yellow isosurface = 25/30 mV/V)

Figure 27 shows the chargeability anomaly on the resistivity 350 m MSL plane. The resistivity plane indicates a correlation between the chargeability high response and a low resistivity response at the location of the Cobalt Shaft. This may indicate that there is a shift from magnetite to sulphides at the cobalt shaft area.

The area noted in the chargeability as a probable structural feature is noticeable within the resistivity dataset. Again, this indicates a similar shift to the south as it strikes east; however, the resistivity signature supports the strike of the structural feature being more perpendicular to the magnetite skarn.

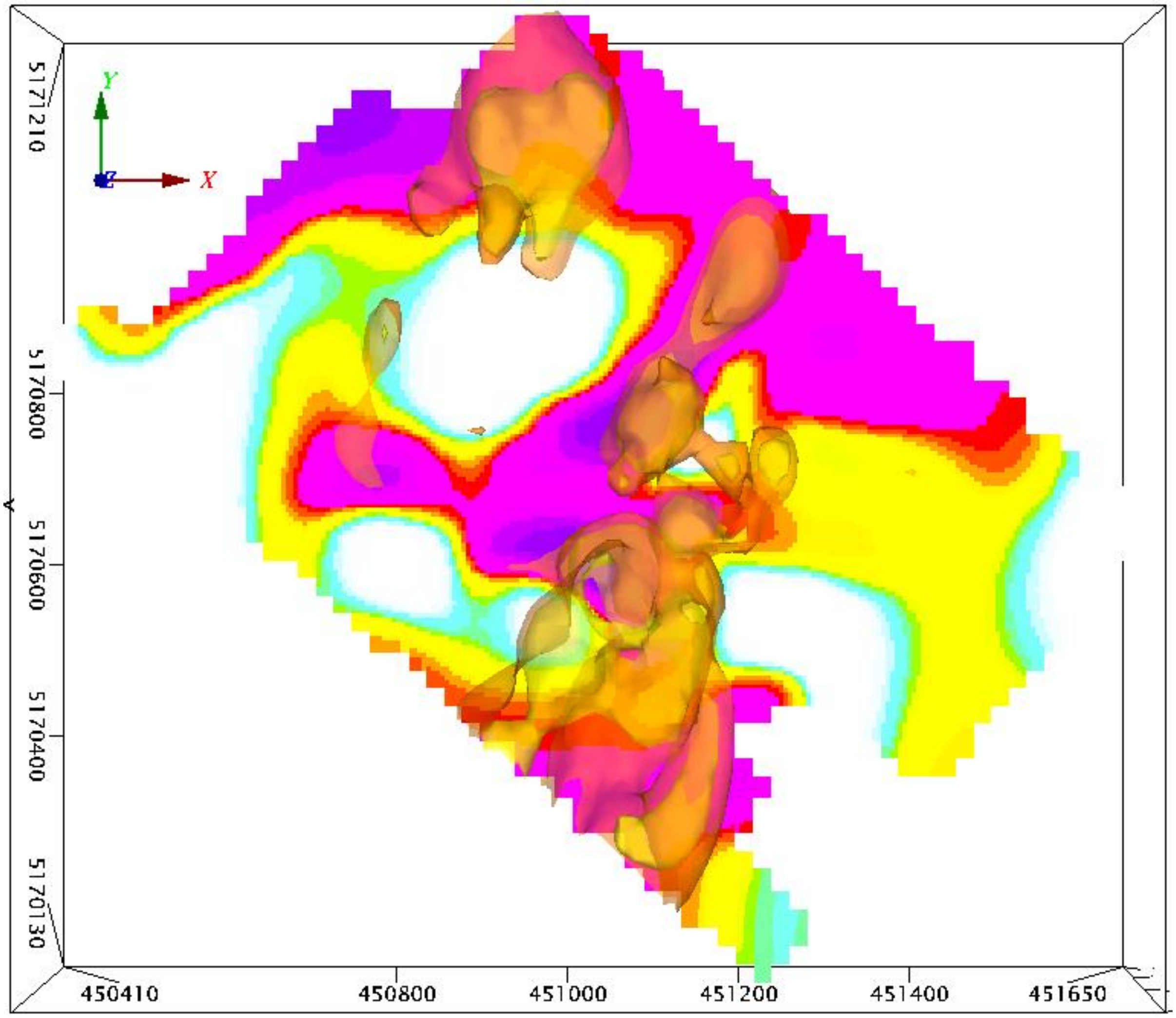


Figure 27: 3D chargeability model (yellow 30mV/V, orange 25mV/V) on a resistivity 350m MSL plane

Using the strong chargeability and low resistivity response as a targeting model (Figure 28), an additional target for further exploration was located on the west side of the offset (Figure 28; Target). Two additional targets on the northern edge and southern edge of the survey area were generated, however they are not constrained and may be related to edge effects from the inversion.

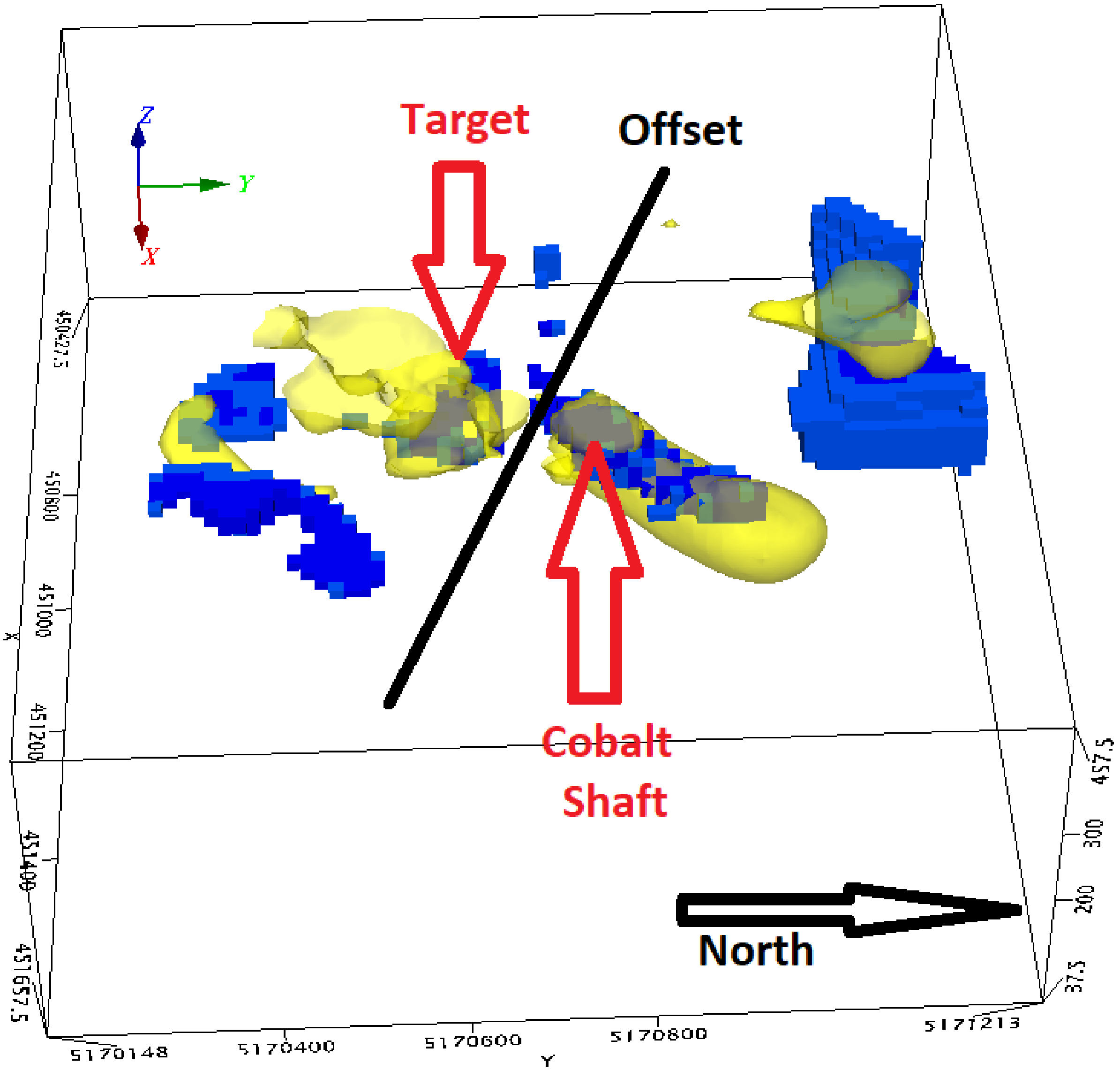


Figure 28: High chargeability and low resistivity model with interpretations. Chargeability (yellow) = 30mV/V and resistivity (blue) <1000 ohm.m

7.3 RECOMMENDATIONS

It is recommended that historic work be compiled. This compilation overlaid on the present geophysical maps may indicate sources of the anomalies and allow for better identification and correlation to the expected geophysical signatures.

The survey area should also be extended along strike to constrain the anomalies along the edge of the survey area. This would assist in determining the extent of these anomalies versus edge effect produced from the inversion.

7.4 CONCLUSIONS

The 3D IP survey highlighted and defined the mineralized zone that has been previously explored. The survey also indicated the presence of crosscutting features including a structural feature resulting in an offset to the magnetite skarn. The observed signature over the cobalt shaft also appears to be present on the other side of the offset.

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 **Battery Mineral Resources Inc.**

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 16, 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 Practicing Member of the Association of Professional Geoscientists, with membership number 2172.

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

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

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

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

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
PRACTISING MEMBER
2172

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

Larder Lake, ON
November 16, 2018

APPENDIX B

IRIS V-FullWaver Receiver[4]

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...)

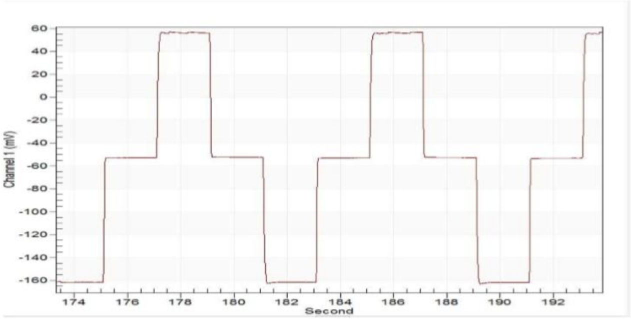
Internal GPS: an integrated GPS, very accurate and providing PPS signal (one pulse per second) allows to store all time series with time information. This is crucial to process data from several V-Full Waver loggers installed in a same area. This is also useful to correlate with injection dipole waveform,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

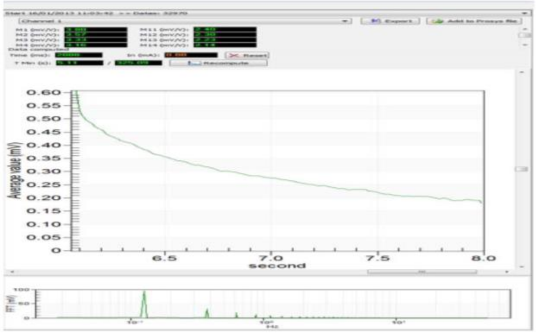
---

[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 µV
- 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 MΩ
- 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 Monitor[5]

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

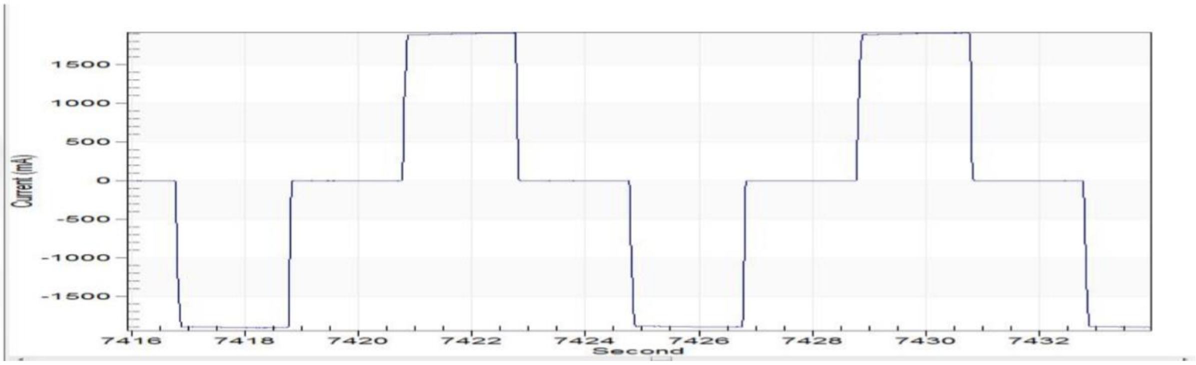
Integrated GPS: an integrated gps, very accurate and providing PPS signal (one pulse per second) allows to store all time series with time information. This is crucial to correlate and process data with V-Fullwaver receiver loggers installed in a same area. This information displays the behaviour of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

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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.

Dunbar P. & Hinzer J. 2007. Report on the Iron Mask 2007 Diamond Drilling Program – North S1 Grid Extnesion for Champion Bear Resources Ltd.

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APPENDIX D

DIGITAL DATA

The digital data contains

- PDF copy of this report
- PDF copy of the maps
- Raw data in binary format
- Raw data in CSV format
- Ascii XYZ of inversion results
- Packed Oasis maps
- Oasis databases
- 3D Oasis voxels created

APPENDIX E

LIST OF MAPS (IN MAP POCKET)

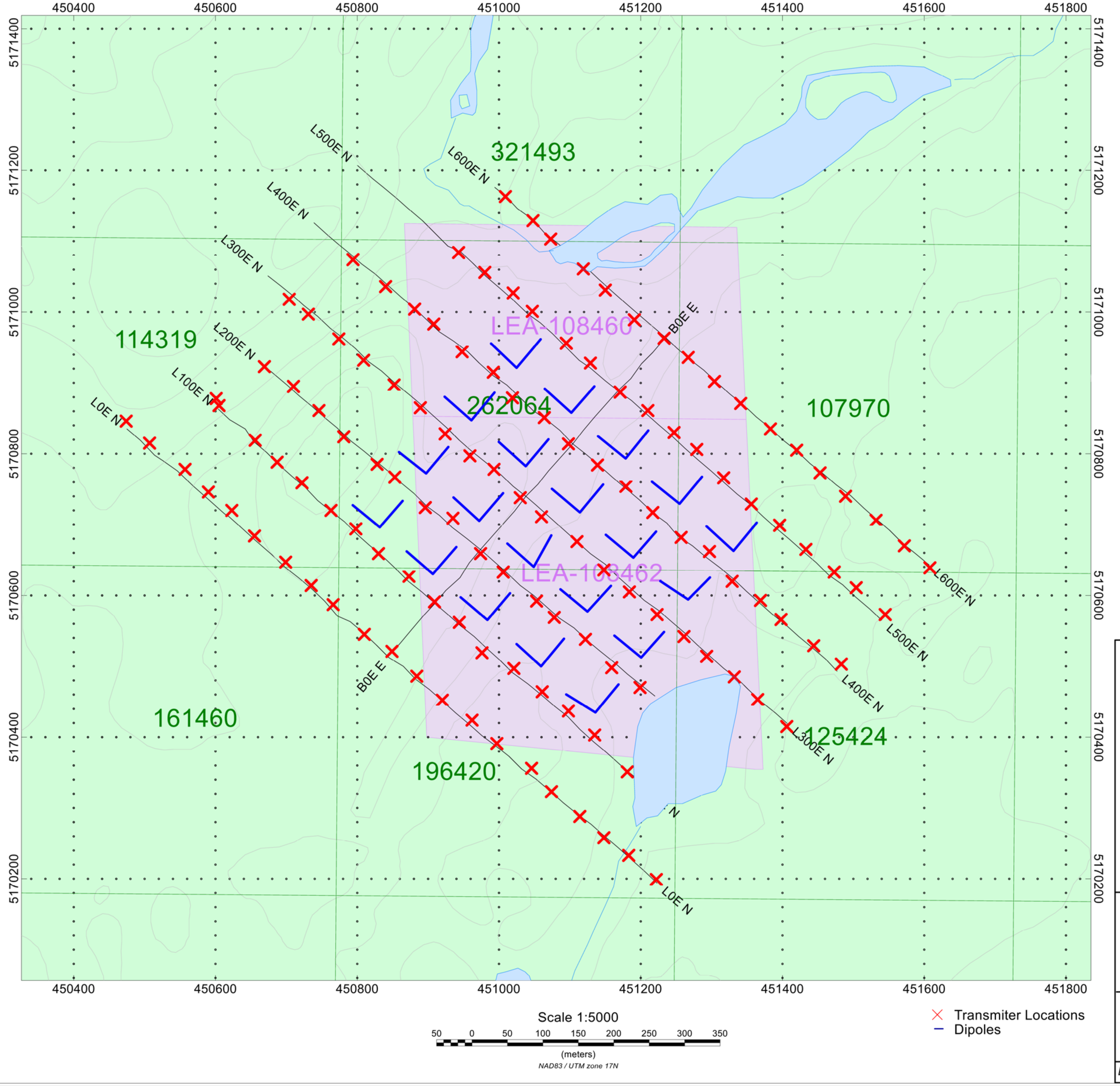
Grid Sketch (1:5000)

1) Q2555-Battery-Iron Mask-North-Grid-3DIP-Layout-Claims

IP Plan Map (1:5000)

2) Q2555-Battery-Iron Mask-North-3DIP-Inv-Charge-450MSL
3) Q2555-Battery-Iron Mask-North-3DIP-Inv-Charge-400MSL
4) Q2555-Battery-Iron Mask-North-3DIP-Inv-Charge-350MSL
5) Q2555-Battery-Iron Mask-North-3DIP-Inv-Charge-300MSL
6) Q2555-Battery-Iron Mask-North-3DIP-Inv-Charge-250MSL
7) Q2555-Battery-Iron Mask-North-3DIP-Inv-Charge-200MSL
8) Q2555-Battery-Iron Mask-North-3DIP-Inv-Charge-150MSL
9) Q2555-Battery-Iron Mask-North-3DIP-Inv-Res-450MSL
10) Q2555-Battery-Iron Mask-North-3DIP-Inv-Res-400MSL
11) Q2555-Battery-Iron Mask-North-3DIP-Inv-Res-350MSL
12) Q2555-Battery-Iron Mask-North-3DIP-Inv-Res-300MSL
13) Q2555-Battery-Iron Mask-North-3DIP-Inv-Res-250MSL
14) Q2555-Battery-Iron Mask-North-3DIP-Inv-Res-200MSL
15) Q2555-Battery-Iron Mask-North-3DIP-Inv-Res-150MSL

TOTAL MAPS = 15



BATTERY
MINERAL RESOURCES

Iron Mask Project - North Grid
Hart Township, Ontario

3D Distributed IP Array
Survey Layout overlaying Grid
Operational Claim Fabric

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

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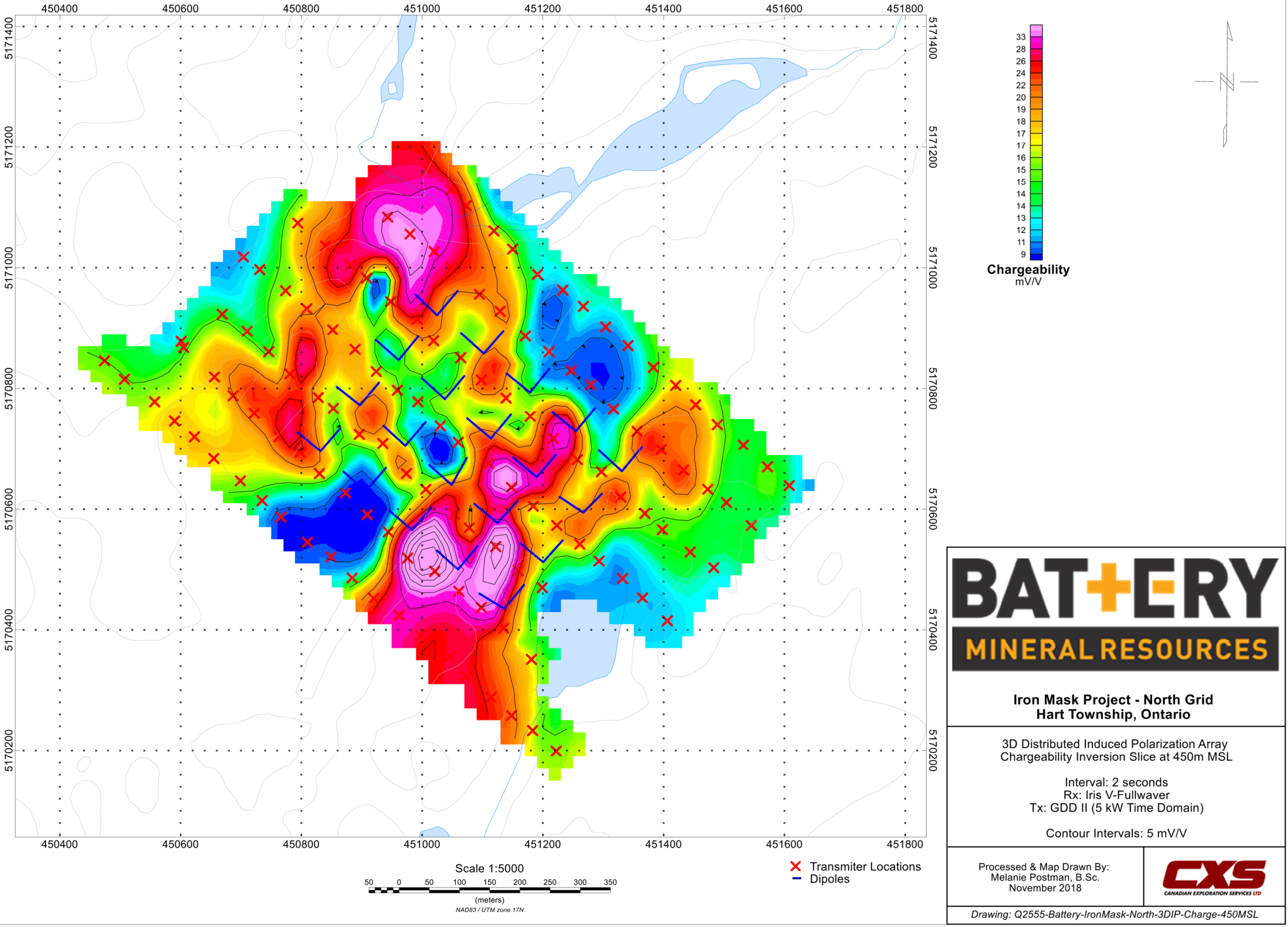
Drawing: Q2555-Battery-IronMask-North-3DIP-Layout-OperationalClaims



BATTERY
MINERAL RESOURCES

Iron Mask Project - North Grid
Hart Township, Ontario

3D Distributed Induced Polarization Array
Chargeability Inversion Slice at 450m MSL

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

Contour Intervals: 5 mV/V

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

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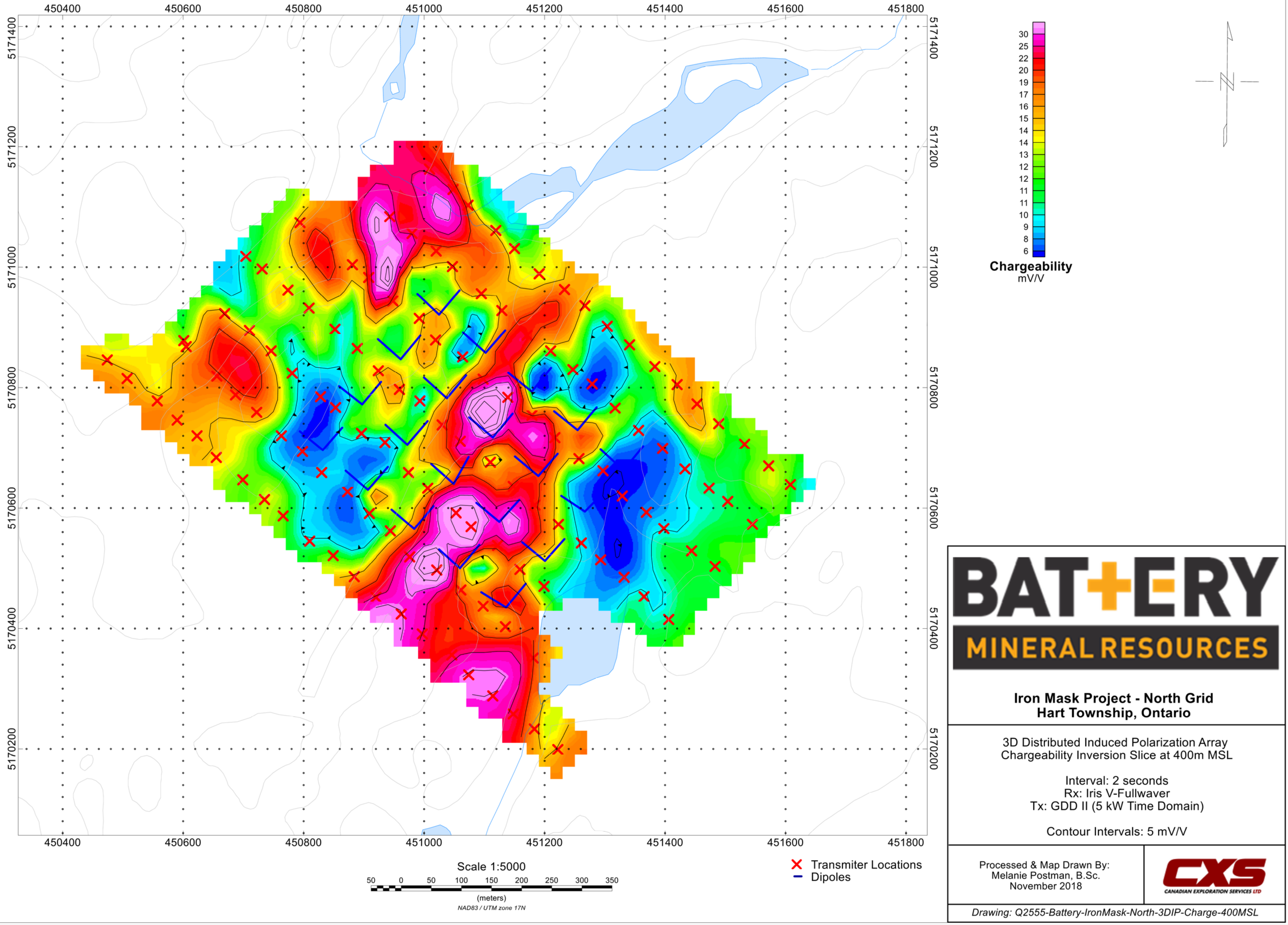
CANADIAN EXPLORATION SERVICES LTD

Drawing: Q2555-Battery-IronMask-North-3DIP-Charge-450MSL



BATTERY
MINERAL RESOURCES

Iron Mask Project - North Grid
Hart Township, Ontario

3D Distributed Induced Polarization Array
Chargeability Inversion Slice at 400m MSL

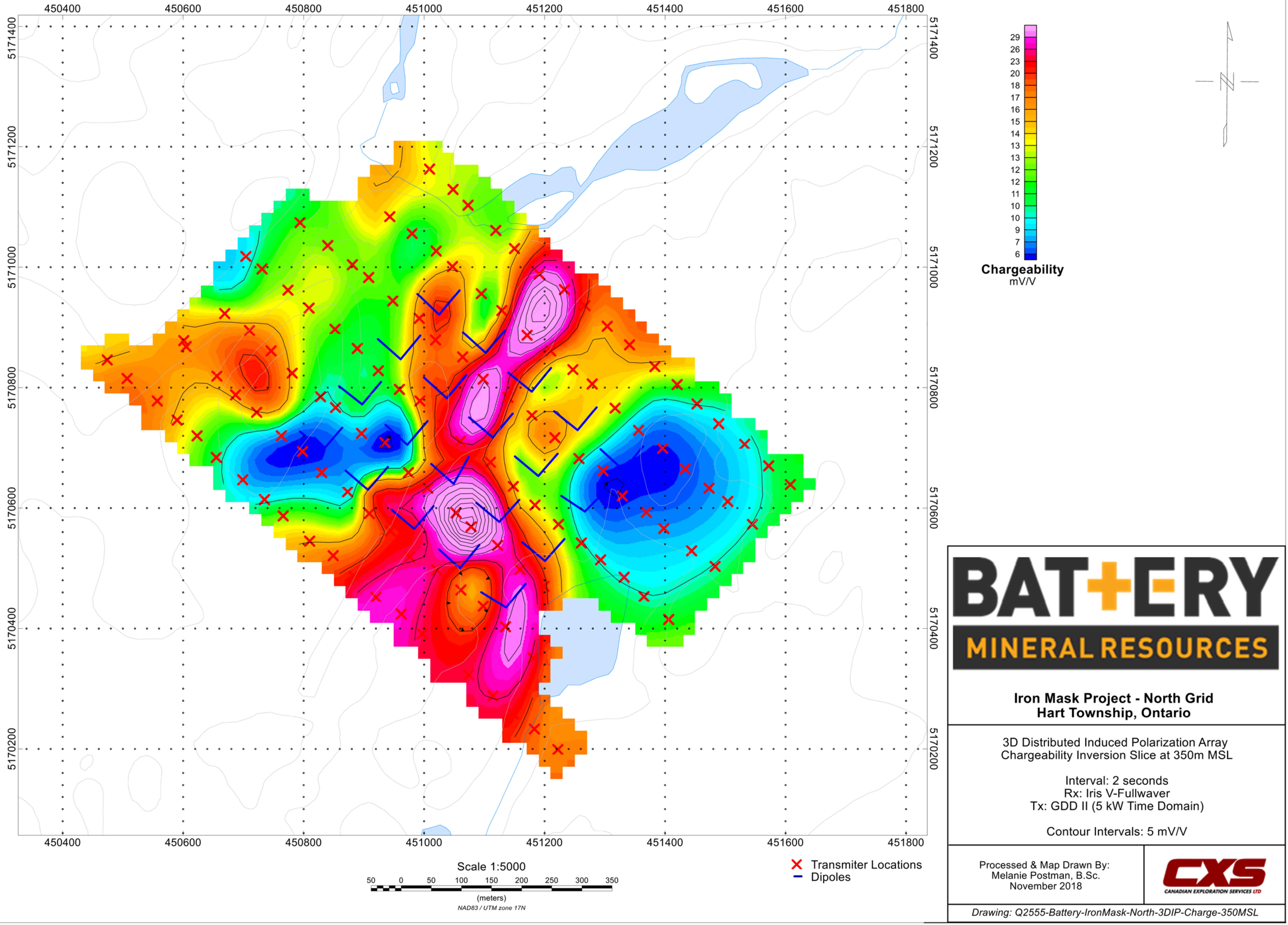
Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5 kW Time Domain)

Contour Intervals: 5 mV/V

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

CXS
CANADIAN EXPLORATION SERVICES LTD

Drawing: Q2555-Battery-IronMask-North-3DIP-Charge-400MSL



BATTERY

MINERAL RESOURCES

Iron Mask Project - North Grid
Hart Township, Ontario

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

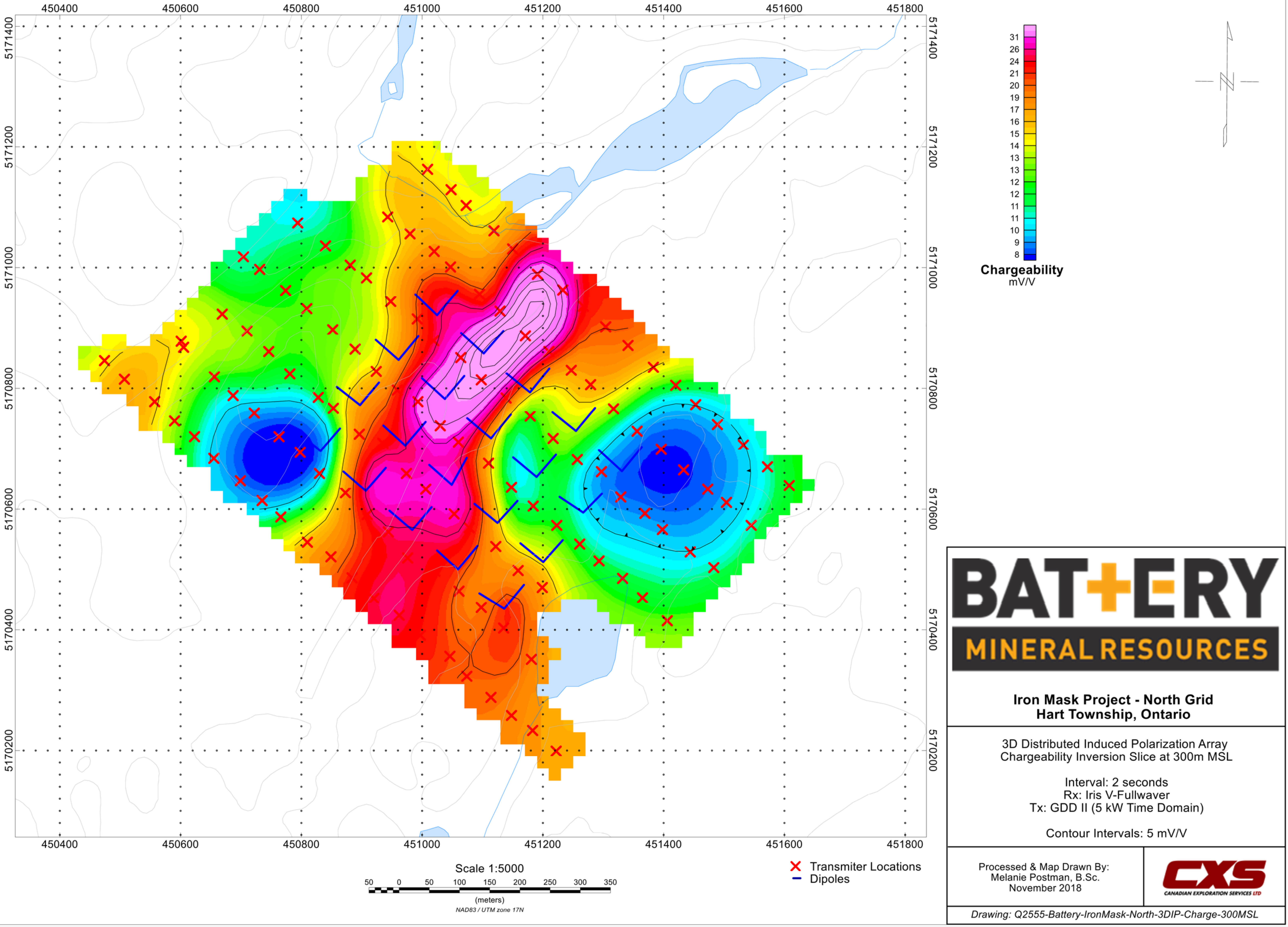
Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5 kW Time Domain)

Contour Intervals: 5 mV/V

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

CXS
CANADIAN EXPLORATION SERVICES LTD

Drawing: Q2555-Battery-IronMask-North-3DIP-Charge-350MSL



BATTERY MINERAL RESOURCES

Iron Mask Project - North Grid
Hart 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 mV/V

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

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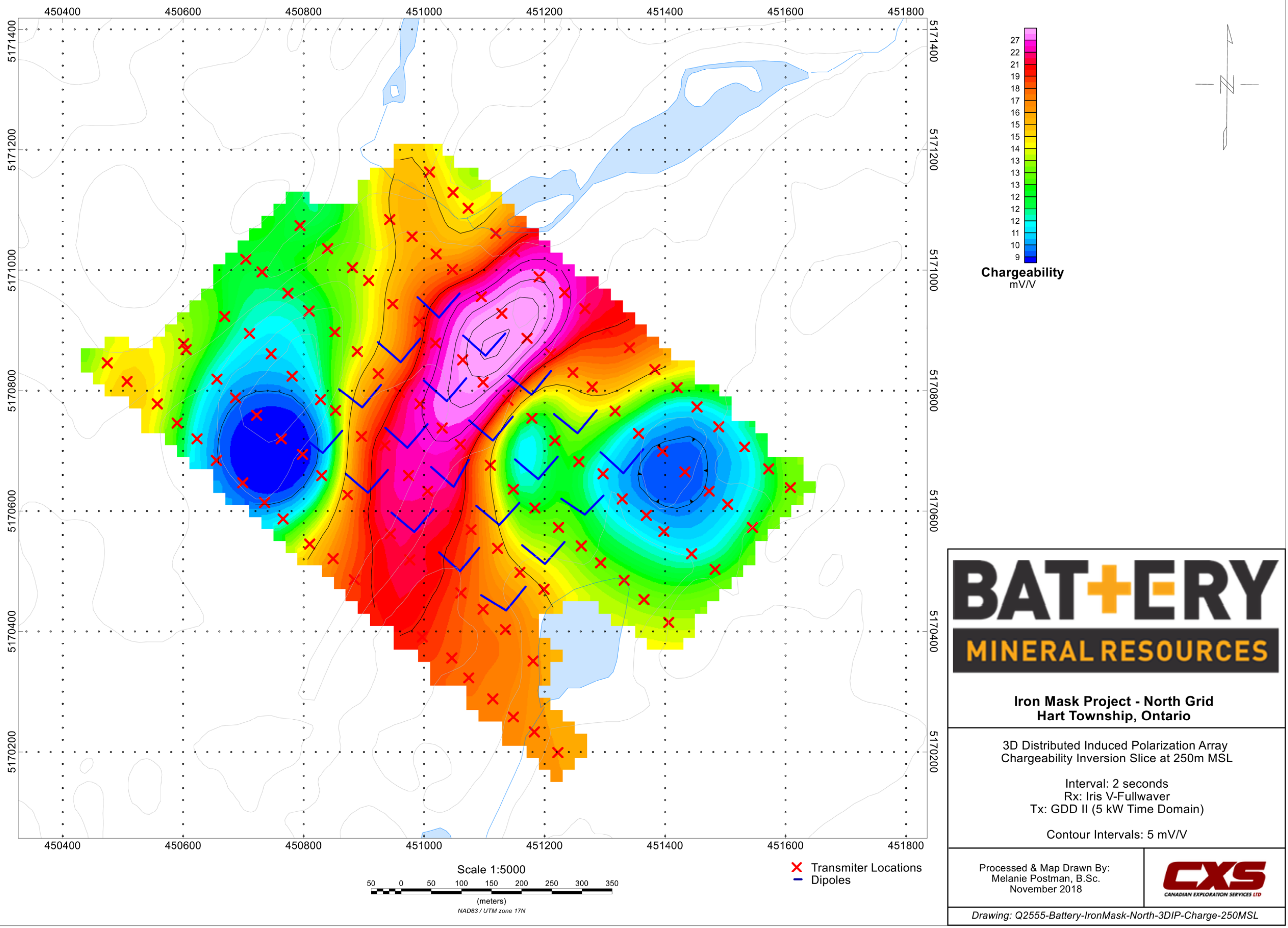
Drawing: Q2555-Battery-IronMask-North-3DIP-Charge-300MSL



BATTERY
MINERAL RESOURCES

Iron Mask Project - North Grid
Hart Township, Ontario

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

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

Contour Intervals: 5 mV/V

Processed & Map Drawn By:
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November 2018

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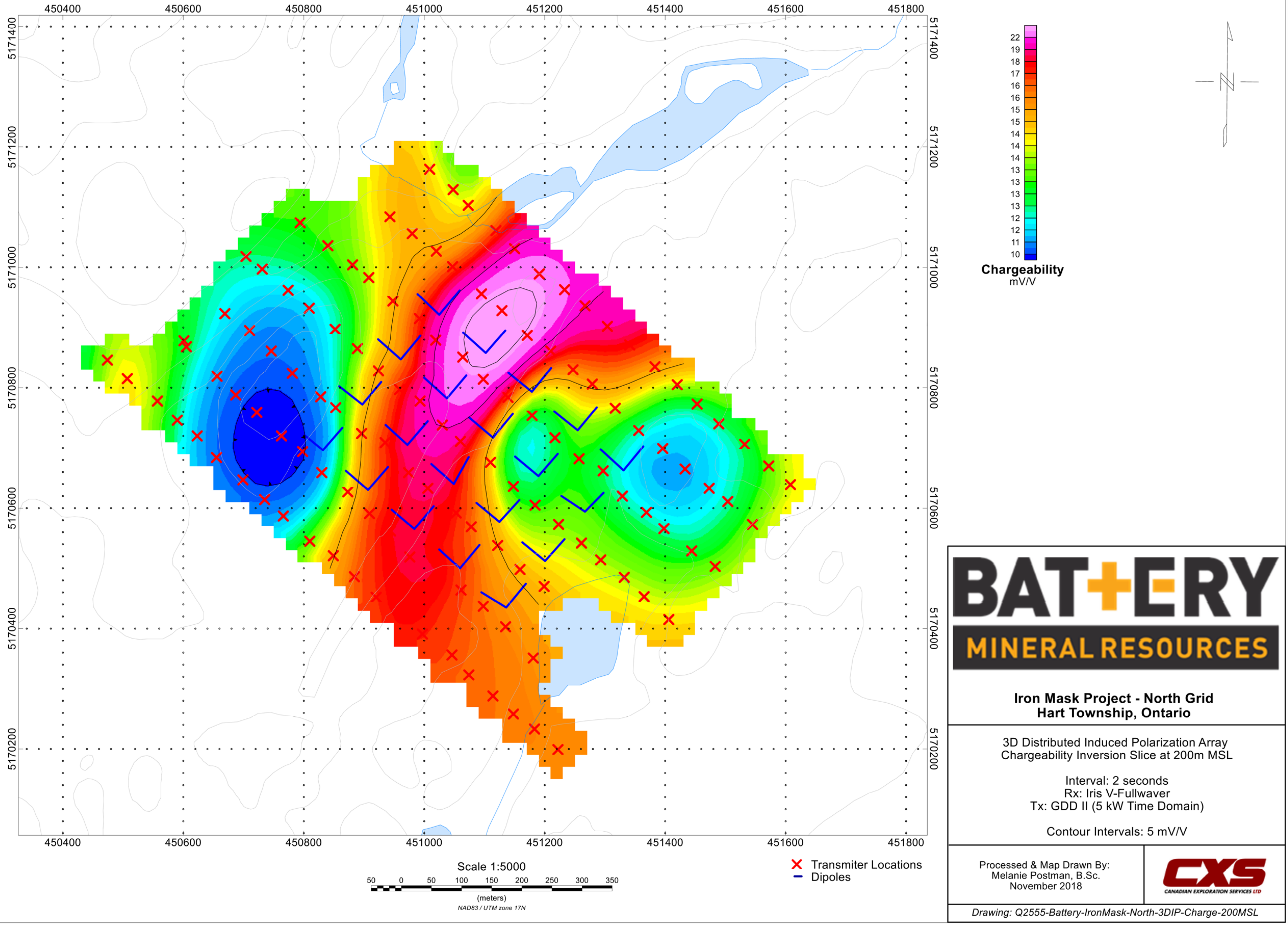
Drawing: Q2555-Battery-IronMask-North-3DIP-Charge-250MSL



BATTERY
MINERAL RESOURCES

Iron Mask Project - North Grid
Hart Township, Ontario

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 mV/V

Processed & Map Drawn By:
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November 2018

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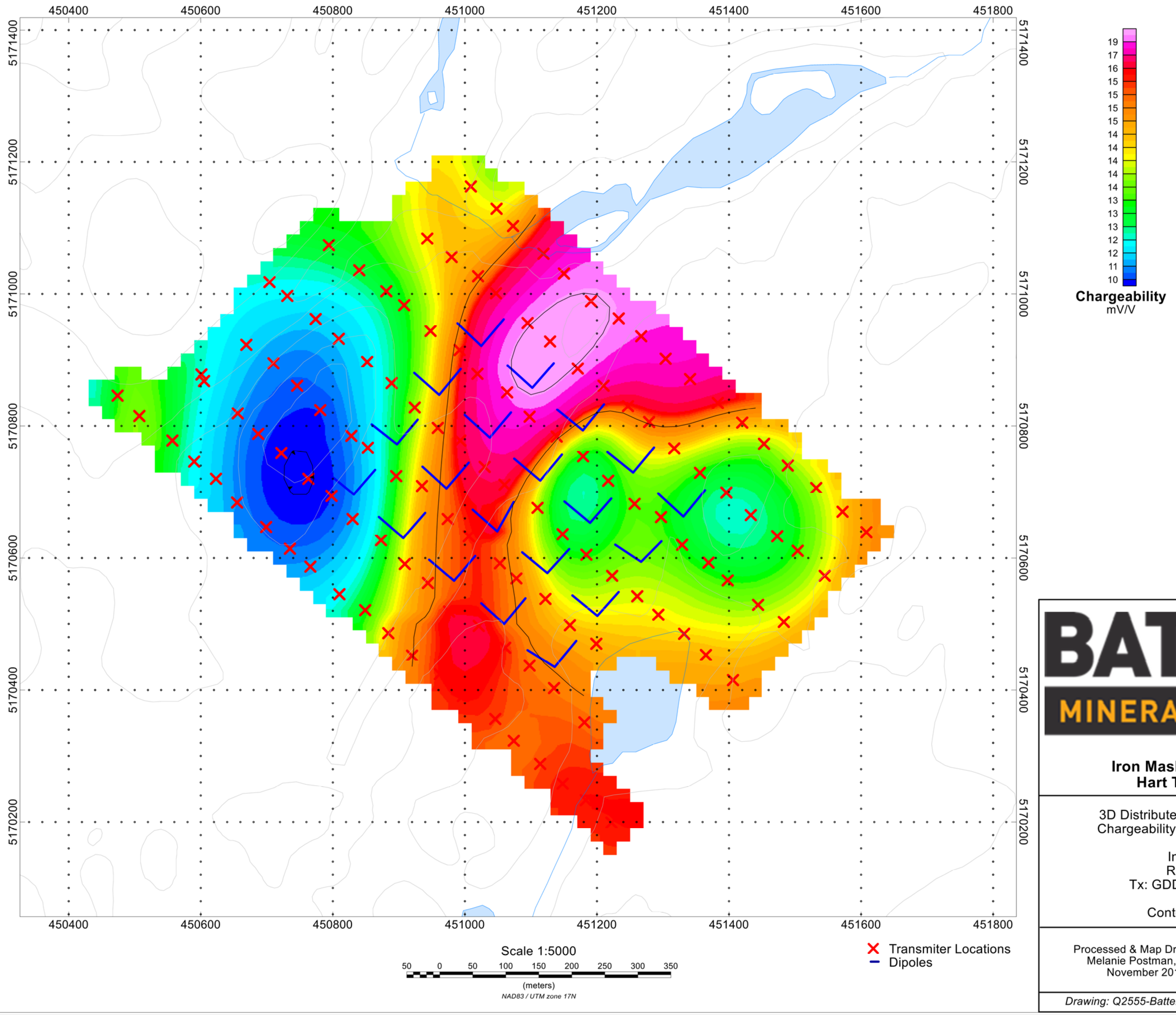
Drawing: Q2555-Battery-IronMask-North-3DIP-Charge-200MSL



BATTERY MINERAL RESOURCES

Iron Mask Project - North Grid
Hart Township, Ontario

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

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

Contour Intervals: 5 mV/V

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

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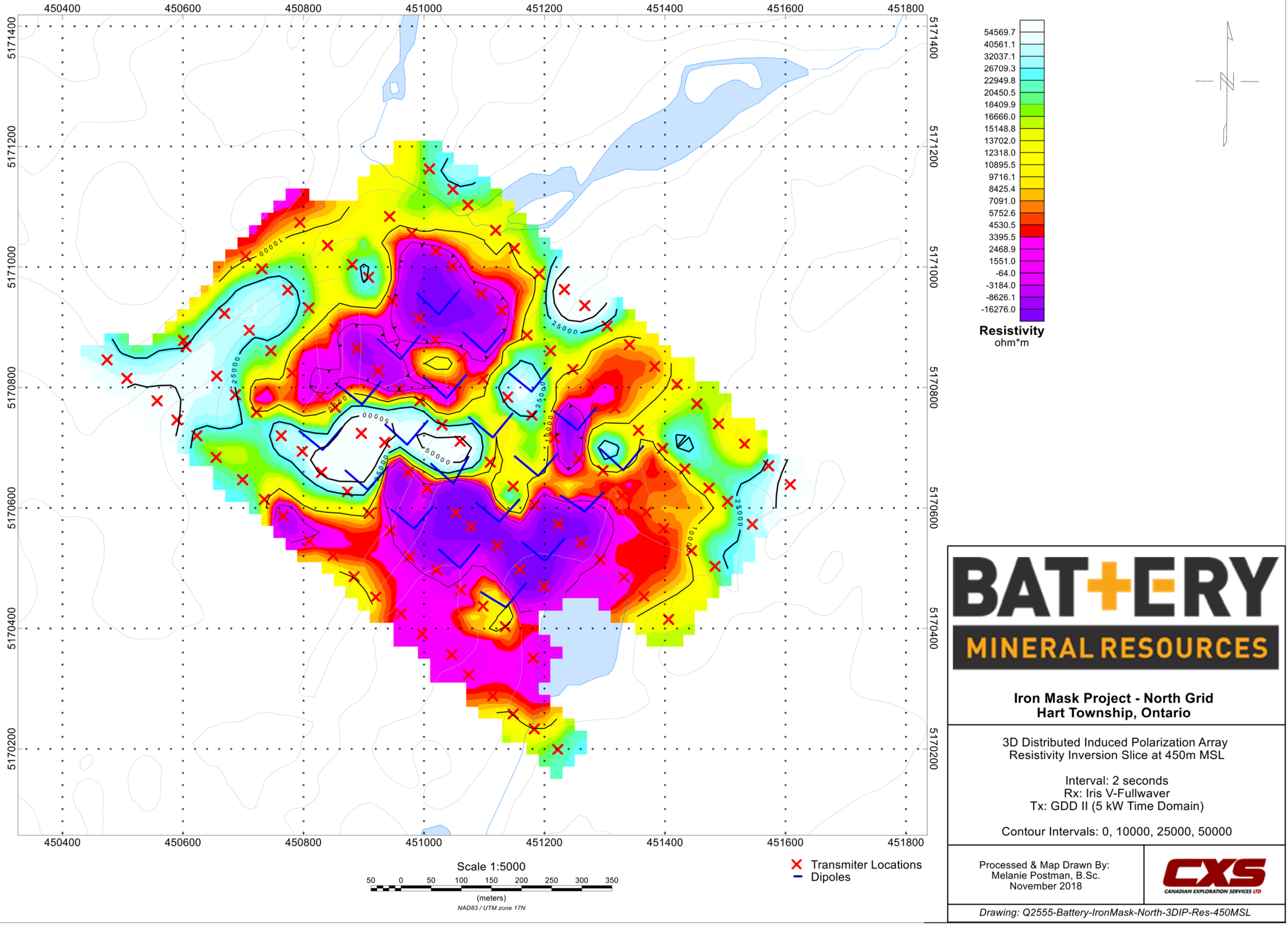
Drawing: Q2555-Battery-IronMask-North-3DIP-Charge-150MSL



BATTERY

MINERAL RESOURCES

Iron Mask Project - North Grid
Hart Township, Ontario

3D Distributed Induced Polarization Array
Resistivity Inversion Slice at 450m MSL

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

Contour Intervals: 0, 10000, 25000, 50000

Processed & Map Drawn By:
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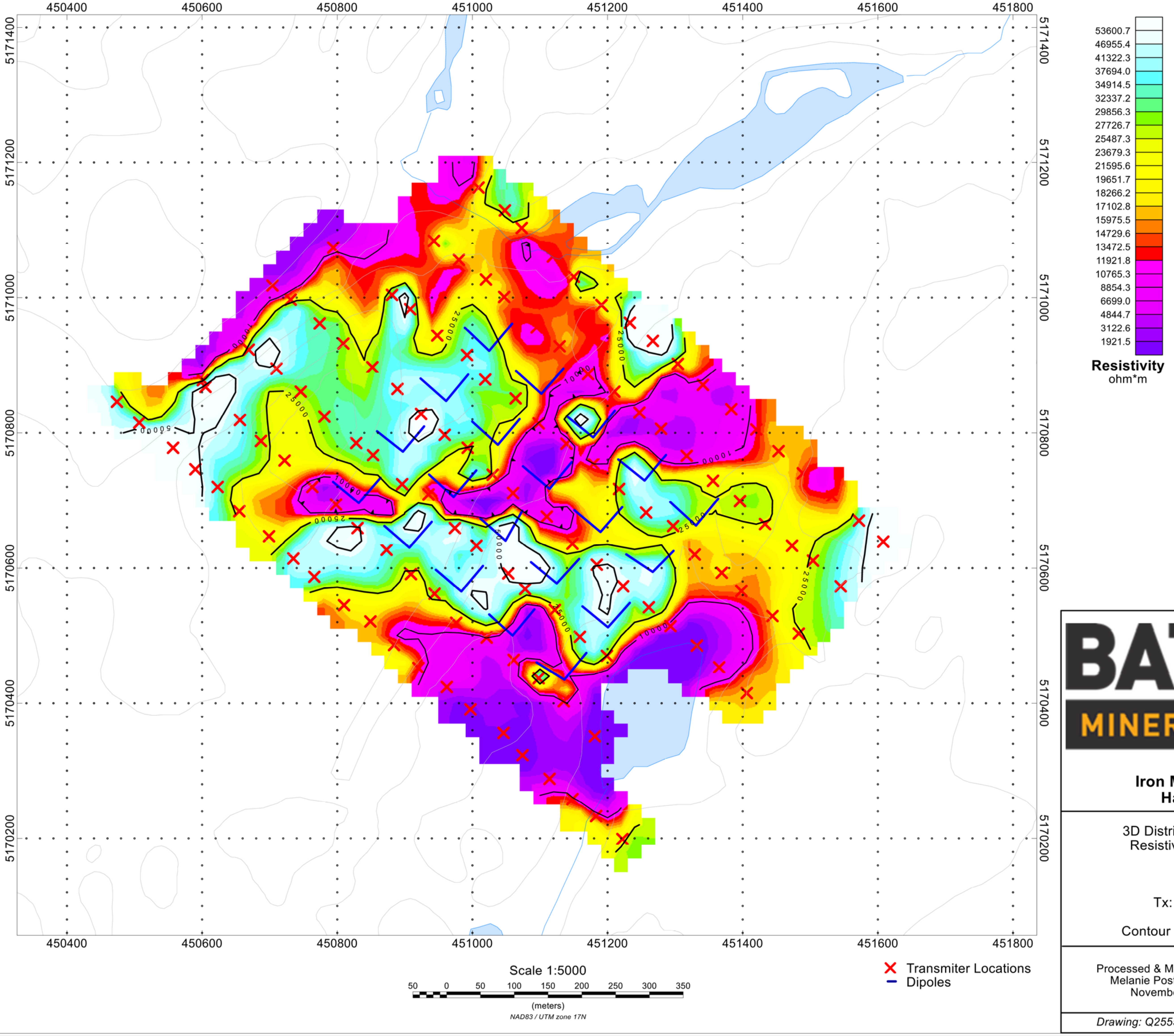
Drawing: Q2555-Battery-IronMask-North-3DIP-Res-450MSL



BATTERY MINERAL RESOURCES

Iron Mask Project - North Grid
Hart Township, Ontario

3D Distributed Induced Polarization Array
Resistivity Inversion Slice at 400m MSL

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

Contour Intervals: 0, 10000, 25000, 50000

Processed & Map Drawn By:
Melanie Postman, B.Sc.
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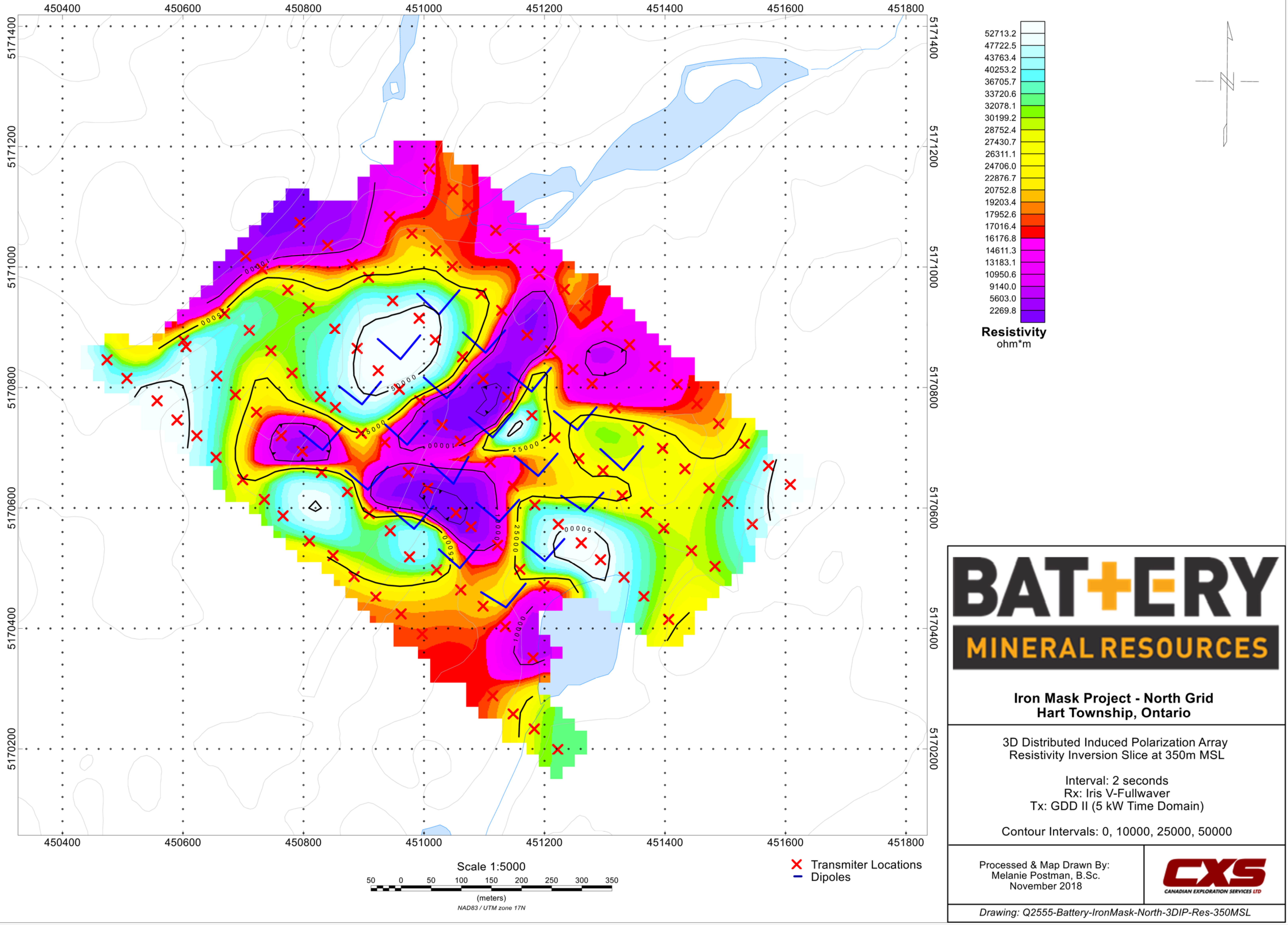
Drawing: Q2555-Battery-IronMask-North-3DIP-Res-400MSL



BATTERY MINERAL RESOURCES

Iron Mask Project - North Grid
Hart 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: 0, 10000, 25000, 50000

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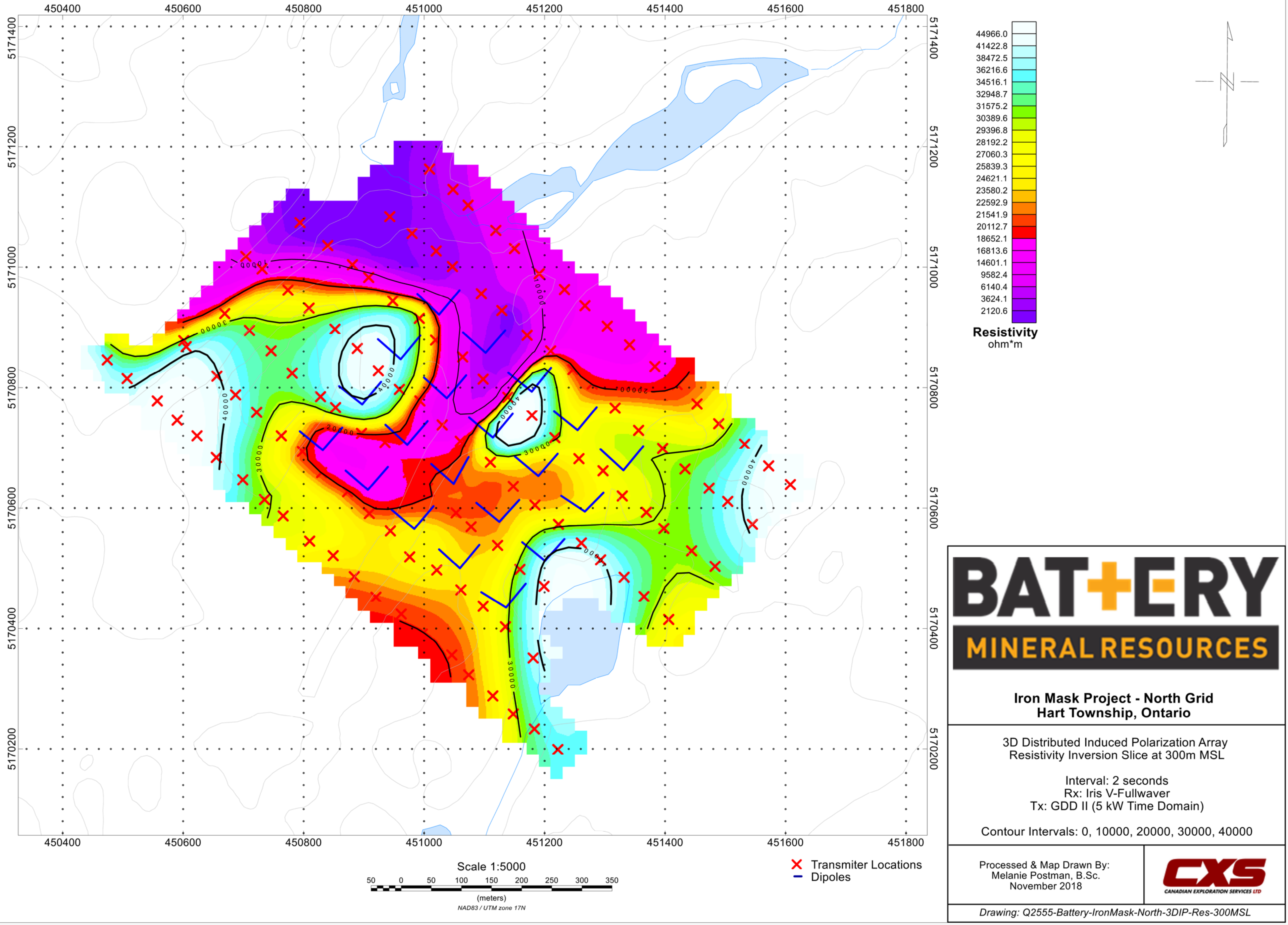
Drawing: Q2555-Battery-IronMask-North-3DIP-Res-350MSL



BATTERY
MINERAL RESOURCES

Iron Mask Project - North Grid
Hart 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: 0, 10000, 20000, 30000, 40000

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November 2018

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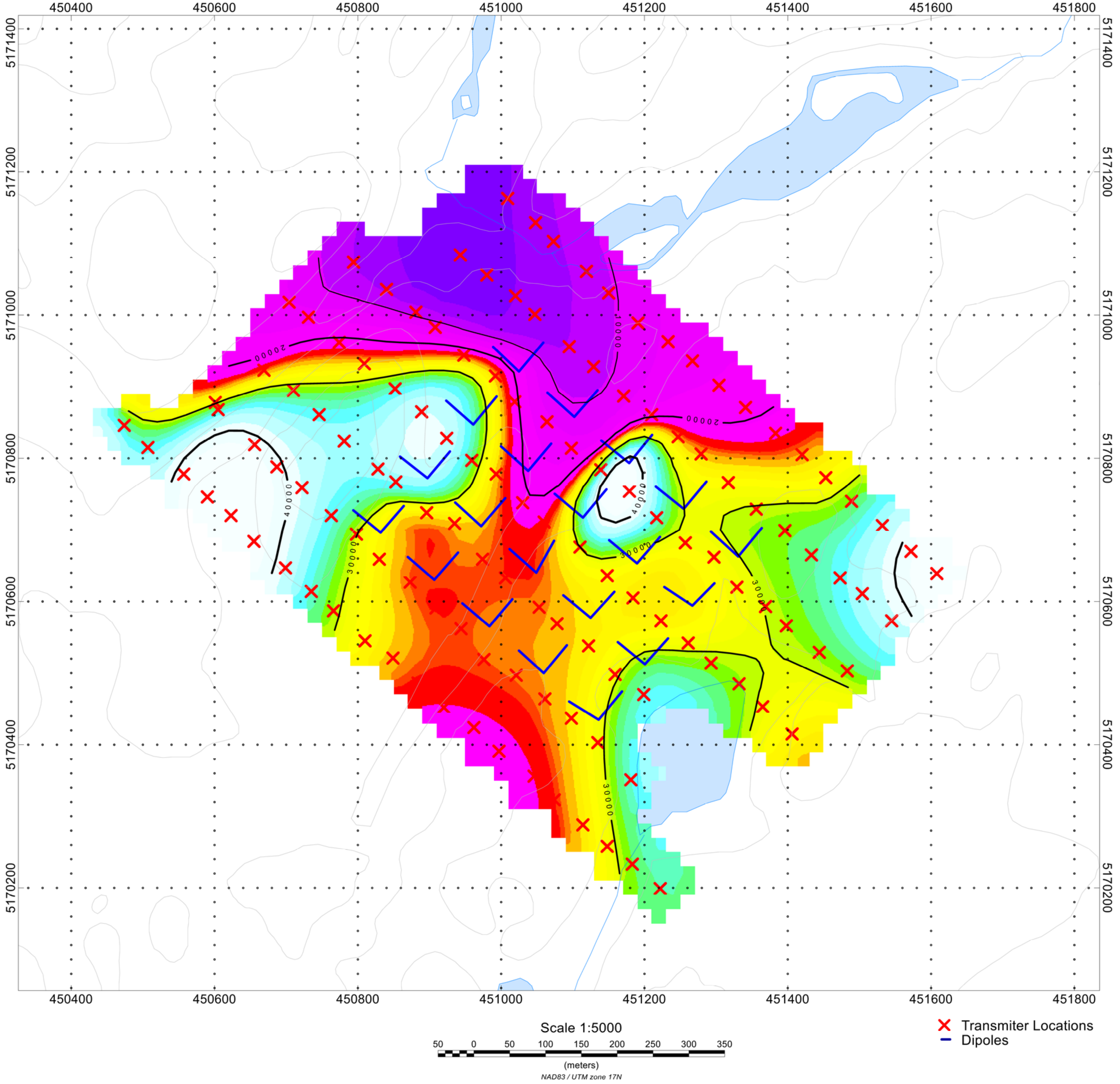
Drawing: Q2555-Battery-IronMask-North-3DIP-Res-300MSL



BATTERY MINERAL RESOURCES

Iron Mask Project - North Grid
Hart 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: 0, 10000, 20000, 30000, 40000

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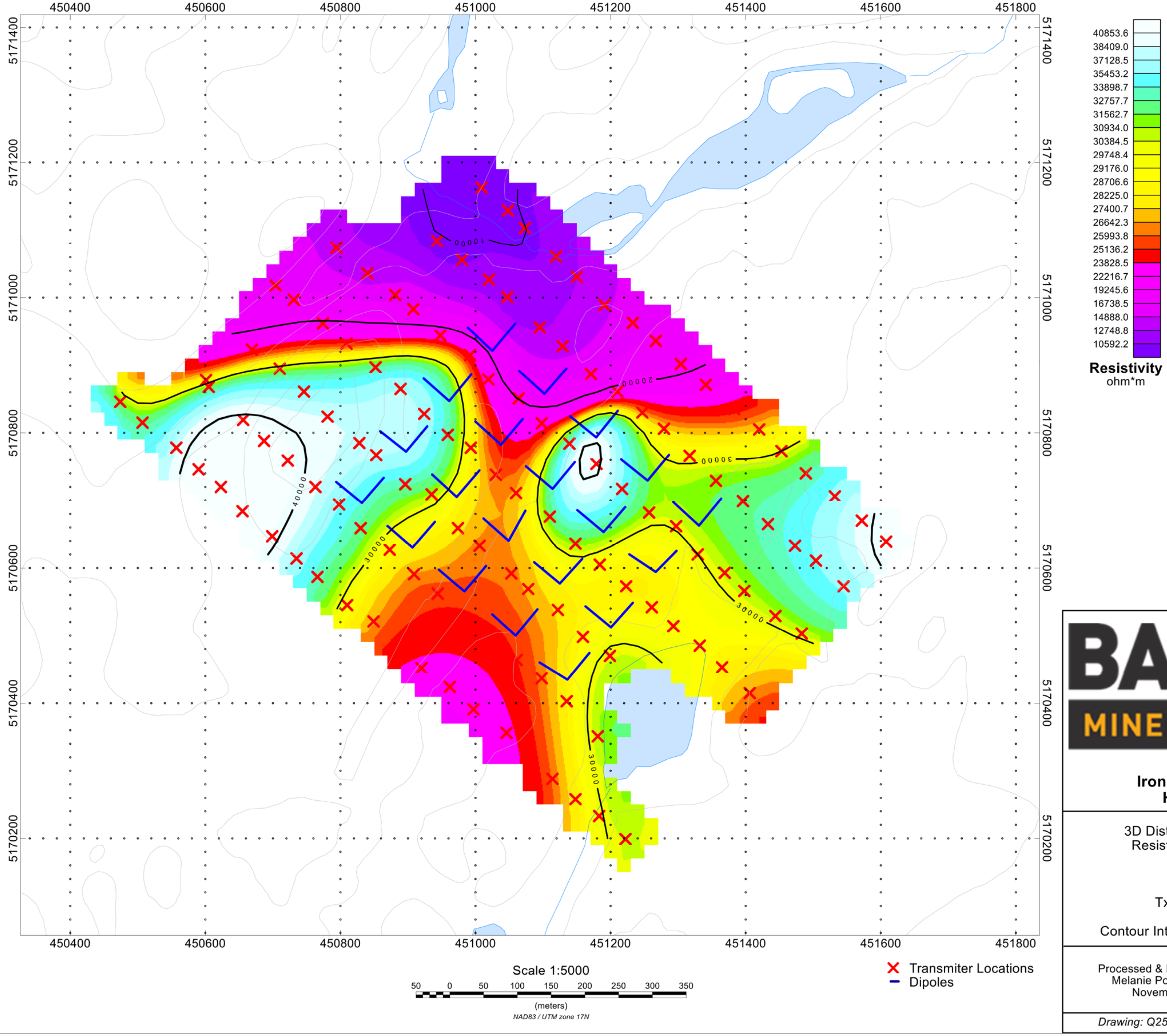
Drawing: Q2555-Battery-IronMask-North-3DIP-Res-250MSL



Iron Mask Project - North Grid
Hart 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: 0, 10000, 20000, 30000, 40000

Processed & Map Drawn By:
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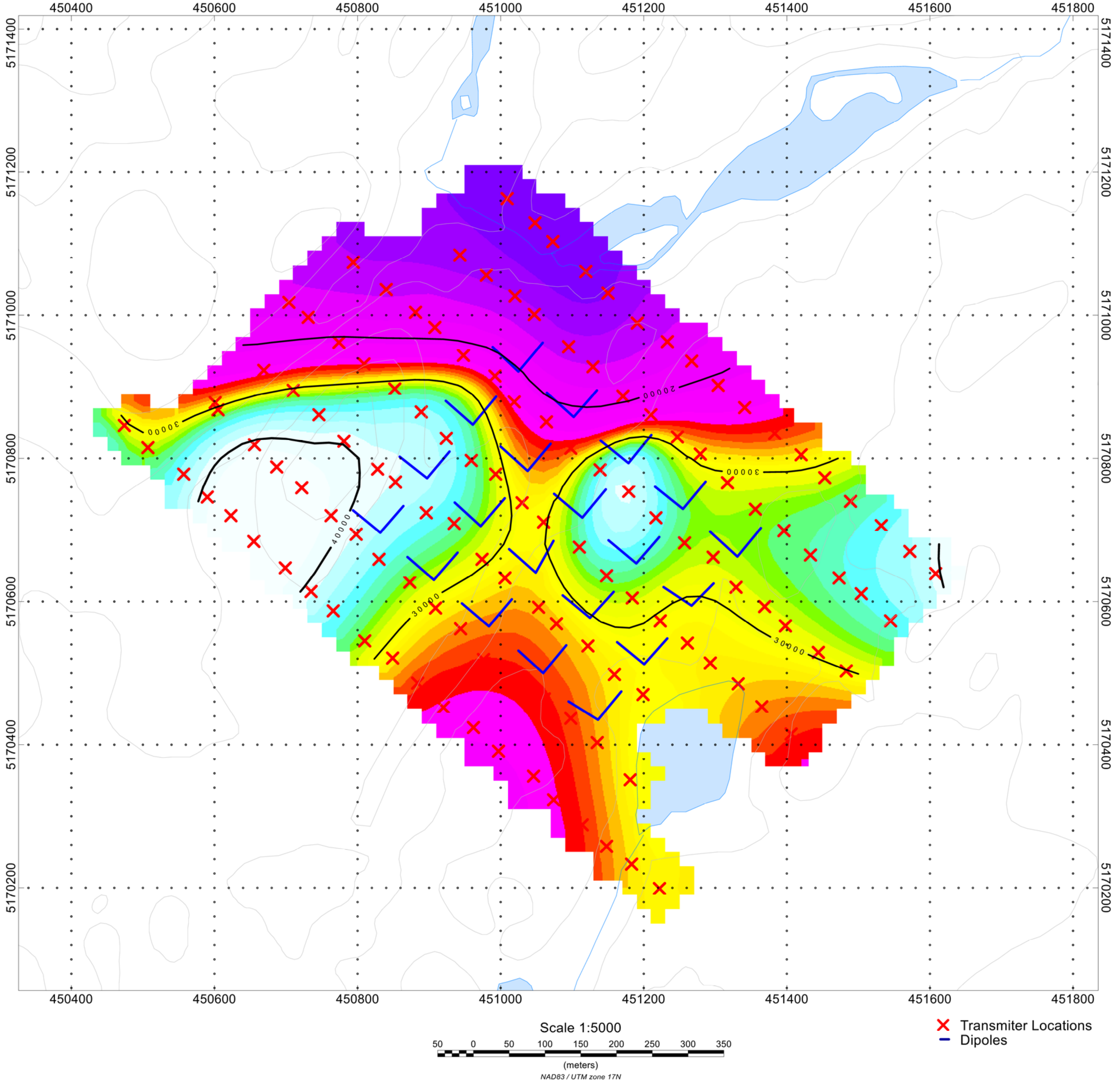
Drawing: Q2555-Battery-IronMask-North-3DIP-Res-200MSL



Iron Mask Project - North Grid
Hart 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: 0, 10000, 20000, 30000, 40000

Processed & Map Drawn By:
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November 2018

Drawing: Q2555-Battery-IronMask-North-3DIP-Res-150MSL

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