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REPORT ON A HELICOPTER-BORNE VERSATILE TIME DOMAIN ELECTROMAGNETIC (VTEM™ Plus) AND HORIZONTAL MAGNETIC GRADIOMETER GEOPHYSICAL SURVEY

- MAUDE LAKE PROPERTY - SCHREIBER, ONTARIO

Pays Plat Lake Area, Lower Aguasabon Lake Area,

Killraine, and Priske Townships

Thunder Bay Mining Division

NTS 42D14

Prepared For

Transition Metals Corp.

Monday, 14 March 2022

Benjamin Williams, GIT

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1.0 INTRODUCTION

The following Report encompasses done on the Maude Lake Property (Figure 1), by Transition Metals Corp. Work was contracted to Geotech Airborne Geophysical Surveys, to conduct a Helicopter-Borne Versatile Time Domain Electromagnetic (VTEM™ Plus) and Horizontal Magnetic Gradiometer Geophysical Survey (Section 5.1) on the Property between January 11th and January 18th, 2022.

Transition Metals Corp. contracted Alan King, P.Geo, of Geosciences North, of Sudbury Ontario to advise on the type and orientation of the Airborne Geophysical survey. Furthermore, Geoscience North, undertook an additional geophysical review of all historical Geophysical products within the Property area between November 2021 and February 2022 (Section 5.3). The new VTEM AEM/Magnetic survey data by Geotech, was incorporated into the regional magnetic and gravity inversion models as part of the regional and local scale geophysical evaluation of the property. Data from the new AEM survey highlighted several discrete AEM anomalies, which were selected, examined, and interpreted quantitatively. A total of seven moderate AEM anomalies and one strong anomaly were located on the Maude Lake property. These anomalies were quantitively interpreted using the Maxwell EM modelling software and the results are plotted and discussed as part of that work.

The above-mentioned exploration program was supported in part by the 2021/2022 Ontario Junior Exploration Program (OJEP) funding, within the reporting period of July 26th, 2021, through to February 28th, 2022. All aspects of the conduct and timing of the geophysical exploration was supervised by personnel employed by Transition Metals Corp.

2.0 PROPERTY LOCATION, ACCESS, AND DESCRIPTION

The property is located within the Thunder Bay Mining District in the Pays Plat Lake Area and the Lower Aquasabon Area (Figure 1), near the western end of the Schreiber Volcanic belt, part of the Abitibi Wawa Greenstone belt of the Superior Structural Province. The government of Ontario advises that the property is within the acknowledged traditional territory of Pays Platt, Rocky Bay, Sand Point, Pic River, and Long Lake 58 First Nations as well as the Red Sky Independent Metis Nation. The property consists of 74 mining claims, covering an area of approximately 1,500 hectares (Figure 2, Table 1).

The property is located approximately 6 km north of the town of Schreiber. Access is gained off the Winston Lake mine road just south of Sammy's Lake. An old drill road provides access to the property. The old drill road is driveable by 4x4 for the first 2 km and then by all-terrain vehicle for the remainder.

The climate is that typical of north of Lake Superior, warm summers, cold winters, a modicum of snow, and a wet spring. Work can be done around the year except for the inevitable delays during spring thaw and winter freeze up.

The general terrain in the region of the property is typical of that north of Lake Superior, hilly with local steep sides, and long valleys filled with marsh with a local relief of a few hundred metres. Outcrop near hilltops is locally abundant, but elsewhere a veneer of glacial debris covers the landscape. Vegetation is poplar and birch bush with minor spruce stands. Access trails in the area are old logging roads now used mainly by ATV and skidoo, some of which can be used to gain access by heavy equipment.

There is sufficient water for drilling within reach of most potential drill locations. There are no apparent impediments to exploration in the form of surface right alienation.

Access to the area is well served with the Trans-Canada Highway, the CPR passing within 10 km or so of the claim groups, and a power line traverses the area only 5 km to the south. The town of Schreiber and surround areas has previous experience with mining and can provide the appropriate infrastructure and labour force.

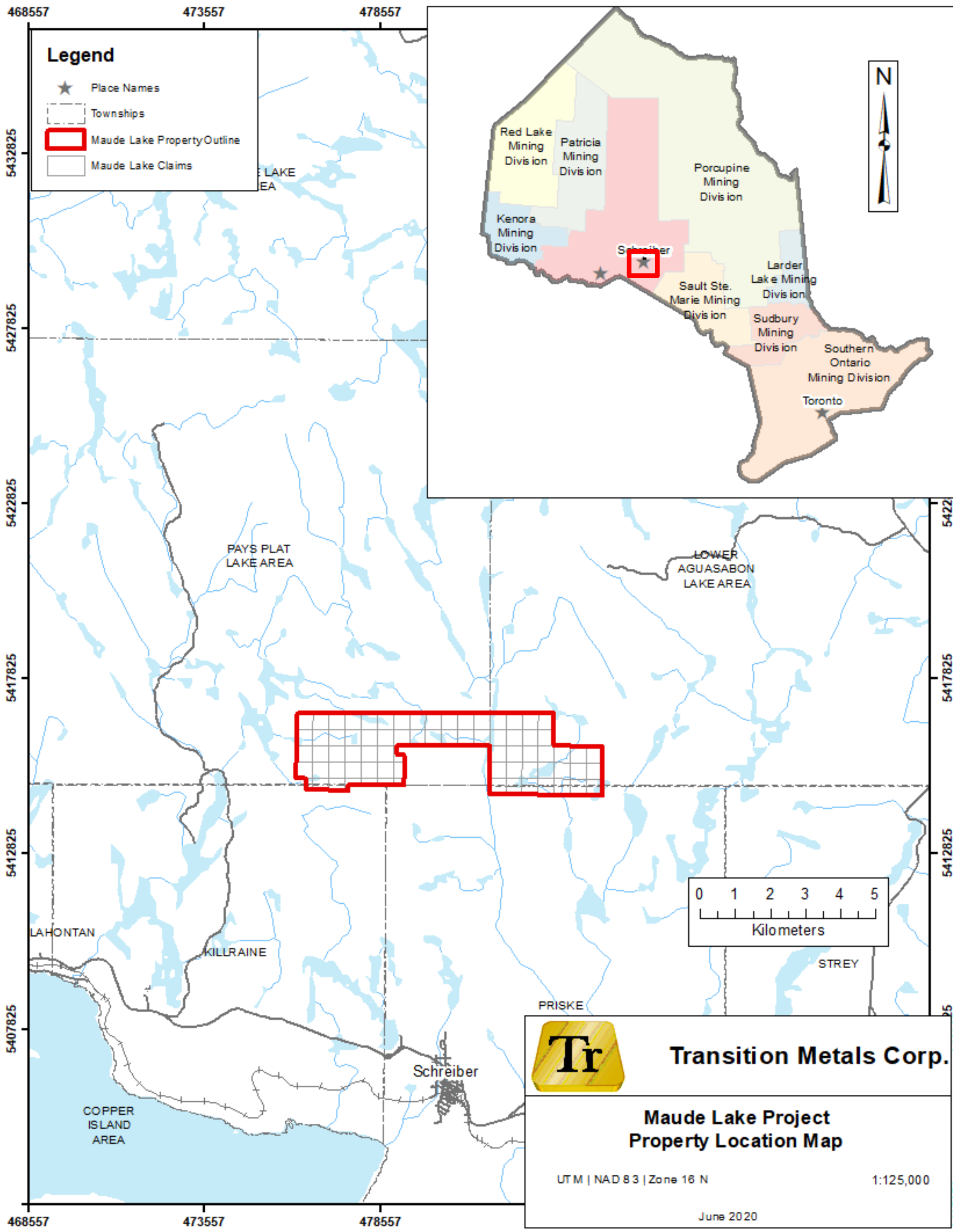

Figure 1: Maude Lake Property Location Map

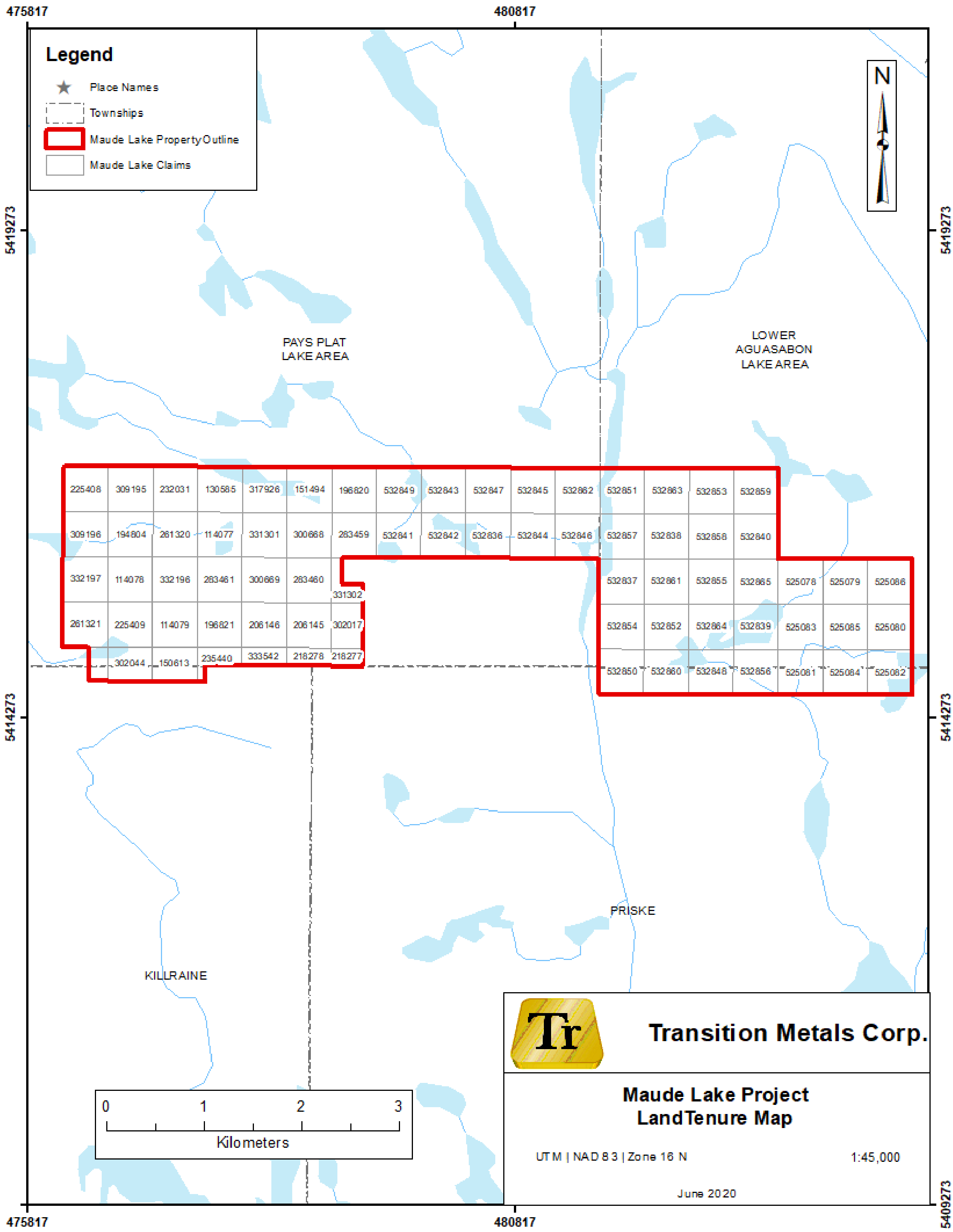

Figure 2: Maude Lake Property Claim Tenure Map

Table 1: List of Claim Tenures Comprising the Maude Lake Property

Tenure	Title Type	Status	Issue Date	Anniversary Date	Holder
333542	Boundary Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
114077	Single Cell Mining Claim	Active	2018-04-10	2022-04-23	(100) Transition Metals Corp.
114078	Single Cell Mining Claim	Active	2018-04-10	2022-04-23	(100) Transition Metals Corp.
114079	Single Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
130585	Single Cell Mining Claim	Active	2018-04-10	2022-04-23	(100) Transition Metals Corp.
150613	Boundary Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
151494	Single Cell Mining Claim	Active	2018-04-10	2022-04-20	(100) Transition Metals Corp.
194804	Single Cell Mining Claim	Active	2018-04-10	2022-04-23	(100) Transition Metals Corp.
196820	Single Cell Mining Claim	Active	2018-04-10	2022-04-20	(100) Transition Metals Corp.
196821	Single Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
206145	Single Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
206146	Single Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
532836	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
218277	Boundary Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
218278	Boundary Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
225408	Single Cell Mining Claim	Active	2018-04-10	2022-04-23	(100) Transition Metals Corp.
225409	Single Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
232031	Single Cell Mining Claim	Active	2018-04-10	2022-04-23	(100) Transition Metals Corp.
235440	Boundary Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
261320	Single Cell Mining Claim	Active	2018-04-10	2022-04-23	(100) Transition Metals Corp.
261321	Single Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.

Tenure	Title Type	Status	Issue Date	Anniversary Date	Holder
532837	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532841	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532838	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532839	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532840	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
283459	Single Cell Mining Claim	Active	2018-04-10	2022-04-20	(100) Transition Metals Corp.
283460	Single Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
283461	Single Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
302017	Boundary Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
302044	Boundary Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
300668	Single Cell Mining Claim	Active	2018-04-10	2022-04-20	(100) Transition Metals Corp.
300669	Single Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
309195	Single Cell Mining Claim	Active	2018-04-10	2022-04-23	(100) Transition Metals Corp.
309196	Single Cell Mining Claim	Active	2018-04-10	2022-04-23	(100) Transition Metals Corp.
317926	Single Cell Mining Claim	Active	2018-04-10	2022-04-20	(100) Transition Metals Corp.
319275	Boundary Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
331301	Single Cell Mining Claim	Active	2018-04-10	2022-04-20	(100) Transition Metals Corp.
331302	Boundary Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
332196	Single Cell Mining Claim	Active	2018-04-10	2022-10-30	(100) Transition Metals Corp.
332197	Single Cell Mining Claim	Active	2018-04-10	2022-04-23	(100) Transition Metals Corp.
525078	Single Cell Mining Claim	Active	2018-06-30	2022-06-30	(100) Transition Metals Corp.
525079	Single Cell Mining Claim	Active	2018-06-30	2022-06-30	(100) Transition Metals Corp.

Tenure	Title Type	Status	Issue Date	Anniversary Date	Holder
525080	Single Cell Mining Claim	Active	2018-06-30	2022-06-30	(100) Transition Metals Corp.
525081	Single Cell Mining Claim	Active	2018-06-30	2022-06-30	(100) Transition Metals Corp.
532842	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532843	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532844	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532845	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532846	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532847	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532848	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532849	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532850	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532851	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532852	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532853	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532854	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532855	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532856	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532857	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532858	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532859	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532860	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532861	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.

Tenure	Title Type	Status	Issue Date	Anniversary Date	Holder
532862	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532863	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532864	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
532865	Single Cell Mining Claim	Active	2018-10-09	2022-10-09	(100) Transition Metals Corp.
525082	Single Cell Mining Claim	Active	2018-06-30	2022-06-30	(100) Transition Metals Corp.
525083	Single Cell Mining Claim	Active	2018-06-30	2022-06-30	(100) Transition Metals Corp.
525084	Single Cell Mining Claim	Active	2018-06-30	2022-06-30	(100) Transition Metals Corp.
525085	Single Cell Mining Claim	Active	2018-06-30	2022-06-30	(100) Transition Metals Corp.
525086	Single Cell Mining Claim	Active	2018-06-30	2022-06-30	(100) Transition Metals Corp.

3.0 HISTORICAL WORK

The following is a summary culled from the MNDM records of previous work completed on or adjacent to the Maude Lake Property:

Circa 1930 - Trenching was conducted on the iron formations and gossans in the area.

1930-36 - Cominco undertaken surface sampling and diamond drilling of 3 holes (locations unknown)

1937 - Cook Lake Gold Mines Ltd. performed a ground mag survey.

1938 - Ontario Geological Survey mapped portions of the area (Bartley, 1938)

1950 - Falconbridge Nickel Mines held the property under option from D. Campbell of Schreiber. They conducted a ground mag survey and geological mapping. A detailed investigation of the mineralization was carried out and formed the basis of a bachelor's thesis by D.T. Anderson (1951).

1956 - Property optioned to New Athona Mines Ltd. and Mogul Mining Corp., who drilled 4 holes totalling 516 m.

1965 - Property came open and was restated by Zenmac Metal Mines Ltd., who mapped the property and drilled 5 holes totalling 61 m along a strike length of 48.8 m on the main mineralized zone.

1966 - Ontario Geological Survey geological compilation map, 1'= 2miles.

1969 - Zenmac Metals carried out a detailed ground mag survey, locating 4 anomalous zones. 8 holes totalling 642 m were drilled. Zenmac Metal Mines described their results as follows:

> "The deposit known before this (1969) program was estimated to contain 185,000 tons grading 0.49% nickel and 0.26% copper to the 300 foot horizon in a zone 300 feet long, 22 feet thick and dipping 40 degrees. Three holes have intersected the deposit at greater depth to at least 600 feet and indicate an additional 190,000 tons grading 0.40% nickel and 0.12% copper. The grade of the central core of the deposit was calculated to be about 1.0% nickel and 0.3% copper over 5 to 15 feet."

1970 - Nicohal Mines Ltd. drilled 9 holes totalling 1231.7 m, encountering Ni-Cu mineralization.

1983- Noranda Exploration conducts reconnaissance investigations. Geological mapping and geophysical surveys including mag, Max Min Horizontal Loop and PEM surveys were conducted. Areas of hydrothermal alteration were recognized.

1984 - Noranda Exploration drilled 4 holes totalling 699 m, in the vicinity Northwest of Victoria Lake, on targets considered prospective for hosting VMS style copper/zinc mineralization, also conducting down-hole pulse surveys.

1985 - Noranda Exploration conducts 878 m of diamond drilling on the property as well as down-hole PEM survey as follow up to drilling completed in 1984.

1987 - Geological mapping and 1558 m of diamond drilling are conducted. Down-hole pulse survey is conducted. Minor base metal values (<1100 ppm Zn) are intersected.

1990 - Minnova Inc. options the property from Noranda Exploration and Cumberland resources Ltd. Detailed geological mapping is conducted and several favourable alteration zones and synvolcanic structures are defined.

1991-1992 - Minnova Inc. conducts diamond drilling and downhole geophysical surveys.

1992 - Resident Geologist Staff visited the Nicopor Deposit. Seven grab samples returned copper values ranging from 80 to 10,540 ppm Cu, 105 to 45,250 ppm Ni, and <10 to 456 ppb Palladium. The best copper value came from amphibole rich granite, with fine grained disseminated py, po, cp and rare native copper grains (Main trench). The best Nickel and Palladium value came from massive po, with minor cp blebs, subhedral pyrite porphyroblasts; relict patches of host granite (Main Trench dump).

1997 - Brian Fowler sampled and assayed the adjacent Nicopor Deposit. Grab samples assayed as high as 5.7% Nickel, 1.3% copper, 0.09% cobalt, 0.44 g/t palladium and 0.11 g/t platinum. The highlight results of Fowler's sampling are as follows:

- 97-09 - 36 ppb Au, 158 ppb Pd, 60 ppb Pt, 0.78% Cu, 2.92% Ni
- 97-10 - 24 ppb Au, 442 ppb Pd, 30 ppb Pt, 0.09% Cu, 5.70% Ni
- 97-11 - 56 ppb Au, 194 ppb Pd, 50 ppb Pt, 1.26% Cu, 1.44% Ni
- 97-12 - 64 ppb Au, 124 ppb Pd, 110 ppb Pt, 1.01% Cu, 0.60% Ni
- 97-13 - 36 ppb Au, 186 ppb Pd, 40 ppb Pt, 0.66% Cu, 1.55% Ni
- 97-14 - 32 ppb Au, 242 ppb Pd, 50 ppb Pt, 0.11% Cu, 0.66% Ni
- 97-15 - 24 ppb Au, 236 ppb Pd, 70 ppb Pt, 0.09% Cu, 3.27% Ni

2001- 2004 - NovaWest Resources completed 11 diamond drill holes (1,502 metres) in the vicinity of the Nicopar Prospect. Eight of the 11 diamond drill holes intersected disseminated to semi-massive (10-15 per cent) sulphide mineralization (pyrrhotite-pyrite-chalcopyrite). The sulphide mineralization occurred as blebs or clots associated to a magnetic pyroxenite unit that is believed to have intruded the granitic rocks. Company geologists believed the sulphide clots or blebs noted within the pyroxenite dike material were from settling or coalescing, which could create significant accumulation.

2019 – Transition Metals Corp completed a property visit which included collection of 38 samples were collected from the Nicopar Prospect area, of which 11 were grab samples selected for assay and whole rock geochemistry, and 27 were collected from four separate channels. In addition, Transition Metals contracted Alan King, P.Geo, of Geoscience North Ltd., to review of the available geophysical products which overlap the Maude Lake property, and undertake the construction of magnetic 3D inversion models.

4.0 GEOLOGICAL SETTING AND MINERALIZATION

4.1 REGIONAL GEOLOGY

This account is summarized form government reports (Carter 1988, Bartley 1938, Williams et al 1991, Easton, 2000).

The property (Figure 3) is located north of Schreiber within the Hemlo/Schreiber Greenstone Belt in the Wawa Subprovince. The belt is characterized by east trending basic and felsic volcanic units and clastic and chemical sediments intruded by gabbro sills/dykes and later Archean granitic plutons. In the property region, the Crossman Lake batholith occupies a central role, and the property straddles the contact. The crude structural position of the Nicopor showing is on the south facing side of the east west trending major regional structure, the Hays Lake Anticline (Bello's 1986 "Big Duck Anticline"), and on the north side of accompanying Hays Lake syncline some 5 km to the south. Later, open cross folding has affected the area (Bello, 1986). The other side of the horseshoe, (i.e. the northern part), is along the contact of the granite with a north-east facing sequence. Here a large thick body or suite of gabbro bodies (the Cameron Lake Gabbro) occupies a large area. It is layered and may consist of several sills or of tectonically repeated sills.

According to Easton (2000), the area has been multiply metamorphosed, perhaps as many as three times. The supracrustal units show amphibolite-grade metamorphism; and the Crossman Lake Pluton seems to have been intruded into an already-folded, supracrustal succession. The region hosts VMS deposits, the largest of which located north of the batholith is the Winston Lake Mine which produced approximately 900 Mlbs of Zn, 54 Mlbs of Cu, 1,172 kOz of Ag and 51 kOz Au over the course of its 9-year production between 1988 and 1998 from an amphibolite grade massive sulphide deposit in felsic volcanic units. Another mine, the Zenith, was apparently a portion of the Winston Lake Mine body that was included into later intrusions of gabbro sills (Cameron Lake gabbro).

4.2 PROPERTY GEOLOGY

The property is part of a horseshoe shaped parcel of land loosely following the southern contact of the Crossman Lake Granite contact. In most places this contact is with rocks labelled metamorphosed mafic volcanism or metamorphosed gabbro by previous workers (Bartley 1938, Pye 1966, Carter, 1988). The relationship between the contact between the Crossman Granite and the gabbro is complex. Fischer (2002) proposes that in the absence of age dates or conclusive field relations, the massive sulphides associated with the Nicopar Deposit occur in a basal position within the layered gabbro and that the sulphide could have intruded the granite.

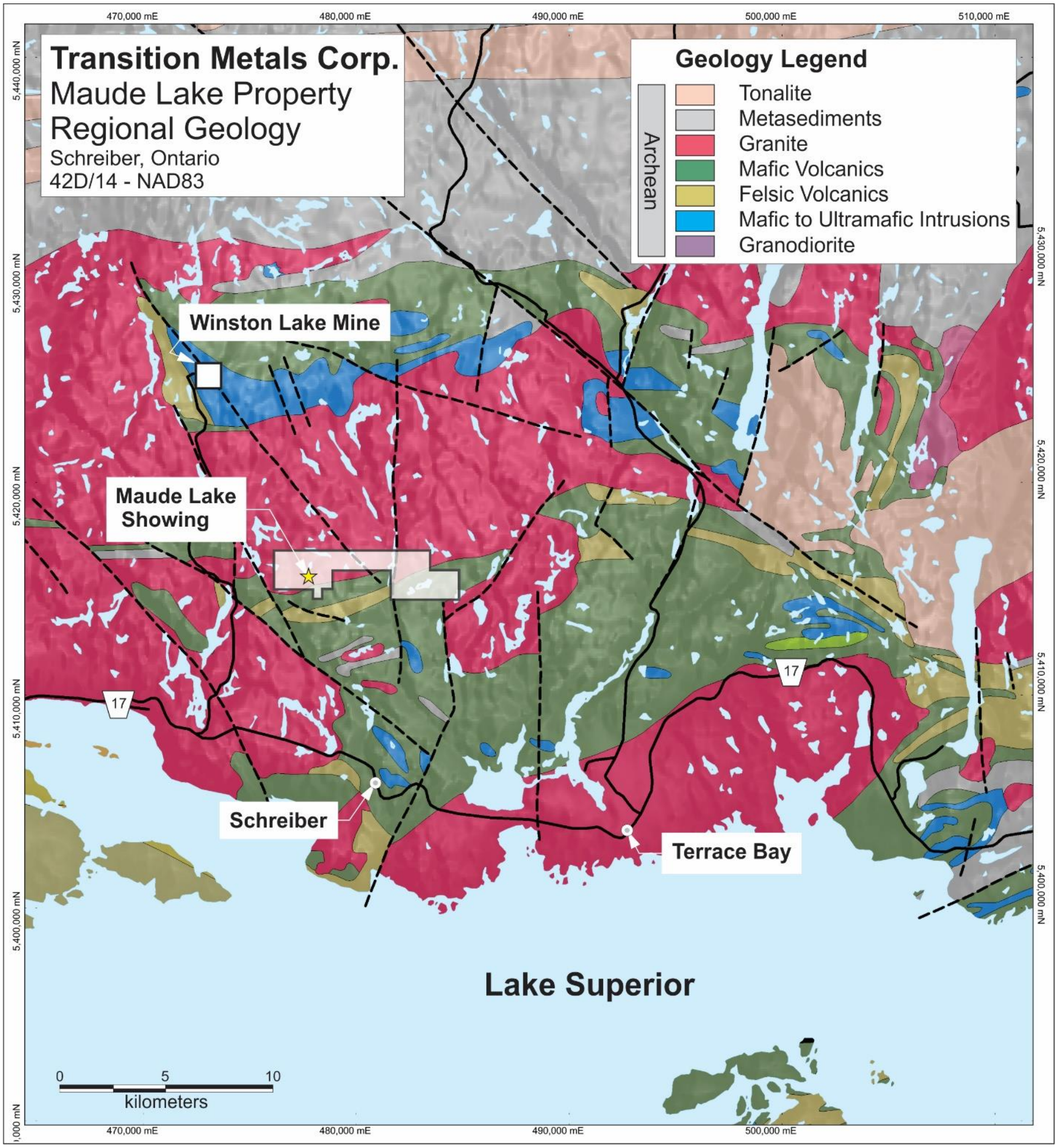

Figure 3: Maude Lake Regional Geology Map

Carter (1988) describes the relationship between the Crossman Lake Batholith and the Cameron Lake Gabbro as "*... The Crossman Lake Batholith is clearly intrusive into the Cameron Lake Gabbro ...Similar gabbro is entirely enclosed and intruded by granitic rocks 2 km east of Lower Ross (Rhea) Lake. The Cameron Lake gabbro is identical with other masses intrusive into the metavolcanic rocks..."(p.43.)*

Schau and Clark (2004), along with previous workers, have seen gabbro fragments as xenoliths or septa in the granitic rocks and has also observed the felsic porphyry and aplite dykes cutting the gabbro. Along the Winston Lake Road, the intrusive relations between the older meta-gabbro/amphibolite and the younger granite are well displayed.

4.3 MINERALIZATION

4.3.1 Nicopor Prospect

The property geology has been described on a number of occasions (Bartley, 1938; Anderson, 1951; Woakes, 1956; Nicholson, 1965; Ogden, 1969, 197,; Schnieders et al, 1996; Fischer, 2002; and Schau and Clark, 2004).

The sulphide deposit at the showing is at the contact between the granite and large gabbro xenolith/septa. The sulphide area has been the centre of attention for some 70 years and the origin of the mass is controversial. All agree on the presence of a thin lens/dyke/vein structure of massive sulphide along the contact between a dark rock previously called andesite, basic volcanic, quartz diorite, and now called gabbro and a light-coloured granite or granodiorite.

The sulphides are found in both rock types and often act as the matrix to breccia with host rock fragments. The sulphides decrease away from contact. Thin dykes of quartz porphyry and/or aplite cut both the sulphides and the mafic rocks. Anderson (1951) suggested a crude zoning with a pentlandite-bearing centre, rimmed by pyrrhotite and, the edge by pyrite dominant sulphide. There is still not enough data to confirm this suggestion, either on surface or at depth.

Drilling (Woakes, 1956; Nicholson, 1965; Ogden 1969, 1970) has largely confirmed the presence of a "continuous" sulphide lens, (see Schau and Clark, 2004) with local later granitic dykes cutting the sulphide and the gabbro. Sulphide mineralization is located along the contact between granite and what is called "altered gabbro" in drill logs, for about a hundred metres down dip. Two deeper drill holes (see Schau and Clark, 2004) contain sulphide accumulations within the altered gabbro zone away from the contact with the granite.

5.0 EXPLORATION

Transition Metals Corp. contracted to Geotech Ltd. of Aurora, Ontario, to conduct a Helicopter-Borne Versatile Time Domain Electromagnetic (VTEM™ Plus) and Horizontal Magnetic Gradiometer Geophysical Survey (Section 5.1) on the Property between January 11th and January 18th, 2022.

Transition Metals Corp. contracted Alan King, P.Geo, of Geosciences North, of Sudbury Ontario to advise on the type and orientation of the Airborne Geophysical survey. Furthermore, Geoscience North, undertook an additional geophysical review of all historical Geophysical products within the Property area between November 2021 and February 2022 (Section 5.3). The new VTEM AEM/Magnetic survey data by Geotech, was incorporated into the regional magnetic and gravity inversion models as part of the regional and local scale geophysical evaluation of the property. Data from the new AEM survey highlighted several discrete AEM anomalies, which were selected, examined, and interpreted quantitatively. A total of seven moderate AEM anomalies and one strong anomaly were located on the Maude Lake property. These anomalies were quantitively interpreted using the Maxwell EM modelling software and the results are plotted and discussed as part of that work.

The above-mentioned work was supported in part by the 2021/2022 Ontario Junior Exploration Program (OJEP) funding, covering expenses incurred within the reporting period of July 26th, 2021, through to February 28th, 2022. All aspects of the logistics related to design and conduct of the geophysical exploration was supervised in part by personnel employed by Transition Metals Corp.

5.1 HELICOPTER-BORNE VERSATILE TIME DOMAIN ELECTROMAGNETIC (VTEM™ PLUS) AND HORIZONTAL MAGNETIC GRADIOMETER GEOPHYSICAL SURVEY

Between January 11th and January 18th, 2022, Geotech Ltd. carried out a helicopter-borne geophysical survey over the Maude Lake Project North of Schreiber, ON. Principal geophysical sensors included a versatile time domain electromagnetic (VTEM™ Plus) system and a horizontal magnetic gradiometer with two caesium sensors. Ancillary equipment included a GPS navigation system and a radar altimeter.

A total of 363 line-kilometres of geophysical data were acquired during the survey (figure 4). In-field data quality assurance and preliminary processing were carried out on a daily basis during the acquisition phase. Preliminary data processing, including generation of preliminary digital data and map products were undertaken from the office of Geotech Ltd. in Aurora, Ontario. Note: the there was a limit of 3-line kilometre flight length minimum requirement for data acquisition; thus some portions of the survey had to be flown outside the property boundary to acquire optimal data for within the property.

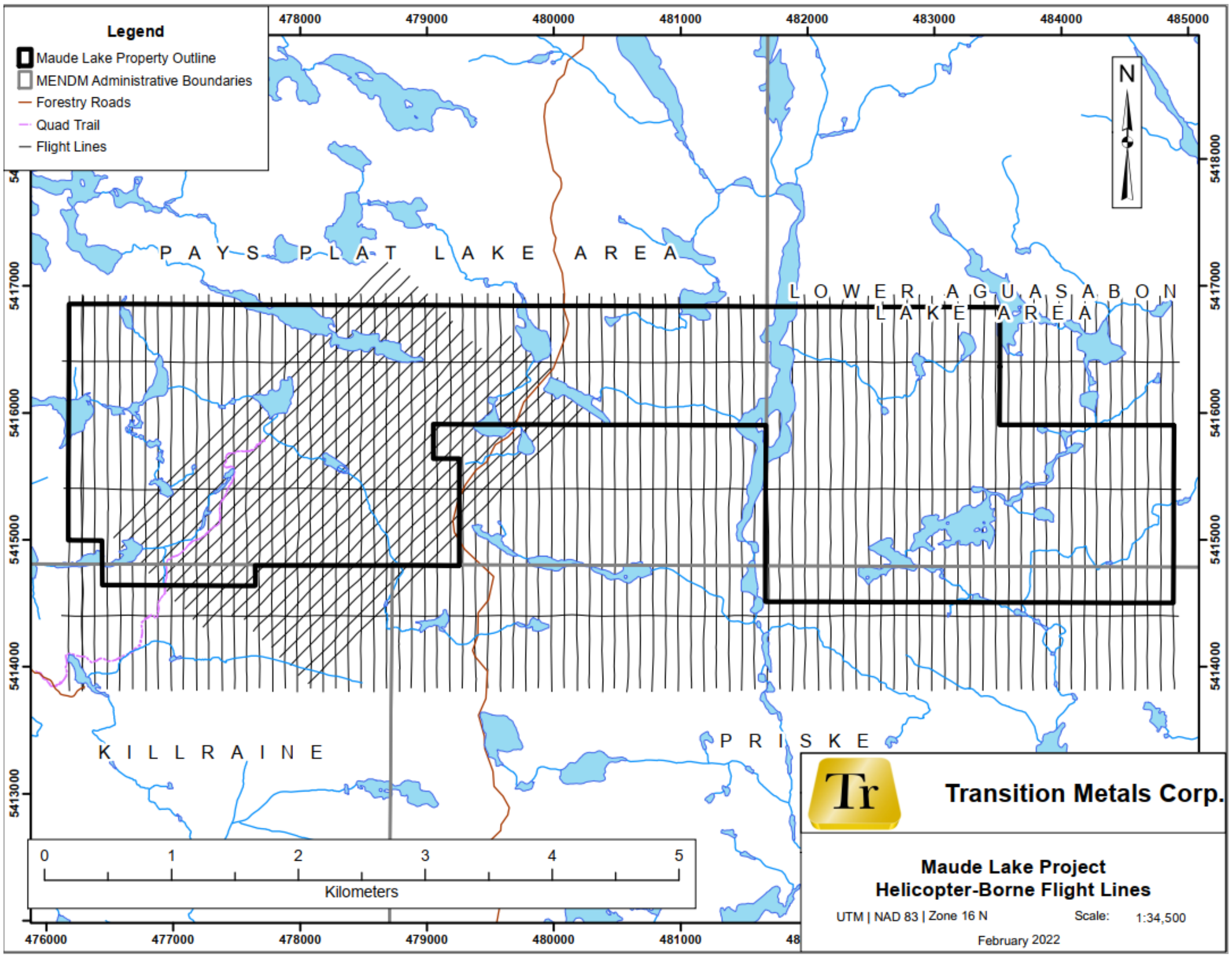

Figure 4: Geophysical Survey Flight Lines

Digital data include all electromagnetic and magnetic products, plus ancillary data including the waveform. The survey report describes the procedures for data acquisition, equipment used, and processing methods, which is attached as Appendix A1: Report on a Helicopter-Borne Versatile Time Domain Electromagnetic (VTEM™ Plus) and Horizontal Magnetic Gradiometer Geophysical Survey.

The processed survey results are presented as the following products, Contained within Appendix A2: Geophysical Maps;

- VTEM dB/dt Z Component Profiles Time Gates 0.220 - 7.036 ms
- VTEM B-Field Z Component Profiles Time Gates 0.220 - 7.036 ms over Total Magnetic Intensity
- VTEM B-Field Z Component Channel 25, Time Gate 0.440 ms
- VTEM dB/dt Z Component Channel 30, Time Gate 0.880 ms
- Fraser Filtered dB/dt X Component Channel 25, Time Gate 0.440 ms
- Total Magnetic Intensity (TMI)
- Total Magnetic Horizontal Gradient

- Magnetic Tilt-Angle Derivative
- Calculated Vertical Gradient (CVG) of Total Magnetic Intensity (TMI)
- dB/dt Calculated Time Constant (Tau) with Calculated Vertical Derivative contours

Appendix A3 contains processed Resistivity Depth Image (RDI) Sections for all flight lines flown within the survey, and Appendix A4 contains Resistivity Depth Image (RDI) Slices for select depths.

5.2 GEOPHYSICAL REVIEW, 3D INVERSION, AND MAXWELL PLATE MODELLING

Alan King, P.Geo, of Geoscience North Ltd., located in Sudbury Ontario was contracted by Transition Metals Corp to incorporate the VTEM AEM/Magnetic survey data, and incorporate it into a regional magnetic and gravity inversion models as part of a regional and local scale geophysical evaluation of the property. Data from the new AEM survey highlighted several discrete AEM anomalies, which were selected, examined, and interpreted quantitatively.

A total of seven moderate AEM anomalies and one strong anomaly were located on the Maude Lake property. These anomalies were quantitively interpreted using the Maxwell EM modelling software and the results are plotted and discussed within the report. The resulting model plates were exported as '.dxf' and Maxwell '.pte' files. Modeling projects and plates are identified by anomaly number, survey line and conductance in Siemens (S).

In general, the interpreted conductance ranges from 70S to 100S, and conductors appear fairly deep. Some of the anomalies may also be affected in some manner by Super ParaMagnetic (SPM) effects which, at worst, can result in spurious anomalies. These affects should be carefully checked before further follow-up.

The geophysical review and detailed Modelling by Geoscience North Ltd., is attached as Appendix B: Maude Lake Project Geophysics.

6.0 ABORIGINAL CONSULTATION

The property is considered to fall within the traditional territory of Pays Platt, Rocky Bay, Sand Point, Pic River, and Long Lake 58 First Nations, as well as the Red Sky Independent Metis Nation. During the reporting period, an exploration plan and permit application was submitted to the MNDM in replacement of permit PR-18-000157 and PR-18-000158, issued to the former property holder, which expired on September 19th, 2021. In relation to this permit and planned work, the Company has endeavoured to engage with the identified First Nations, eliciting some feedback from Pays Plat First Nation.

On February 4th, 2022, Greg Collins and Scott McLean of Transition Metals held a conference call with representatives of Pays Plat First Nation, including Chief David Mushquash, CEO John Szura, Environmental Technician Debbie King, and Councillor Raymond Goodchild. During the meeting, Transition Metals representatives discussed the company's interest to explore in the area, reviewed historical work, permit application documentation, and requested to learn more about Pays Plat First Nation engagement protocols.

7.0 EXPENDITURES

The total value of the work completed on the claims is summarized in Table 2. The total work expenditures for the work program(s) contained within this report were completed during the period of July 26th, 2021, through to February 28th, 2022; with an exploration expenditure of $**144,338**.

Additional information regarding expenditures and their associated invoices can be found in Appendix C and the detailed tables and invoices contained within.

Table 2: Summary of Expenditures

Work Type	Work Subtype	Subtotal	Total
Airborne Geophysical Survey Work			**$ 121,583**
	Airborne Electromagnetics	121,583	
Modelling or Reprocessing of Data			**$ 18,000**
	Data Modelling	18,000	
Associated Work types			**$ 4,130**
	Report/Map	4,130	
Aboriginal Consultation Costs			**$ 625**
	Consultation Costs	625	
Totals	**Total Expenditures**		**$ 144,338**

The above-mentioned work was supported in part by the 2021/2022 Ontario Junior Exploration Program (OJEP) funding, covering expenses incurred within the reporting period of July 26th, 2021, through to February 28th, 2022. All aspects of the logistics related to design and conduct of the geophysical exploration was supervised in part by personnel employed by Transition Metals Corp.

8.0 RECOMMENDATIONS

The author would recommend additional work be undertaken to further evaluate the mineralization potential which may be highlighted because of the Airborne geophysics anomalies. This additional work should include one or more of the following aspects of:

(1) Additional property scale mapping and detailed geochemical sampling on the property would be highly recommended to better understand the intrusive composition, contact relationships, and structural importance to mineralization.

(2) Modern stripping, with high-pressure washing of the historical blast pit in and around the area of the main showing would be highly beneficial. This would include detailed mapping of controlling structure, and additional channel sampling to provide an updated representative geological understanding of mineralization.

(3) A new surface TEM survey could be considered for the Property, ensuring On-time (UTEM or Crone STP) and B-filed data is collected, such that targeting for large very conductive targets are captured.

(4) Locate and reference all historical drill holes with modern D-GPS system, determine if it would be possible to do BHEM with on-time (UTEM or Crone STP) for large very conductive targets in all available old drill holes

(5) Review historic drill logs from adjacent Properties to better understand if MCR type mafic intrusive have been intersected.

(6) Drill testing of the best geophysical anomalies. Drilling should be undertaken in combination with borehole geophysics (BHEM) with an on-time (either UTEM or Crone STEP) response for large, very conductive targets. A drill program should also include twinning of a few historical holes, to boost confidence in historical results.

9.0 STATEMENT OF AUTHORS

9.1 STATEMENT OF AUTHOR: WILLIAMS, B.

I, Benjamin Williams do hereby certify that:

1) I am an employee of Transition Metals Corp.

2) I currently reside at 407 Cartier Ave, Unit 3, Sudbury, Ontario, Canada, P3B 1C7,

3) I graduated with a B.Sc Hon. Geology degree in 2013 from Saint Mary's University, Halifax, NS.

4) I am a registered Geologist in Training (GIT) with the Association of Professional Geoscientists of Ontario (APGO) since 2015 (Membership number: 10309).

5) I have been working as a Field Geologist in Canada since 2011.

Signed this Monday, 14 March 2022, in the City of Sudbury, Ontario

Benjamin Williams, GIT.

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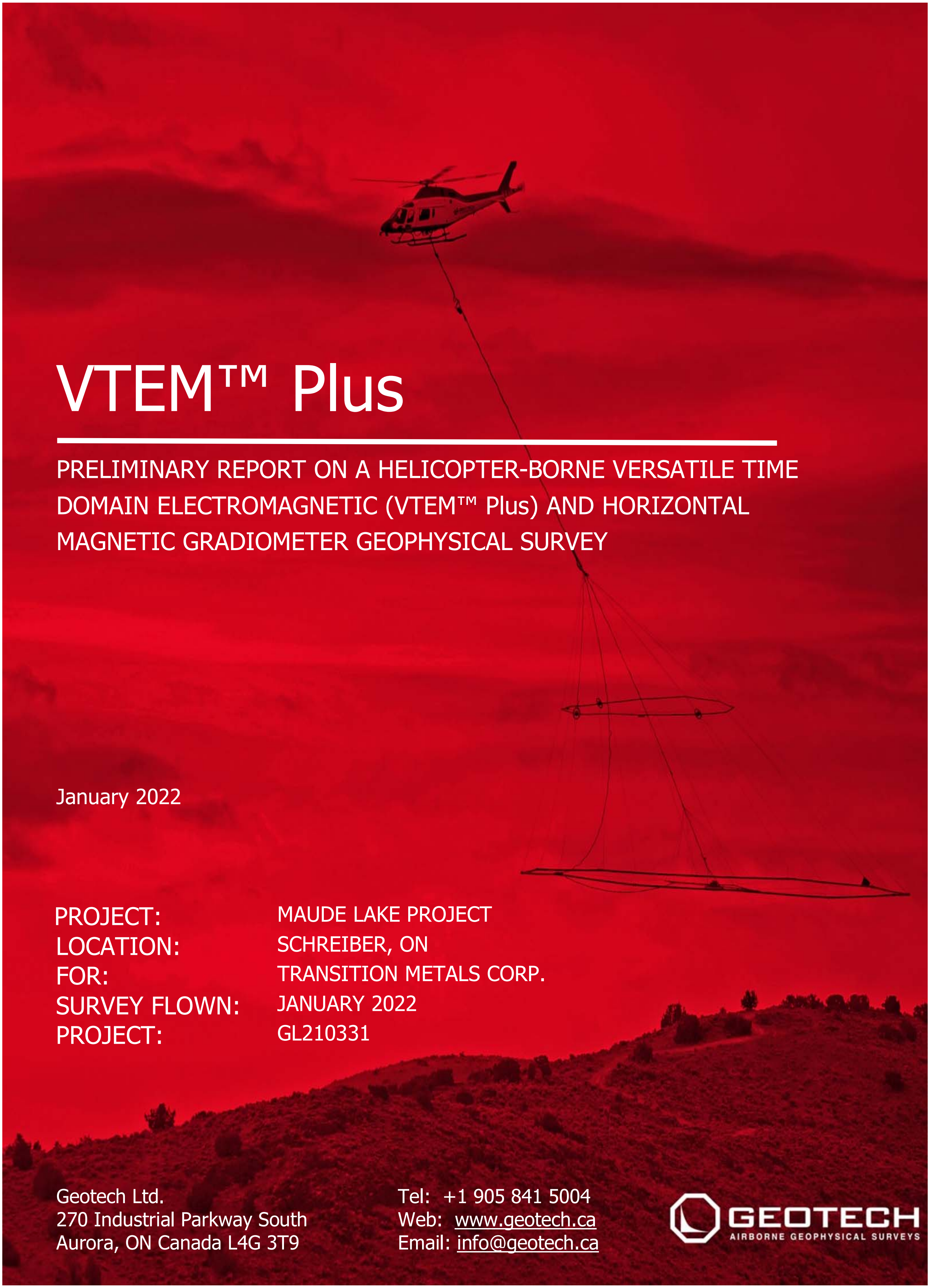
Appendix A: VTEM Preliminary Report



VTEM™ Plus

PRELIMINARY REPORT ON A HELICOPTER-BORNE VERSATILE TIME DOMAIN ELECTROMAGNETIC (VTEM™ Plus) AND HORIZONTAL MAGNETIC GRADIOMETER GEOPHYSICAL SURVEY

January 2022

PROJECT:	MAUDE LAKE PROJECT
LOCATION:	SCHREIBER, ON
FOR:	TRANSITION METALS CORP.
SURVEY FLOWN:	JANUARY 2022
PROJECT:	GL210331

Geotech Ltd.
270 Industrial Parkway South
Aurora, ON Canada L4G 3T9

Tel: +1 905 841 5004
Web: www.geotech.ca
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GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

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EXECUTIVE SUMMARY

MAUDE LAKE PROJECT
SCHREIBER, ON

Between January 11th and January 18th, 2022, Geotech Ltd. carried out a helicopter-borne geophysical survey over the Maude Lake Project north of Schreiber, ON.

Principal geophysical sensors included a versatile time domain electromagnetic (VTEM™ Plus) system and a horizontal magnetic gradiometer with two caesium sensors. Ancillary equipment included a GPS navigation system and a radar altimeter. A total of 363 line-kilometres of geophysical data were acquired during the survey.

In-field data quality assurance and preliminary processing were carried out on a daily basis during the acquisition phase. Preliminary data processing, including generation of preliminary digital data and map products were undertaken from the office of Geotech Ltd. in Aurora, Ontario.

The preliminary processed survey results are presented as the following maps:

- Electromagnetic stacked profiles of the B-field Z Component
- Electromagnetic stacked profiles of dB/dt Z Component
- B-Field Z Component Channel grid
- dB/dt Z Component Channel grid
- Fraser Filtered X Component Channel grid
- Total Magnetic Intensity (TMI)
- Calculated Vertical Gradient (CVG) of Total Magnetic Intensity (TMI)

Digital data include all electromagnetic and magnetic products, plus ancillary data including the waveform.

The survey report describes the procedures for data acquisition, equipment used, processing, preliminary image presentation and the specifications for the digital data set.

1. INTRODUCTION

1.1 GENERAL CONSIDERATIONS

Geotech Ltd. performed a helicopter-borne geophysical survey over the Maude Lake Project near Schreiber, ON (Figure 1 & Figure 2).

Grant Mourre represented Transition Metals Corp. during the data acquisition and data processing phases of this project.

The geophysical surveys consisted of helicopter borne EM using the versatile time-domain electromagnetic (VTEM™) plus system with Full-Waveform processing. Measurements consisted of Vertical (Z) and In-line Horizontal (X) components of the EM fields using an induction coil and a horizontal magnetic gradiometer using two caesium magnetometers. A total of 363 line-km of geophysical data were acquired during the survey.

The crew was based out of Marathon, ON for the acquisition phase of the survey. Survey flying occurred on January 14th to 17th, 2021.

Data quality control and quality assurance, and preliminary data processing were carried out on a daily basis during the acquisition phase of the project. Preliminary reporting, data presentation and archiving was completed in January 2022.

Figure 1: Survey location

1.2 SURVEY AND SYSTEM SPECIFICATIONS

The survey area is located approximately 8km north of Schreiber, ON (Figure 2).

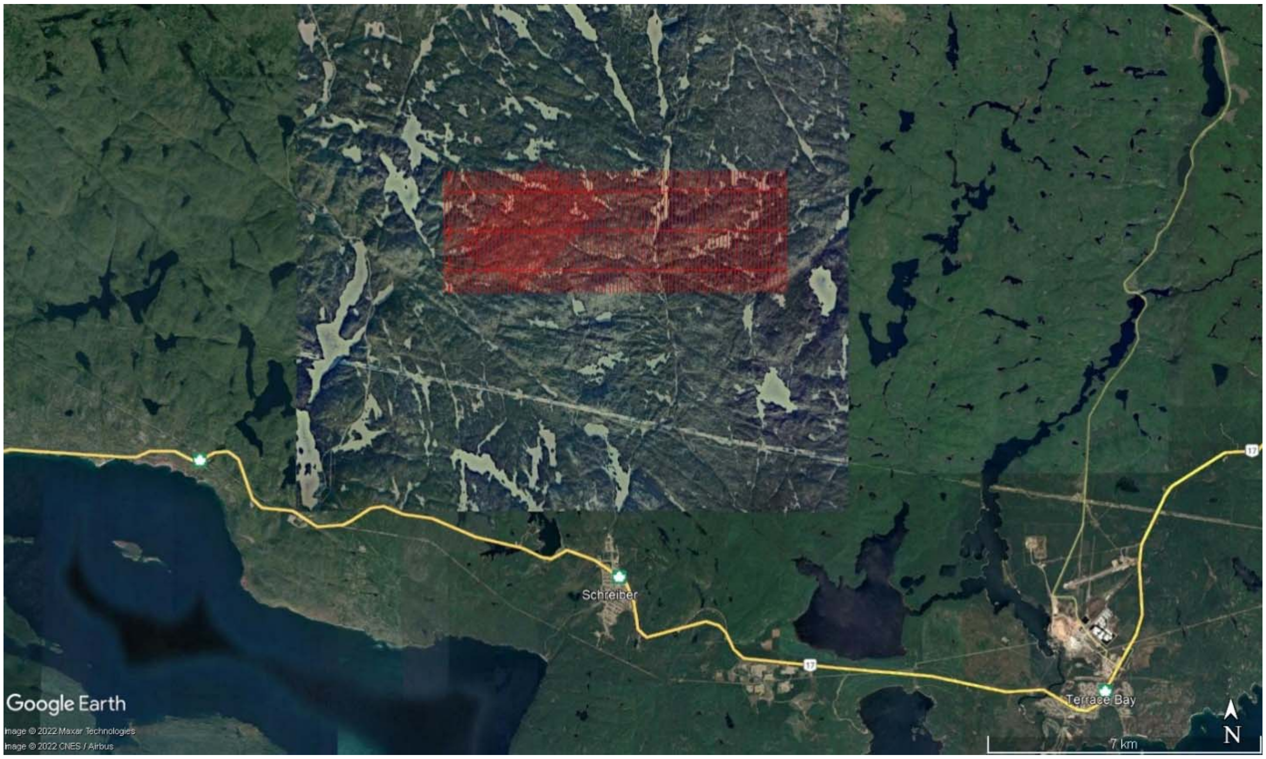

Figure 2: Survey area location map on Google Earth.

The Maude Lake Project was flown in a south to north (N 0° E azimuth) and southwest to northeast (N 45° E azimuth) directions with traverse line spacings of 100 metres, as depicted in Figure 3. Tie lines were flown perpendicular to traverse lines at 1000m line spacing. For more detailed information on the flight spacings and directions, see Table 1.

1.3 TOPOGRAPHIC RELIEF AND CULTURAL FEATURES

Topographically, the survey area exhibits relief with elevations ranging from 347 to 580 metres over an area of 27 square kilometres (Figure 3).

There are no visible signs of culture such as roads within the Maude Lake Project area. There are powerlines ~2.2 km south of the block.

Figure 3: Maude Lake Project flight paths over a Google Earth Image.

2. DATA ACQUISITION

2.1 SURVEY AREA

The survey area (see Figure 3 and Appendix A) and general flight specifications are as follows:

Table 1: Survey Specifications

Survey block	Line spacing (m)	Area (Km^2)	Planned Line-km	Actual[1] Line-km	Flight direction	Line numbers
Maude Lake	Traverse: 100	27	350	363	N0°E / N180°E N45°E / N225°E	L1000 – L1870 L3000 – L3190
	Tie: 1000				N90°E / N270°E	T2000 – T2020
TOTAL		27	350	363		

Survey area boundaries co-ordinates are provided in Appendix B.

2.2 SURVEY OPERATIONS

Survey operations were based out of Marathon, ON. The following table shows the timing of the flying.

Date	Comments
11-Jan	Mobilization
12-Jan	Reconnaissance and production flights - 44 km flown
13-Jan	Weather day
14-Jan	Production flight - 123 km flown
15-Jan	Weather day
16-Jan	Weather day
17-Jan	Production flight - 183 km flown
18-Jan	Demobilization

2.3 FLIGHT SPECIFICATIONS

During the survey, the helicopter was maintained at a mean altitude of 85 metres above the ground with an average survey speed of 81 km/hour. This allowed for an actual average Transmitter-receiver loop terrain clearance of 50 metres and a magnetic sensor clearance of 60 metres.

The on-board operator was responsible for monitoring the system integrity. He also maintained a detailed flight log during the survey, tracking the times of the flight as well as any unusual geophysical or topographic features.

On return of the aircrew to the base camp the survey data was transferred from a compact flash card (PCMCIA) to the data processing computer. The data were then uploaded via ftp to the Geotech office in Aurora for daily quality assurance and quality control by qualified personnel.

[1] Note: Actual Line kilometres represent the total line kilometres in the final database. These line-km normally exceed the Planned Line-km, as indicated in the survey NAV files.

2.4 AIRCRAFT AND EQUIPMENT

2.4.1 SURVEY AIRCRAFT

The survey was flown using Eurocopter Aerospatiale (A-Star) 350 B3 helicopter, registration C-GLHX. The helicopter is owned and operated by Geotech Aviation Ltd. Installation of the geophysical and ancillary equipment was carried out by a Geotech Ltd. crew.

2.4.2 ELECTROMAGNETIC SYSTEM

The electromagnetic system was a Geotech Time Domain EM (VTEM™ Plus) full receiver-waveform streamed data recorded system. The "full waveform VTEM system" uses the streamed half-cycle recording of transmitter and receiver waveforms to obtain a complete system response calibration throughout the entire survey flight. VTEM with the serial number 10 had been used for the survey. The VTEM™ transmitter current waveform is shown diagrammatically in Figure 4.

The VTEM™ Receiver and transmitter coils were in concentric-coplanar and Z-direction oriented configuration. The receiver system for the project also included coincident-coaxial X-direction coil to measure the in-line dB/dt and calculate B-Field responses. The Transmitter-receiver loop was towed at a mean distance of 35 metres below the aircraft as shown in Figure 5.

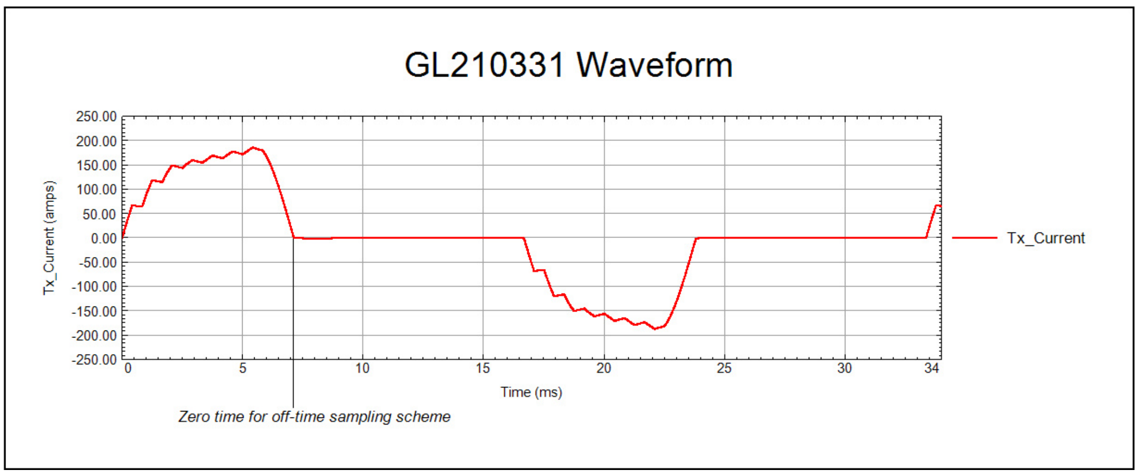

Figure 4: VTEM™ Transmitter Current Waveform

The VTEM™ decay sampling scheme is shown in Table 2 below. Forty-three-time measurement gates were used for the preliminary data processing in the range from 0.021 to 8.083 msec. Zero time for the off-time sampling scheme is equal to the current pulse width and is defined as the time near the end of the turn-off ramp where the dI/dt waveform falls to 1/2 of its peak value.

Table 2: Off-Time Decay Sampling Scheme

VTEM™ Decay Sampling Scheme				
Index	Start	End	Middle	Width
Milliseconds				
4	0.018	0.023	0.021	0.005
5	0.023	0.029	0.026	0.005
6	0.029	0.034	0.031	0.005
7	0.034	0.039	0.036	0.005
8	0.039	0.045	0.042	0.006
9	0.045	0.051	0.048	0.007
10	0.051	0.059	0.055	0.008
11	0.059	0.068	0.063	0.009
12	0.068	0.078	0.073	0.010
13	0.078	0.090	0.083	0.012
14	0.090	0.103	0.096	0.013
15	0.103	0.118	0.110	0.015
16	0.118	0.136	0.126	0.018
17	0.136	0.156	0.145	0.020
18	0.156	0.179	0.167	0.023
19	0.179	0.206	0.192	0.027
20	0.206	0.236	0.220	0.030
21	0.236	0.271	0.253	0.035
22	0.271	0.312	0.290	0.040
23	0.312	0.358	0.333	0.046
24	0.358	0.411	0.383	0.053
25	0.411	0.472	0.440	0.061
26	0.472	0.543	0.505	0.070
27	0.543	0.623	0.580	0.081
28	0.623	0.716	0.667	0.093
29	0.716	0.823	0.766	0.107
30	0.823	0.945	0.880	0.122
31	0.945	1.086	1.010	0.141
32	1.086	1.247	1.161	0.161
33	1.247	1.432	1.333	0.185
34	1.432	1.646	1.531	0.214
35	1.646	1.891	1.760	0.245
36	1.891	2.172	2.021	0.281
37	2.172	2.495	2.323	0.323
38	2.495	2.865	2.667	0.370
39	2.865	3.292	3.063	0.427
40	3.292	3.781	3.521	0.490
41	3.781	4.341	4.042	0.560
42	4.341	4.987	4.641	0.646

VTEM™ Decay Sampling Scheme				
Index	Start	End	Middle	Width
Milliseconds				
43	4.987	5.729	5.333	0.742
44	5.729	6.581	6.125	0.852
45	6.581	7.560	7.036	0.979
46	7.560	8.685	8.083	1.125

Z Component: 4-46 time gates
X Component: 20-46 time gates

Table 3: VTEM™ System Specifications

Transmitter	Receiver
• Transmitter loop diameter: 26 m • Number of turns: 4 • Effective Transmitter loop area: 2123.7 m^2 • Transmitter base frequency: 30 Hz • Peak current: 186.6 A • Pulse width: 7.13 ms • Waveform shape: Bi-polar trapezoid • Peak dipole moment: 396,285 nIA • Average transmitter-receiver loop terrain clearance: 50 metres	• X -Coil diameter: 0.32 m • Number of turns: 245 • Effective coil area: 19.69 m^2 • Z-Coil diameter: 1.2 m • Number of turns: 100 • Effective coil area: 113.04 m^2

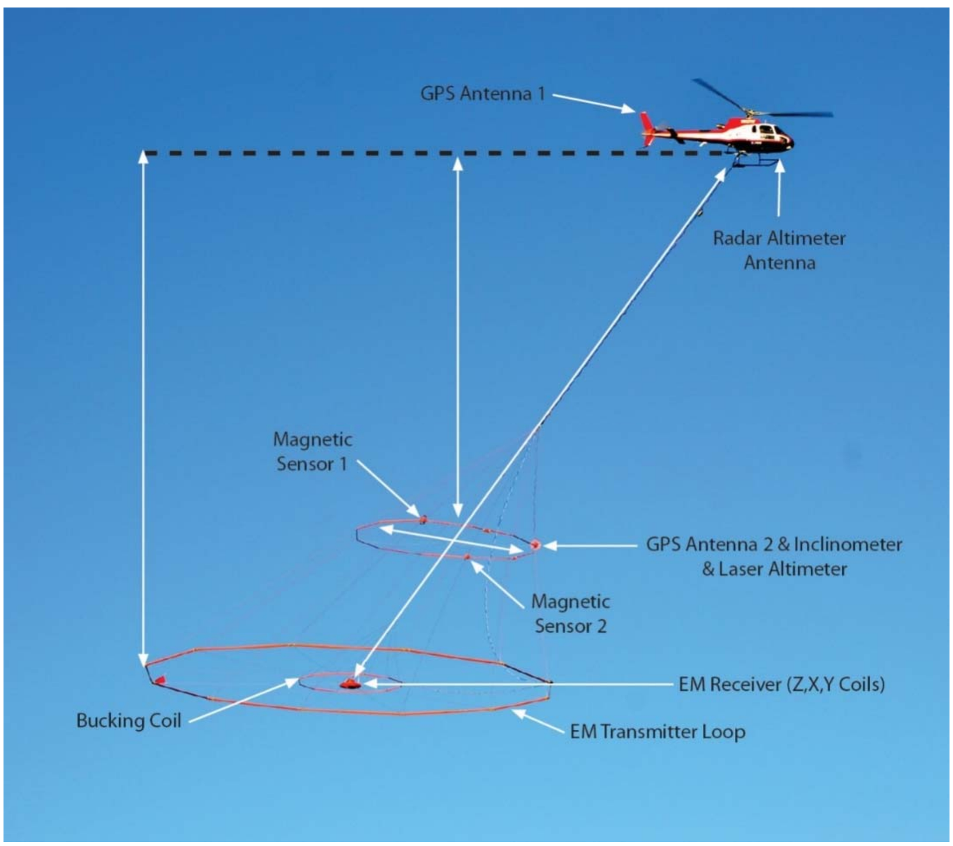

Figure 5: VTEM™plus System Configuration.

2.4.3 FULL WAVEFORM VTEM™ SENSOR CALIBRATION

The calibration is performed on the complete VTEM™ system installed in and connected to the helicopter, using special calibration equipment. This calibration takes place on the ground at the start of the project prior to surveying.

The procedure takes half-cycle files acquired and calculates a calibration file consisting of a single stacked half-cycle waveform. The purpose of the stacking is to attenuate natural and man-made magnetic signals, leaving only the response to the calibration signal.

This calibration allows the transfer function between the EM receiver and data acquisition system and the transfer function between the current monitor and data acquisition system to be determined. These calibration results are then used in VTEM full waveform processing.

2.4.4 HORIZONTAL MAGNETIC GRADIOMETER

The horizontal magnetic gradiometer consists of two Geometrics split-beam field magnetic sensors with a sampling interval of 0.1 seconds. These sensors are mounted 12.5 metres apart on a separate loop, 10 metres above the Transmitter-receiver loop. A GPS antenna and Gyro Inclinometer is installed on the separate loop to accurately record the tilt and position of the magnetic gradiometer sensors.

2.4.5 RADAR ALTIMETER

A Terra TRA 3000/TRI 40 radar altimeter was used to record terrain clearance. The antenna was mounted beneath the bubble of the helicopter cockpit (Figure 5).

2.4.6 GPS NAVIGATION SYSTEM

The navigation system used was a Geotech PC104 based navigation system utilizing a NovAtel's WAAS(Wide Area Augmentation System) enabled GPS receiver, Geotech navigate software, a full screen display with controls in front of the pilot to direct the flight and a NovAtel GPS antenna mounted on the helicopter tail (Figure 5). As many as 11 GPS and two WAAS satellites may be monitored at any one time. The positional accuracy or circular error probability (CEP) is 1.8 m, with WAAS active, it is 1.0 m. The coordinates of the survey area were set-up prior to the survey and the information was fed into the airborne navigation system. The second GPS antenna is installed on the additional magnetic loop together with Gyro Inclinometer.

2.4.7 DIGITAL ACQUISITION SYSTEM

A Geotech data acquisition system recorded the digital survey data on an internal compact flash card. Data is displayed on an LCD screen as traces to allow the operator to monitor the integrity of the system. The data type and sampling interval as provided in Table 4

Table 4: Acquisition Sampling Rates

Data Type	Sampling
TDEM	0.1 sec
Magnetometer	0.1 sec
GPS Position	0.2 sec
Radar Altimeter	0.2 sec
Inclinometer	0.1 sec

2.5 BASE STATION

A combined magnetometer/GPS base station was utilized on this project. A Geometrics Caesium vapour magnetometer was used as a magnetic sensor with a sensitivity of 0.001 nT. The base station was recording the magnetic field together with the GPS time at 1 Hz on a base station computer.

The base station magnetometer sensor was installed in a secured location away from electric transmission lines and moving ferrous objects such as motor vehicles. The base station data were backed-up to the data processing computer at the end of each survey day.

3. PERSONNEL

The following Geotech Ltd. personnel were involved in the project.

FIELD:

Project Manager:	Steven Cargnello (Office)
Data QC:	Matthew Johnston
Crew chief:	Paul Taylor
Operator:	Yassir Jassim

The survey pilot and the mechanical engineer were employed directly by the helicopter operator – Geotech Aviation Ltd.

Pilot:	Rob Girard
Mechanical Engineer:	n/a

OFFICE:

Preliminary Data Processing:	Matthew Johnson
Data QA/QC:	TaiChyi Shei Jean Legault
Reporting/Mapping:	Emily Data

Processing and Interpretation phases were carried out under the supervision of TaiChyi Shei & Jean M. Legault, Chief Geophysicist. The customer relations were looked after by David Hitz.

4. DATA PROCESSING AND PRESENTATION

Data compilation and processing were carried out by the application of Geosoft OASIS Montaj and programs proprietary to Geotech Ltd.

4.1 FLIGHT PATH

The flight path, recorded by the acquisition program as WGS 84 latitude/longitude, was converted into the WGS84 Datum, UTM Zone 16N coordinate system in Oasis Montaj.

The flight path was drawn using linear interpolation between x, y positions from the navigation system. Positions are updated every second and expressed as UTM easting's (x) and UTM northing's (y).

4.2 ELECTROMAGNETIC DATA

The Full Waveform EM specific data processing operations included:

- Half cycle stacking (performed at time of acquisition).
- System response correction.
- Parasitic and drift removal.

A three-stage digital filtering process was used to reject major sferic events and to reduce noise levels. Local sferic activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude but leave a broader residual response that can be confused with geological phenomena. To avoid this possibility, a computer algorithm searches out and rejects the major sferic events.

The signal to noise ratio was further improved by the application of a low pass linear digital filter. This filter has zero phase shift which prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 1 second or 15 metres. This filter is a symmetrical 1 sec linear filter.

The results are presented as stacked profiles of EM voltages for the time gates, in linear - logarithmic scale for the B-field Z component and dB/dt responses in the Z and X components. B-field Z component time channels recorded at 1.760 milliseconds after the termination of the impulse is also presented as a colour image.

VTEM™ has two receiver coil orientations. Z-axis coil is oriented parallel to the transmitter coil axis, and both are horizontal to the ground. The X-axis coil is oriented parallel to the ground and along the line-of-flight. The combination of the X and Z coils configuration provides information on the position, depth, dip, and thickness of a conductor. Generalized modeling results of VTEM data are shown in Appendix D.

In general X-component data produce cross-over type anomalies: from "+ to – "in flight direction of flight for "thin" sub vertical targets and from "- to +" in direction of flight for "thick" targets. Z component data produce double peak type anomalies for "thin" sub vertical targets and single peak for "thick" targets. The limits and change-over of "thin-thick" depends on dimensions of a TEM system (Appendix D, Figure D-16).

Because of X component polarity is under line-of-flight, convolution Fraser Filter (Figure 6) is applied to X component data to represent axes of conductors in the form of grid map. In this case positive FF anomalies always correspond to "plus-to-minus" X data crossovers independent of the flight direction.

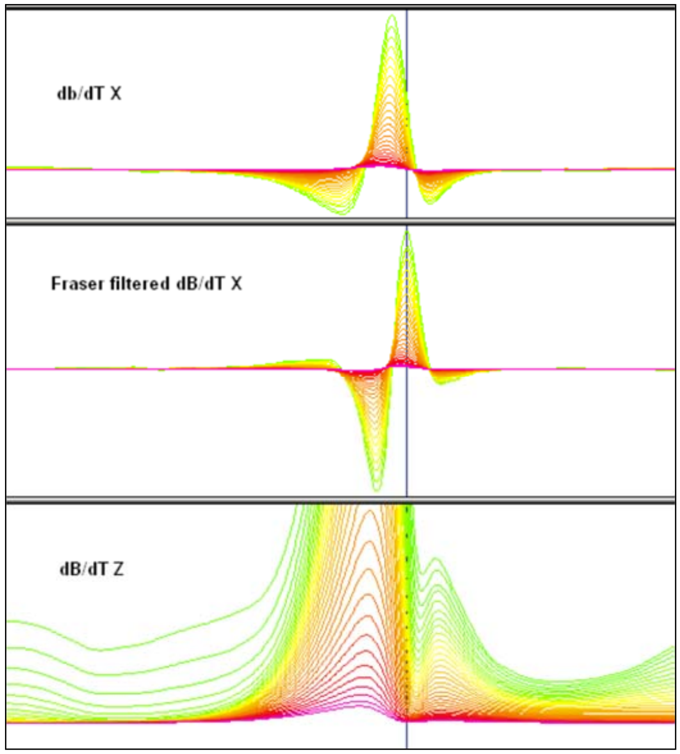

Figure 6: Z, X and Fraser filtered X (FFx) components for "thin" target.

4.3 HORIZONTAL MAGNETIC GRADIOMETER DATA

The horizontal gradients data from the VTEM™ Plus are measured by two magnetometers 12.5 m apart on an independent bird mounted 10m above the VTEM™ loop. A GPS and a Gyro Inclinometer help to determine the positions and orientations of the magnetometers. The data from the two magnetometers are corrected for position and orientation variations, as well as for the diurnal variations using the base station data.

The position of the centre of the horizontal magnetic gradiometer bird is calculated from the GPS utilizing in-house processing tool in Geosoft. Following that total magnetic intensity is calculated at the center of the bird by calculating the mean values from both sensors. In addition to the total intensity advanced processing is done to calculate the in-line and crossline (or lateral) horizontal gradient which enhance the understanding of magnetic targets. The in-line (longitudinal) horizontal gradient is calculated from the difference of two consecutive total magnetic field readings divided by the distance along the flight line direction, while the crossline (lateral) horizontal magnetic gradient is calculated from the difference in the magnetic readings from both magnetic sensors divided by their horizontal separation.

Two advanced magnetic derivative products, the total horizontal derivative (THDR), and tilt angle derivative and are also created. The total horizontal derivative or gradient is defined as:

THDR = sqrt (Hx*Hx+Hy*Hy), where Hx and Hy are crossline and in-line horizontal gradients.

The tilt angle derivative (TDR) is defined as:

TDR = arctan (Vz/THDR), where THDR is the total horizontal derivative, and Vz is the vertical derivative.

Measured crossline gradients can help to enhance crossline linear features during gridding.

5. DELIVERABLES

5.1 SURVEY REPORT

The survey report describes the data acquisition, processing, and preliminary presentation of the survey results. The survey report is provided in two paper copies and digitally in PDF format.

5.2 MAPS

Preliminary maps were produced at scale of 1:10,000 for best representation of the survey size and line spacing. The coordinate/projection system used was WGS84 Datum, UTM Zone 16N. All maps show the flight path trace and topographic data; latitude and longitude are also noted on maps.

The results of the survey are presented as EM profiles, a late-time gate gridded EM channel, and a colour magnetic TMI contour map.

- Maps at 1:10,000 in Geosoft MAP format, as follows:

GL210331_Preilm_10k_dBdt:	dB/dt profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
GL210331_Preilm_10k_BField:	B-field profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
GL210331_Preilm_10k_BFz35:	B-field Z Component Channel 35, Time Gate 1.760 ms colour image.
GL210331_Preilm_10k_SFz35:	VTEM dB/dt Z Component Channel 35, Time Gate 1.760 ms colour image
GL210331_Preilm_10k_SFxFF25:	Fraser Filtered dB/dt X Component Channel 30, Time Gate 0.440 ms colour image.
GL210331_Preilm_10k_TMI:	Total Magnetic Intensity (TMI) colour image and contours.
GL210331_Preilm_10k_CVG:	Calculated Vertical Derivative (nT/m)

- Maps are also presented in PDF format.
- The topographic data base was derived from 1:50,000 CANVEC data. Background shading is from ASTER GDEM (https://gdex.cr.usgs.gov/gdex). Inset data derived from the Geocommunities (www.geocomm.com)
- A Google Earth file *GL210331_Transition.kmz* showing the flight path of the block is included. Free versions of Google Earth software from: http://earth.google.com/download-earth.html

5.3 DIGITAL DATA

Two copies of the data and maps on DVD were prepared to accompany the report. Each DVD contains a digital file of the line data in GDB Geosoft Montaj format as well as the maps in Geosoft Montaj Map and PDF format.

- DVD structure.

Data contains databases, grids, and maps, as described below.
Report contains a copy of the report and appendices in PDF format.

Databases in Geosoft GDB format, containing the channels listed in Table 5.

Table 5: Geosoft GDB Data Format

Channel name	Units	Description
X	metres	Easting WGS84 Zone 16N
Y	metres	Northing WGS84 Zone 16N
Longitude	Decimal Degrees	WGS84 Longitude data
Latitude	Decimal Degrees	WGS84 Latitude data
Z	metres	GPS antenna elevation
Radar	metres	Helicopter terrain clearance from radar altimeter
Radarb	metres	Calculated EM transmitter-receiver loop terrain clearance from radar altimeter
DEM	metres	Digital Elevation Model
Gtime	Seconds of the day	GPS time
Mag1L	nT	Measured Total Magnetic field data (left sensor)
Mag1R	nT	Measured Total Magnetic field data (right sensor)
Basemag	nT	Magnetic diurnal variation data
CVG	nT/m	Calculated Magnetic Vertical Gradient of total magnetic intensity
SFz[4]	pV/(A*m4)	Z dB/dt 0.021 millisecond time channel
SFz[5]	pV/(A*m4)	Z dB/dt 0.026 millisecond time channel
SFz[6]	pV/(A*m^4)	Z dB/dt 0.031 millisecond time channel
SFz[7]	pV/(A*m^4)	Z dB/dt 0.036 millisecond time channel
SFz[8]	pV/(A*m^4)	Z dB/dt 0.042 millisecond time channel
SFz[9]	pV/(A*m^4)	Z dB/dt 0.048 millisecond time channel
SFz[10]	pV/(A*m^4)	Z dB/dt 0.055 millisecond time channel
SFz[11]	pV/(A*m^4)	Z dB/dt 0.063 millisecond time channel
SFz[12]	pV/(A*m^4)	Z dB/dt 0.073 millisecond time channel
SFz[13]	pV/(A*m^4)	Z dB/dt 0.083 millisecond time channel
SFz[14]	pV/(A*m^4)	Z dB/dt 0.096 millisecond time channel
SFz[15]	pV/(A*m^4)	Z dB/dt 0.110 millisecond time channel
SFz[16]	pV/(A*m^4)	Z dB/dt 0.126 millisecond time channel
SFz[17]	pV/(A*m^4)	Z dB/dt 0.145millisecond time channel
SFz[18]	pV/(A*m^4)	Z dB/dt 0.167 millisecond time channel
SFz[19]	pV/(A*m^4)	Z dB/dt 0.192 millisecond time channel
SFz[20]	pV/(A*m^4)	Z dB/dt 0.220 millisecond time channel
SFz[21]	pV/(A*m^4)	Z dB/dt 0.253 millisecond time channel
SFz[22]	pV/(A*m^4)	Z dB/dt 0.290 millisecond time channel
SFz[23]	pV/(A*m^4)	Z dB/dt 0.333 millisecond time channel
SFz[24]	pV/(A*m^4)	Z dB/dt 0.383 millisecond time channel

Channel name	Units	Description
SFz[25]	pV/(A*m^4)	Z dB/dt 0.440 millisecond time channel
SFz[26]	pV/(A*m^4)	Z dB/dt 0.505 millisecond time channel
SFz[27]	pV/(A*m^4)	Z dB/dt 0.580 millisecond time channel
SFz[28]	pV/(A*m^4)	Z dB/dt 0.667 millisecond time channel
SFz[29]	pV/(A*m^4)	Z dB/dt 0.766 millisecond time channel
SFz[30]	pV/(A*m^4)	Z dB/dt 0.880 millisecond time channel
SFz[31]	pV/(A*m^4)	Z dB/dt 1.010 millisecond time channel
SFz[32]	pV/(A*m^4)	Z dB/dt 1.161 millisecond time channel
SFz[33]	pV/(A*m^4)	Z dB/dt 1.333 millisecond time channel
SFz[34]	pV/(A*m^4)	Z dB/dt 1.531 millisecond time channel
SFz[35]	pV/(A*m^4)	Z dB/dt 1.760 millisecond time channel
SFz[36]	pV/(A*m^4)	Z dB/dt 2.021 millisecond time channel
SFz[37]	pV/(A*m^4)	Z dB/dt 2.323 millisecond time channel
SFz[38]	pV/(A*m^4)	Z dB/dt 2.667 millisecond time channel
SFz[39]	pV/(A*m^4)	Z dB/dt 3.063 millisecond time channel
SFz[40]	pV/(A*m^4)	Z dB/dt 3.521 millisecond time channel
SFz[41]	pV/(A*m^4)	Z dB/dt 4.042 millisecond time channel
SFz[42]	pV/(A*m^4)	Z dB/dt 4.641 millisecond time channel
SFz[43]	pV/(A*m^4)	Z dB/dt 5.333 millisecond time channel
SFz[44]	pV/(A*m^4)	Z dB/dt 6.125 millisecond time channel
SFz[45]	pV/(A*m^4)	Z dB/dt 7.036 millisecond time channel
SFz[46]	pV/(A*m^4)	Z dB/dt 8.083 millisecond time channel
SFx[20]	pV/(A*m^4)	X dB/dt 0.220 millisecond time channel
SFx[21]	pV/(A*m^4)	X dB/dt 0.253 millisecond time channel
SFx[22]	pV/(A*m^4)	X dB/dt 0.290 millisecond time channel
SFx[23]	pV/(A*m^4)	X dB/dt 0.333 millisecond time channel
SFx[24]	pV/(A*m^4)	X dB/dt 0.383 millisecond time channel
SFx[25]	pV/(A*m^4)	X dB/dt 0.440 millisecond time channel
SFx[26]	pV/(A*m^4)	X dB/dt 0.505 millisecond time channel
SFx[27]	pV/(A*m^4)	X dB/dt 0.580 millisecond time channel
SFx[28]	pV/(A*m^4)	X dB/dt 0.667 millisecond time channel
SFx[29]	pV/(A*m^4)	X dB/dt 0.766 millisecond time channel
SFx[30]	pV/(A*m^4)	X dB/dt 0.880 millisecond time channel
SFx[31]	pV/(A*m^4)	X dB/dt 1.010 millisecond time channel
SFx[32]	pV/(A*m^4)	X dB/dt 1.161 millisecond time channel
SFx[33]	pV/(A*m^4)	X dB/dt 1.333 millisecond time channel
SFx[34]	pV/(A*m^4)	X dB/dt 1.531 millisecond time channel
SFx[35]	pV/(A*m^4)	X dB/dt 1.760 millisecond time channel
SFx[36]	pV/(A*m^4)	X dB/dt 2.021 millisecond time channel
SFx[37]	pV/(A*m^4)	X dB/dt 2.323 millisecond time channel
SFx[38]	pV/(A*m^4)	X dB/dt 2.667 millisecond time channel
SFx[39]	pV/(A*m^4)	X dB/dt 3.063 millisecond time channel
SFx[40]	pV/(A*m^4)	X dB/dt 3.521 millisecond time channel
SFx[41]	pV/(A*m^4)	X dB/dt 4.042 millisecond time channel
SFx[42]	pV/(A*m^4)	X dB/dt 4.641 millisecond time channel
SFx[43]	pV/(A*m^4)	X dB/dt 5.333 millisecond time channel
SFx[44]	pV/(A*m^4)	X dB/dt 6.125 millisecond time channel
SFx[45]	pV/(A*m^4)	X dB/dt 7.036 millisecond time channel
SFx[46]	pV/(A*m^4)	X dB/dt 8.083 millisecond time channel
BFz	(pV*ms)/(A*m^4)	Z B-Field data for time channels 4 to 46

Channel name	Units	Description
BFx	(pV*ms)/(A*m^4)	X B-Field data for time channels 20 to 46
SFxFF	pV/(A*m^4)	Fraser Filtered X dB/dt
PLM		60 Hz power line monitor

Electromagnetic B-field and dB/dt Z component data is found in array channel format between indexes 4 – 46, and X component data from 20 – 46, as described above.

- Database of the VTEM Waveform "GL210331_Waveform.gdb" in Geosoft GDB format, containing the following channels:

Table 6**:** Geosoft database for the VTEM waveform

Channel name	Units	Description
Time	milliseconds	Sampling rate interval, 5.2083 microseconds
Tx_Current	amps	Output current of the transmitter

- Grids in Geosoft GRD and GeoTIFF format, as follows:

GL210331_Prelim_BFz35:	B-Field Z Component Channel 35 (Time Gate 1.760ms)
GL210331_Prelim_SFxFF25:	Fraser Filtered dB/dt X Component Channel 25 (Time Gate 0.440ms)
GL210331_Prelim_SFz35:	dB/dt Z Component Channel 35 (Time Gate 1.760ms)
GL210331_Prelim_TMI:	Total Magnetic Intensity (nT)
GL210331_Prelim_CVG:	Calculated Vertical Derivative (nT/m)
GL210331_Prelim_DEM:	Digital Elevation Model (m)
GL210331_Prelim_PLM:	60 Hz Power Line Monitor

A Geosoft .GRD file has a .GI metadata file associated with it, containing grid projection information. A grid cell size of 25 metres was used.

6. CONCLUSIONS AND RECOMMENDATIONS

A helicopter-borne versatile time domain electromagnetic (VTEM™plus) horizontal magnetic gradiometer geophysical survey has been completed over the Maude Lake Project near Schreiber, ON, on behalf of Transition Metals Corp.

The total area coverage is 27km^2 and the total survey line coverage is 363 line kilometres over one survey block. The principal sensors included a Time Domain EM system, and a horizontal magnetic gradiometer system with two caesium magnetometers. Results have been presented as stacked profiles, and contour colour images at a scale of 1:10,000.

Respectfully submitted,

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Geotech Ltd.

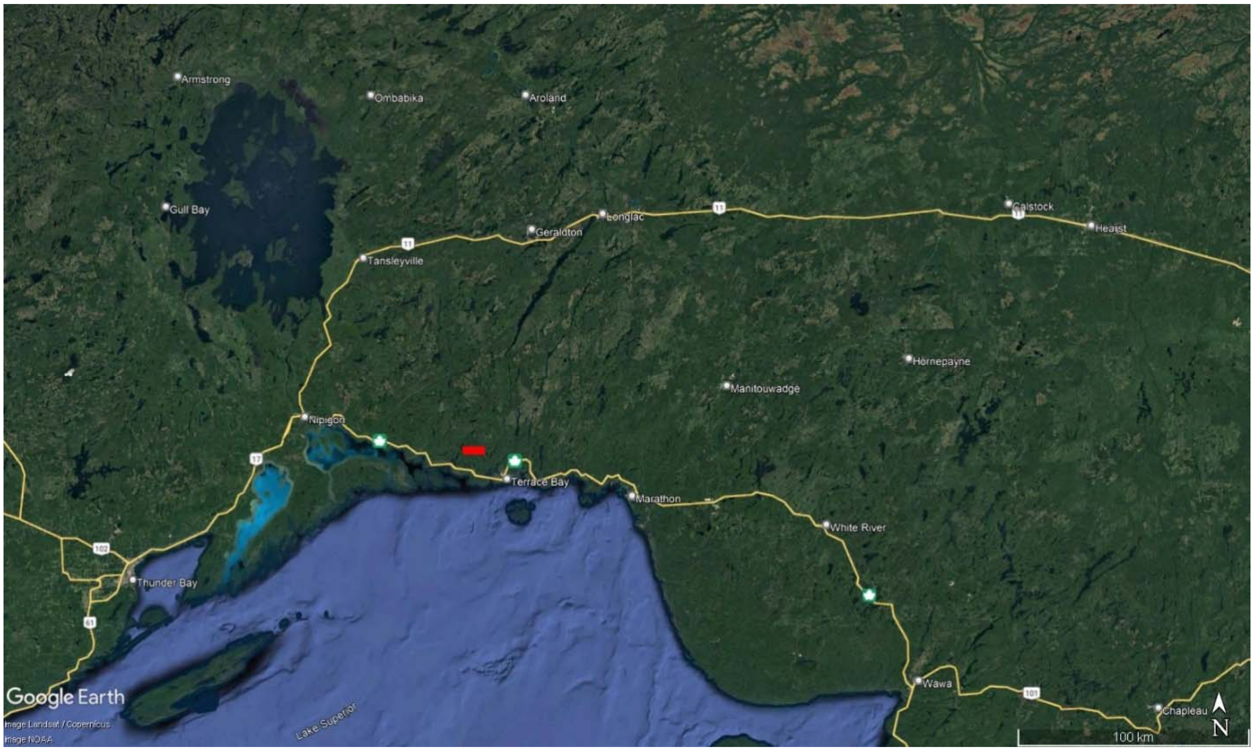
Emily Data
Geotech Ltd.

Jean M. Legault, M.Sc.A, P.Eng, P.Geo
Geotech Ltd.

January 2022

APPENDIX A

SURVEY AREA LOCATION MAP



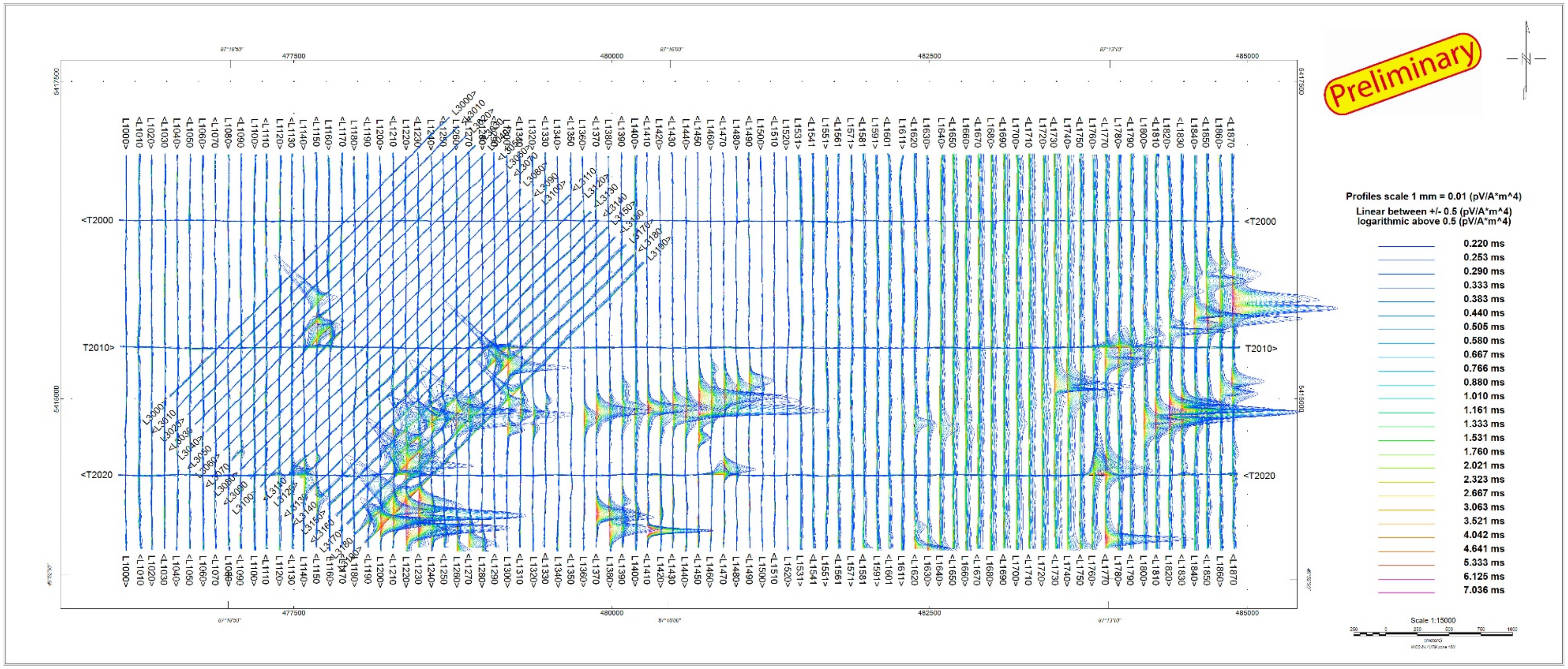
Overview of the Survey Area

APPENDIX B

SURVEY AREA COORDINATES
(WGS84 UTM Zone 16N)

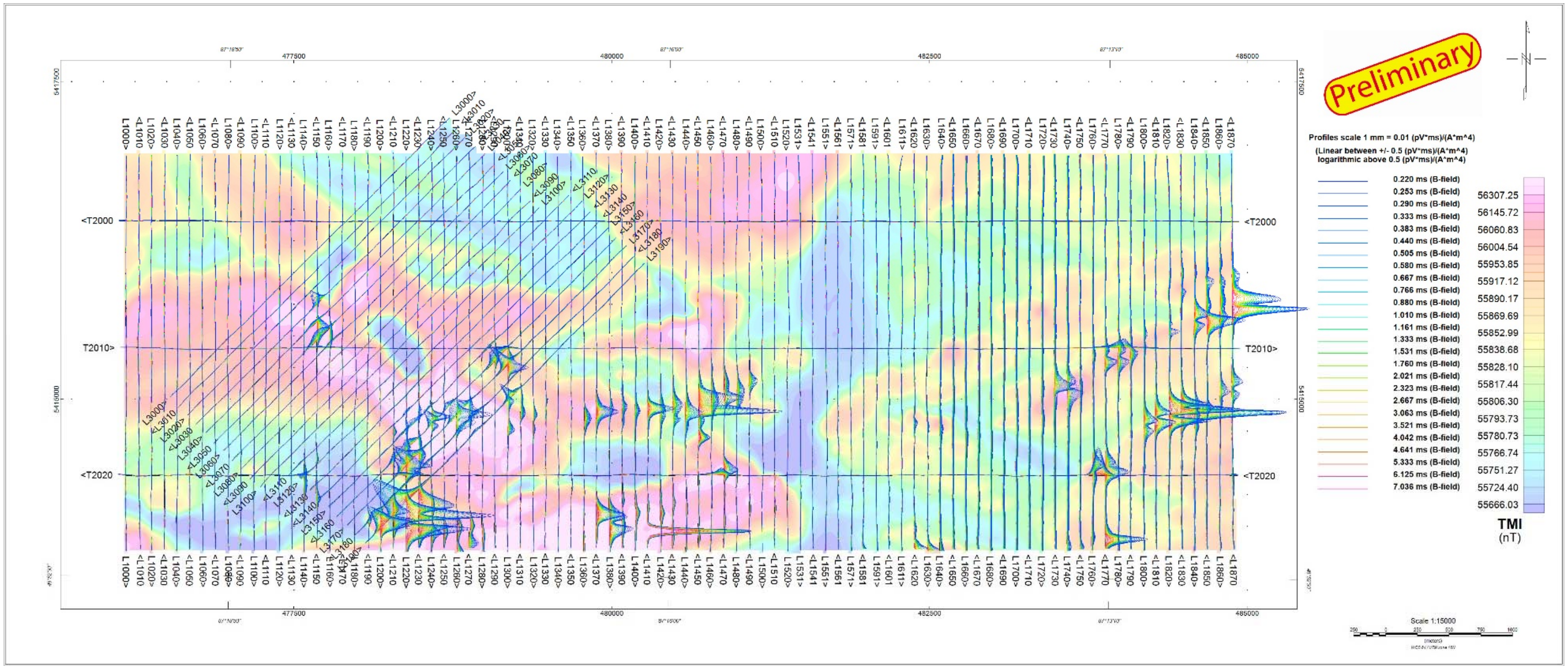
Maude Lake	
X	Y
476167	5416938
478449	5416944
478720	5417226
478945	5416955
484871	5416955
484894	5413819
476161	5413814

APPENDIX C - GEOPHYSICAL MAPS[1]

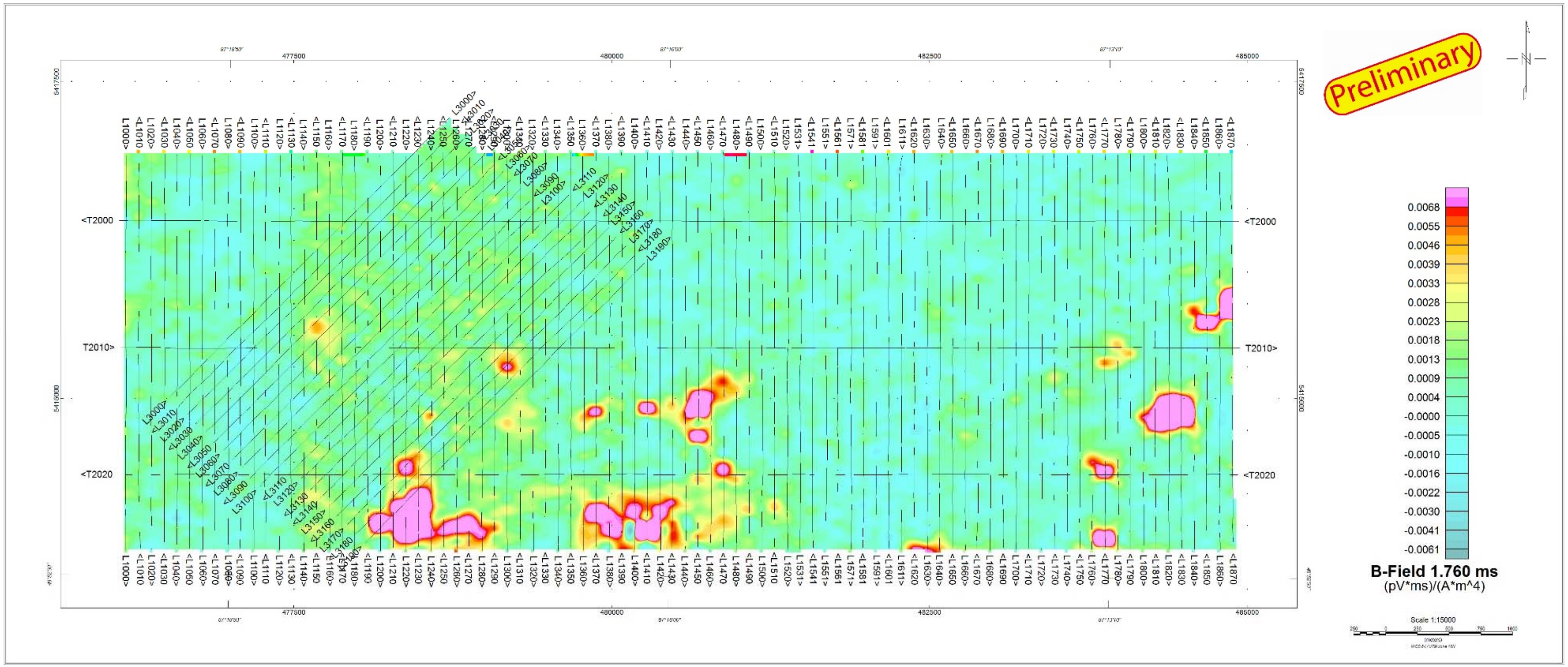


Z Component dB/dt profiles, Time Gates 0.220 – 7.036 ms

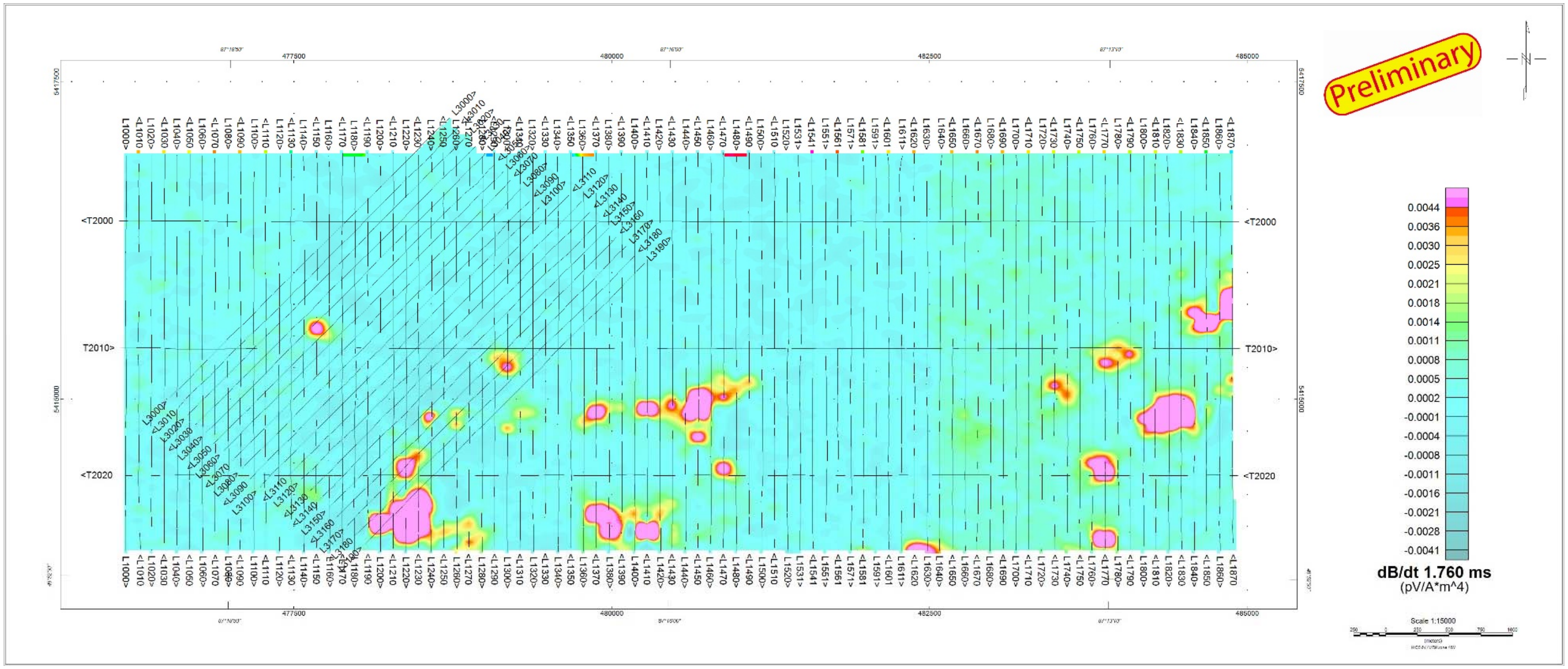
[1]Complete full size geophysical maps are also available in PDF format located in the final data maps folder.



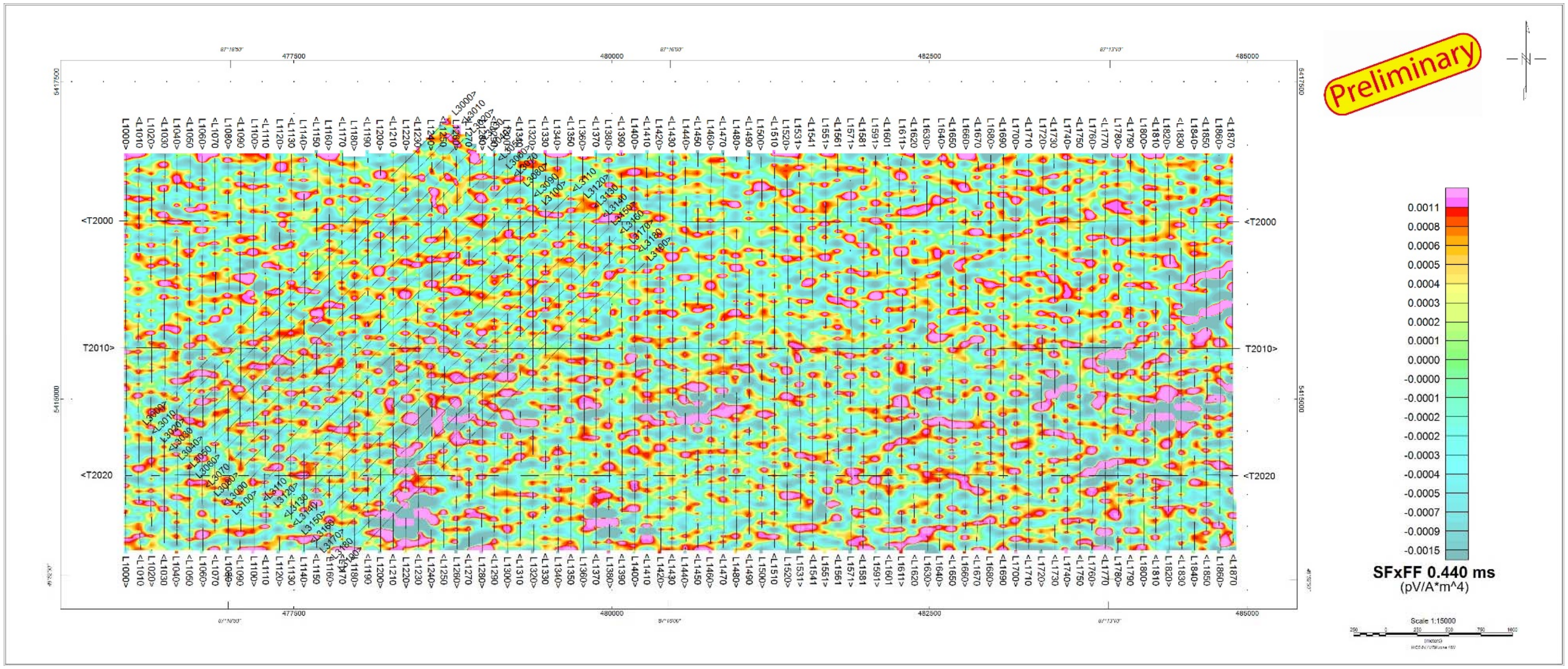
Z Component B-field profiles, Time Gates 0.220 – 7.036 ms over TMI colour image



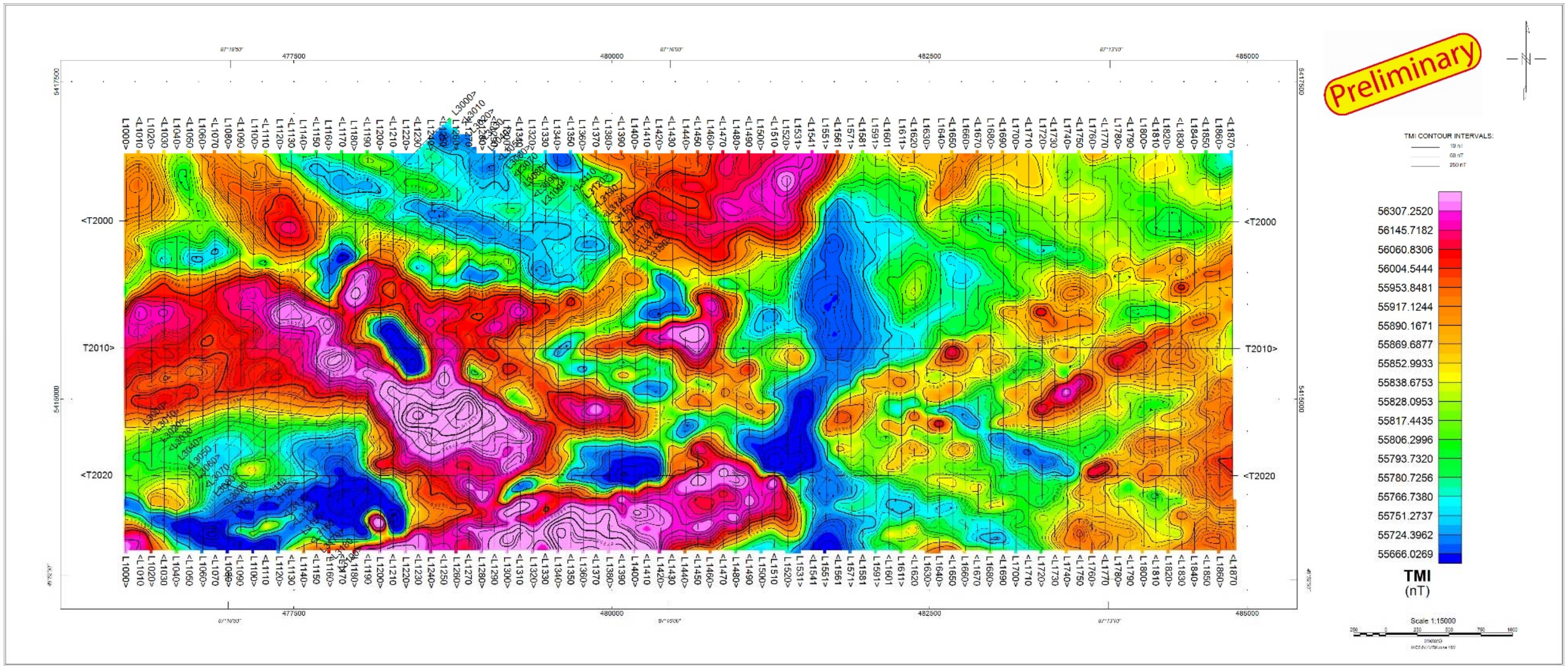
B-field Z Component Channel 35, Time Gate 1.760 ms colour image



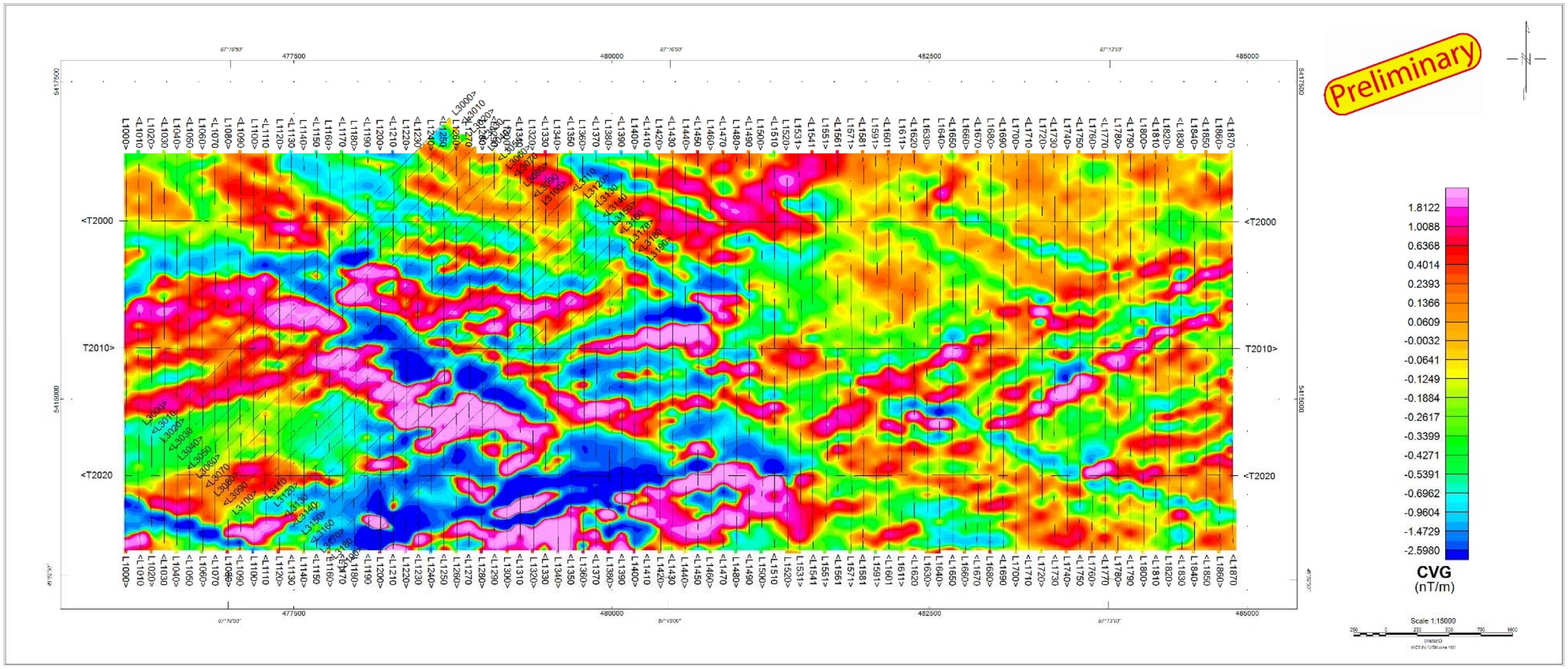
VTEM dB/dt Z Component Channel 35, Time Gate 1.760ms colour image



Fraser Filtered dB/dt X Component Channel 25, Time Gate 0.440 ms colour image



Total Magnetic Intensity (TMI) colour image and contours



Calculated Vertical Gradient (CVG)

APPENDIX D

GENERALIZED MODELING RESULTS OF THE VTEM SYSTEM
INTRODUCTION

The VTEM system is based on a concentric or central loop design, whereby, the receiver is positioned at the centre of a transmitter loop that produces a primary field. The wave form is a bi-polar, modified square wave with a turn-on and turn-off at each end.

During turn-on and turn-off, a time varying field is produced (dB/dt) and an electro-motive force (emf) is created as a finite impulse response. A current ring around the transmitter loop moves outward and downward as time progresses. When conductive rocks and mineralization are encountered, a secondary field is created by mutual induction and measured by the receiver at the centre of the transmitter loop.

Efficient modeling of the results can be carried out on regularly shaped geometries, thus yielding close approximations to the parameters of the measured targets. The following is a description of a series of common models made for the purpose of promoting a general understanding of the measured results.

A set of models has been produced for the Geotech VTEM™ system dB/dT Z and X components (see models D1 to D15). The Maxwell ™ modeling program (EMIT Technology Pty. Ltd. Midland, WA, AU) used to generate the following responses assumes a resistive half-space. The reader is encouraged to review these models, so as to get a general understanding of the responses as they apply to survey results. While these models do not begin to cover all possibilities, they give a general perspective on the simple and most commonly encountered anomalies.

As the plate dips and departs from the vertical position, the peaks become asymmetrical.

As the dip increases, the aspect ratio (Min/Max) decreases, and this aspect ratio can be used as an empirical guide to dip angles from near 90º to about 30º. The method is not sensitive enough where dips are less than about 30º.

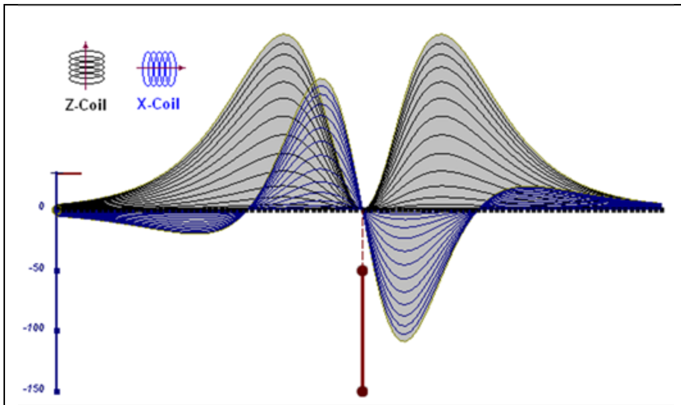


Figure D-1: vertical thin plate

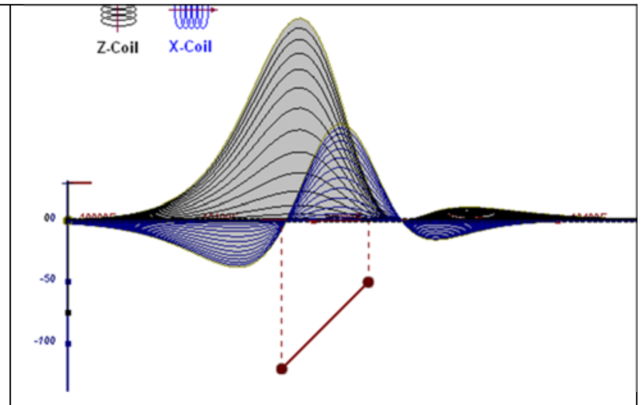


Figure D-2: inclined thin plate

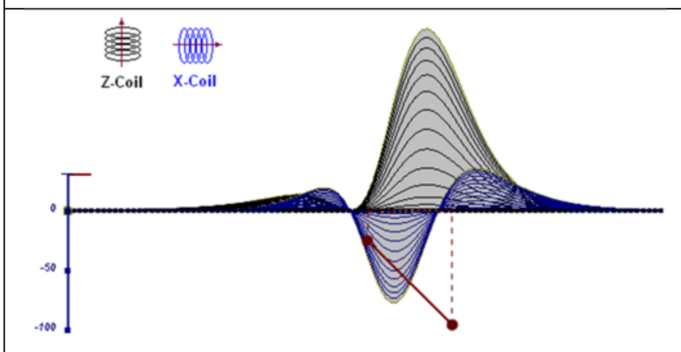


Figure D-3: inclined thin plate

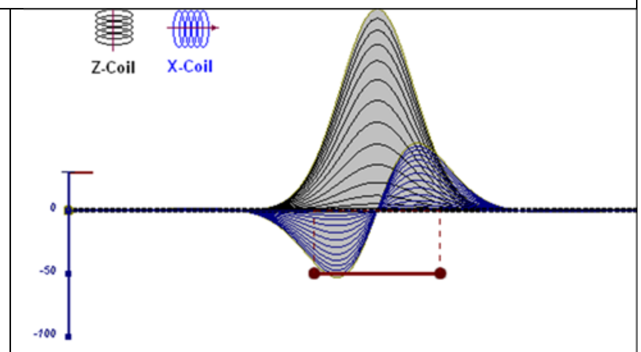


Figure D-4: horizontal thin plate

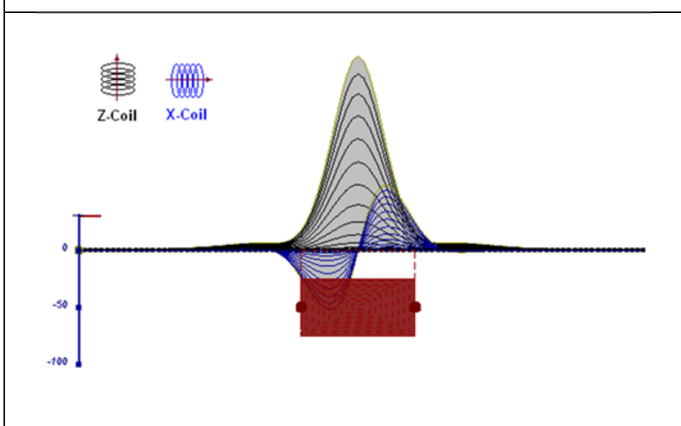


Figure D-5: horizontal thick plate (linear scale of the response)

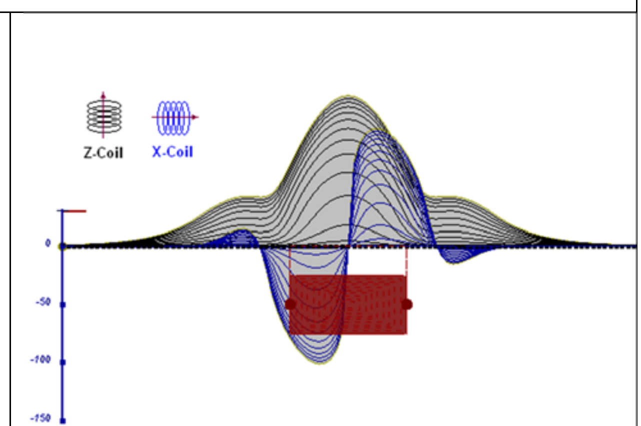


Figure D-6: horizontal thick plate (log scale of the response)

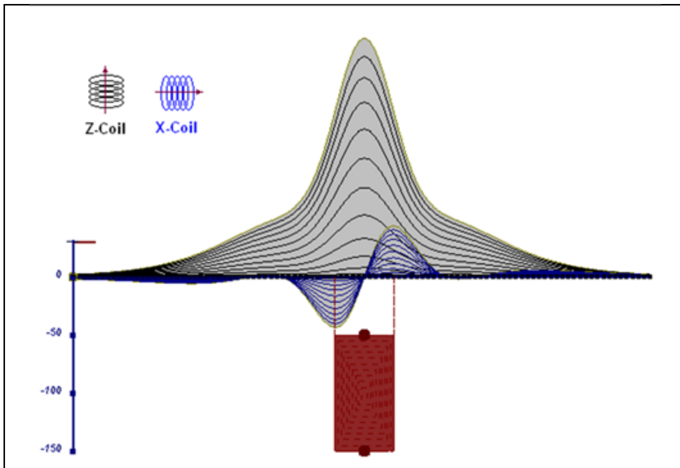


Figure D-7: vertical thick plate (linear scale of the response). 50 m depth

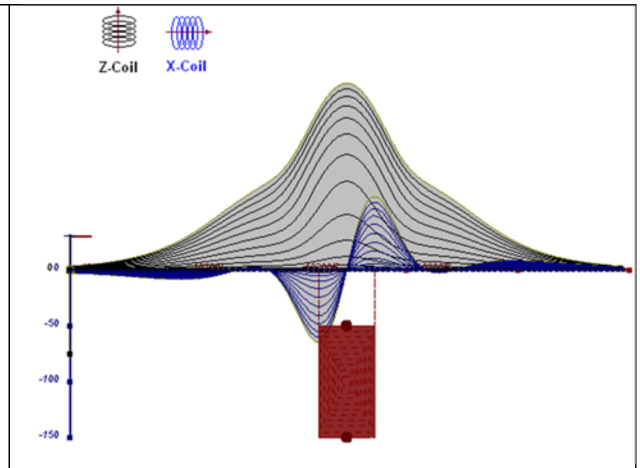


Figure D-8: vertical thick plate (log scale of the response). 50 m depth

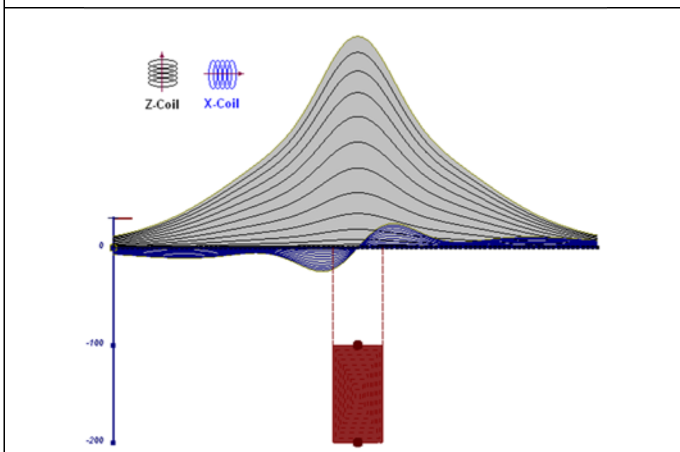


Figure D-9: vertical thick plate (linear scale of the response). 100 m depth

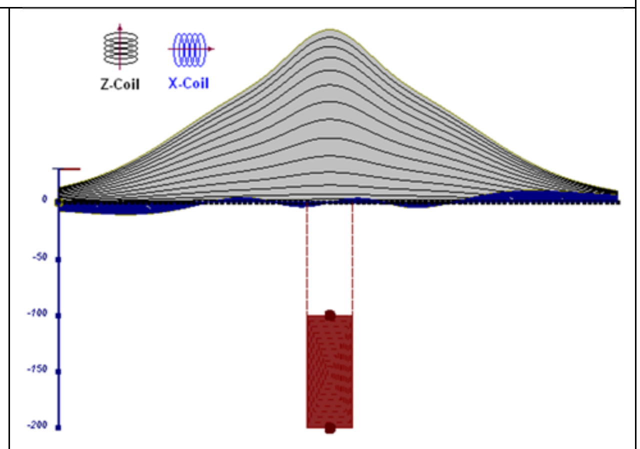


Figure D-10: vertical thick plate (linear scale of the response). Depth / horizontal thickness=2.5

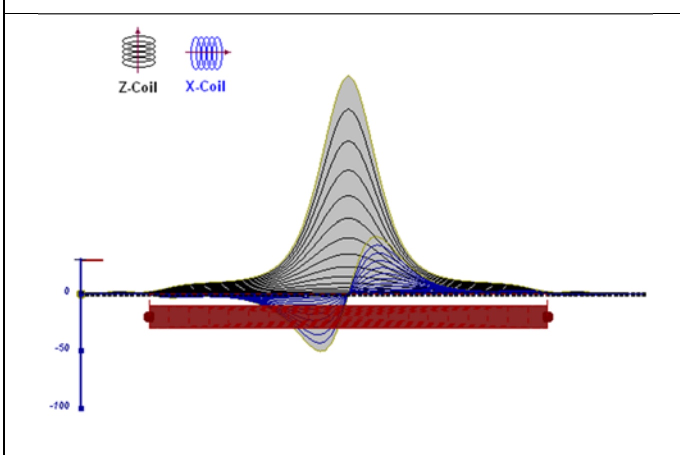


Figure D-11: horizontal thick plate (linear scale of the response)

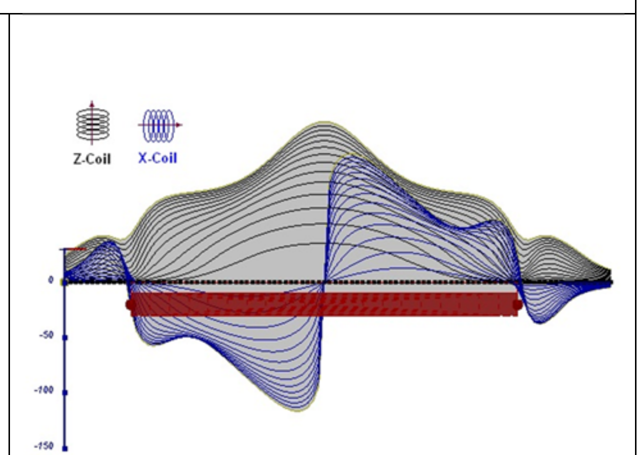


Figure D-12: horizontal thick plate (log scale of the response)

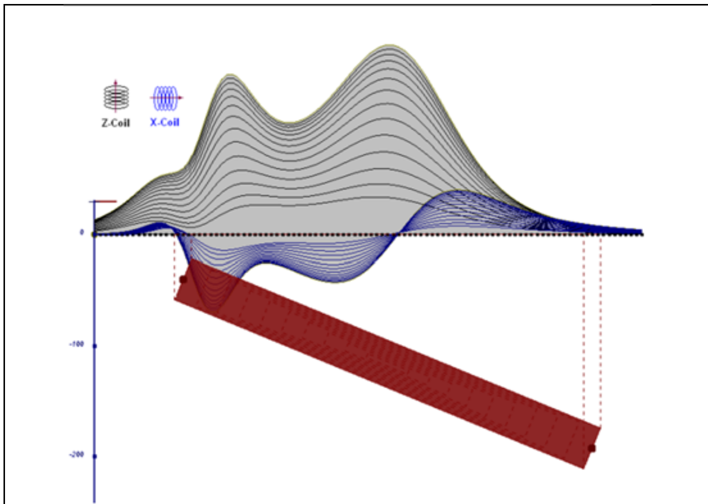


Figure D-13: inclined long thick plate

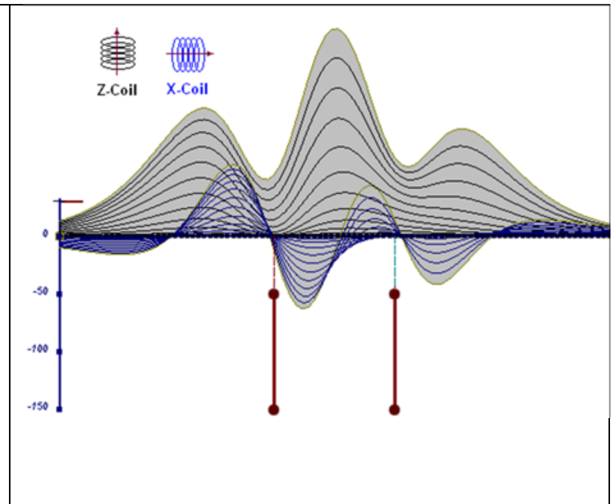


Figure D-14: two vertical thin plates

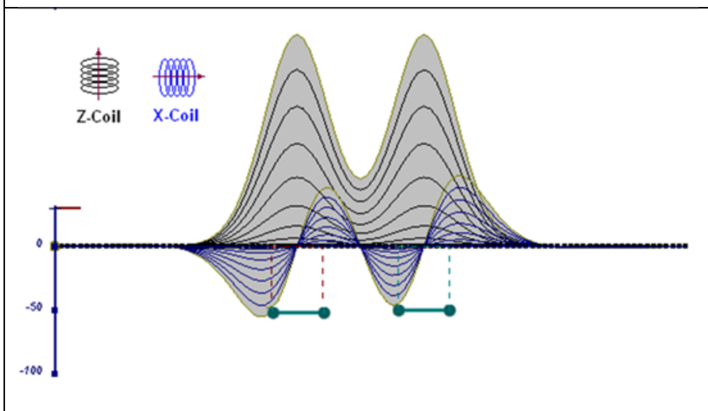


Figure D-15: two horizontal thin plates

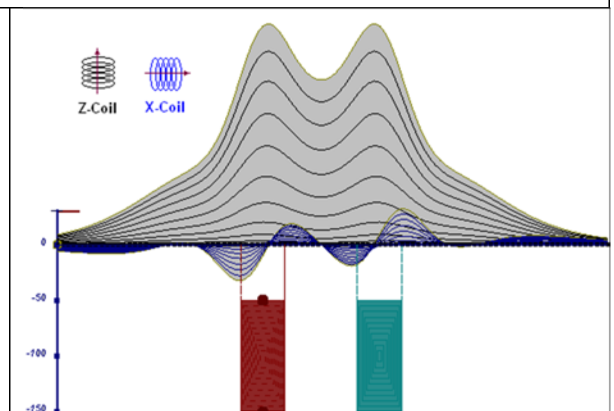


Figure D-16: two vertical thick plates

The same type of target but with different thickness, for example, creates different form of the response:

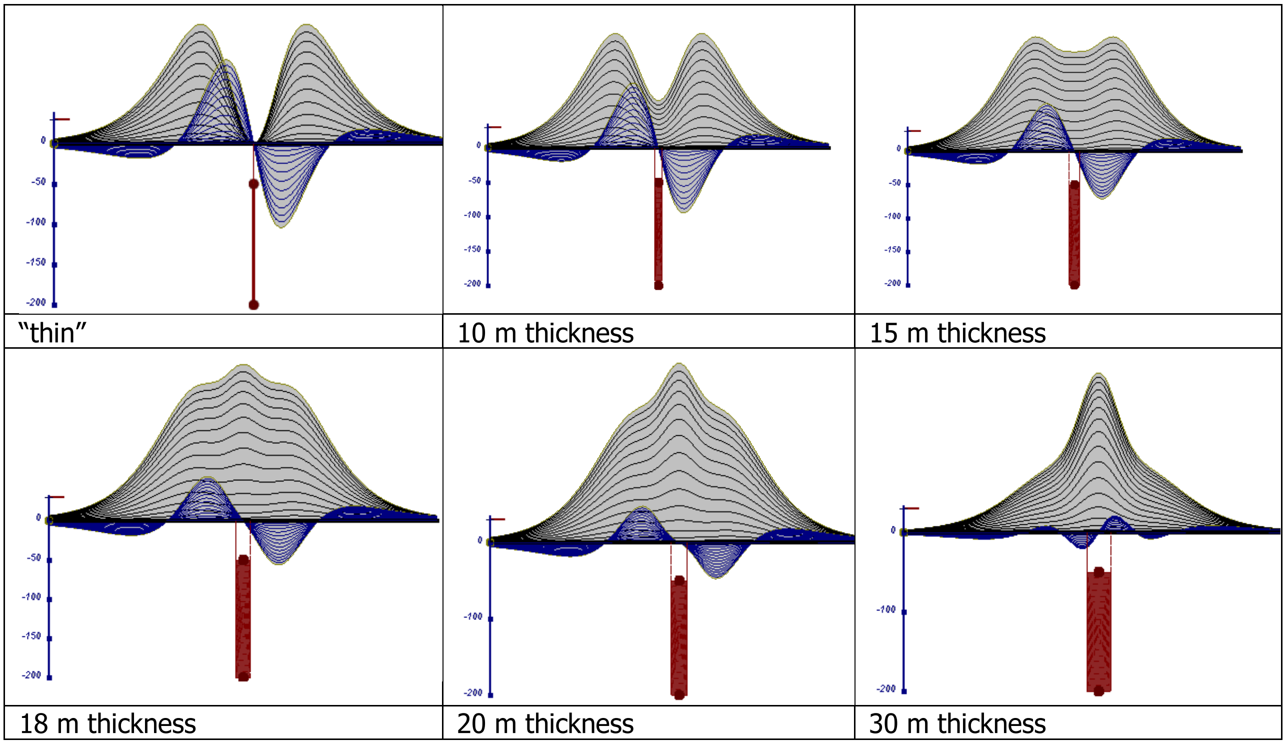


Figure E-17: Conductive vertical plate, depth 50 m, strike length 200 m, depth extends 150 m.

Geotech Ltd.

September 2010

Appendix A2: Geophysical Maps
Appendix A3: Resistivity Depth Image (RDI) Sections
Appendix A4: Resistivity Depth Slices

[*See accompanying PDF]

Maude Lake Project Geophysics

Prepared for

Transition Metals

by

Geoscience North

Alan King, P.Geo., M.Sc.

&

Christopher Mancuso, M.Sc.

March 2022

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Geoscience North

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List of Tables

Acronyms

Table 1. Acronyms used in this report.

Mag	**Mag**netic/**Mag**netics
AS	**A**nalytic **S**ignal
TMI	**T**otal **M**agnetic **I**ntensity
CVG	**C**alculated **V**ertical **G**radient
1VD	**F**irst **V**ertical **D**erivative (*may be used interchangeably with* **CVG**)
AS	**A**nalytic **S**ignal
OGS	**O**ntario **G**eologic **S**urvey
EM	**E**lectro**M**agnetic
AEM	**A**irborne **E**lectro**M**agnetic
TEM	**T**ransient **E**lectro**M**agnetic
PEM	**P**ulse **E**lectro**M**agnetic
FEM	**F**requency **E**lectro**M**agnetic

1 Introduction

The Maude Lake property is a Ni-Cu-Co-PGM Project located 10 km of the TransCanada Highway and the town of Schreiber, Ontario (figure 1). The property contains the historic Nicopor Showing where historic surface sampling returned 6.23% Ni, 0.15% Cu, 0.12% Co and 0.43g/t PGM (Transition Metals, 2022).

Located in the southern limb of the Schreiber Greenstone Belt, the property straddles the boundary between the mafic/felsic volcanics to the south and the Crossman Lake pluton to the north. Numerous Archean aged gabbroic-dioritic intrusion have been emplaced into the greenstone belt. The property is located 11 km north of Mid-Continent Rift (MCR) 'related' Proterozoic lithologies. The Nicopor Showing is hosted in a gabbro-diorite body within the Crossman Lake pluton and may be represent an enclave within the granite. The sulphide zone on surface consists of semi-massive, net-like veins mainly hosted by granite that has been brecciated by the introduced sulphides and occurs as xenoliths within them. Sulphides away from the main zone tend to be fine-grained, disseminated, to blebby in nature. The Nicopor showing is a High-grade, high-tenor Ni-Cu-Co-PGM surface occurrence over 80 m in strike length with values up to 6.23% Ni. The geological model for the Ni mineralization is poorly understood.

As part of a regional and local evaluation the property, regional scale geophysical data for the Maude Lake property was reviewed. Subsequently a new VTEM AEM/Magnetic survey was flown over the property. On receipt of the final data from the new AEM, several discrete AEM anomalies were selected and interpreted quantitatively.

The principal target of the exploration program was magmatic Ni-Cu-PGE deposits that maybe associated with mafic intrusive rocks related to the nearby Mid-Continent Rift (MCR). Volcanogenic Massive Sulfide (VMS) deposits within the associated volcanics are a secondary target. One of the key questions to be answered is the extent of the MCR into the area around the property.

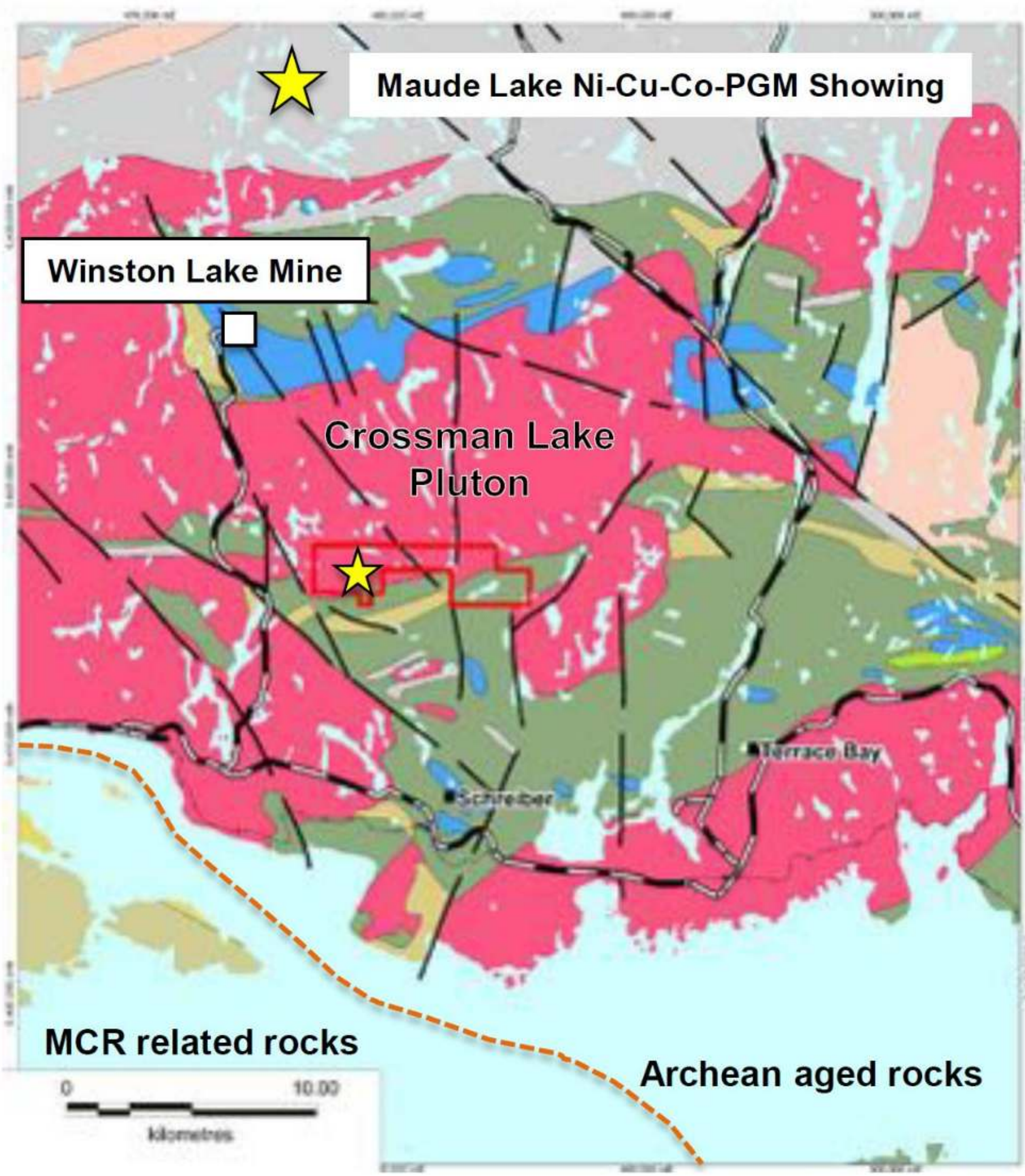

Figure 1. Location of the Maude Lake Property, Ontario, with associated major mineralization and infrastructure.

2 Regional Geophysics and Geology

2.1 Regional Magnetics

Regional magnetic data from the GDS1104 Schreiber FEM and Mag Survey 2000 was downloaded from the Ontario Geological Survey (OGS) and incorporated into the GIS project.

Mafic intrusive rocks of the MCR are usually characterized by strong regional magnetic responses (figure 2). The mafic intrusives from the earliest part of the MCR event are thought to be the most prospective for Ni-Cu-PGE deposits. These intrusive rocks are commonly indicated by a very characteristic reversed remanent magnetism which shows up as negative magnetic anomalies in the Mag TMI data and positive anomalies in the Mag AS. Negative anomalies due to remanent magnetism are usually isolated negative (deep blue) without the positive (red) anomalies usually to the south of the negative. This pattern is characteristic of the dipole anomalies associated with normal positive induced magnetism. As displayed figure 2 there are a number of these prominent negative (deep blue) magnetic anomalies in the area of the property.

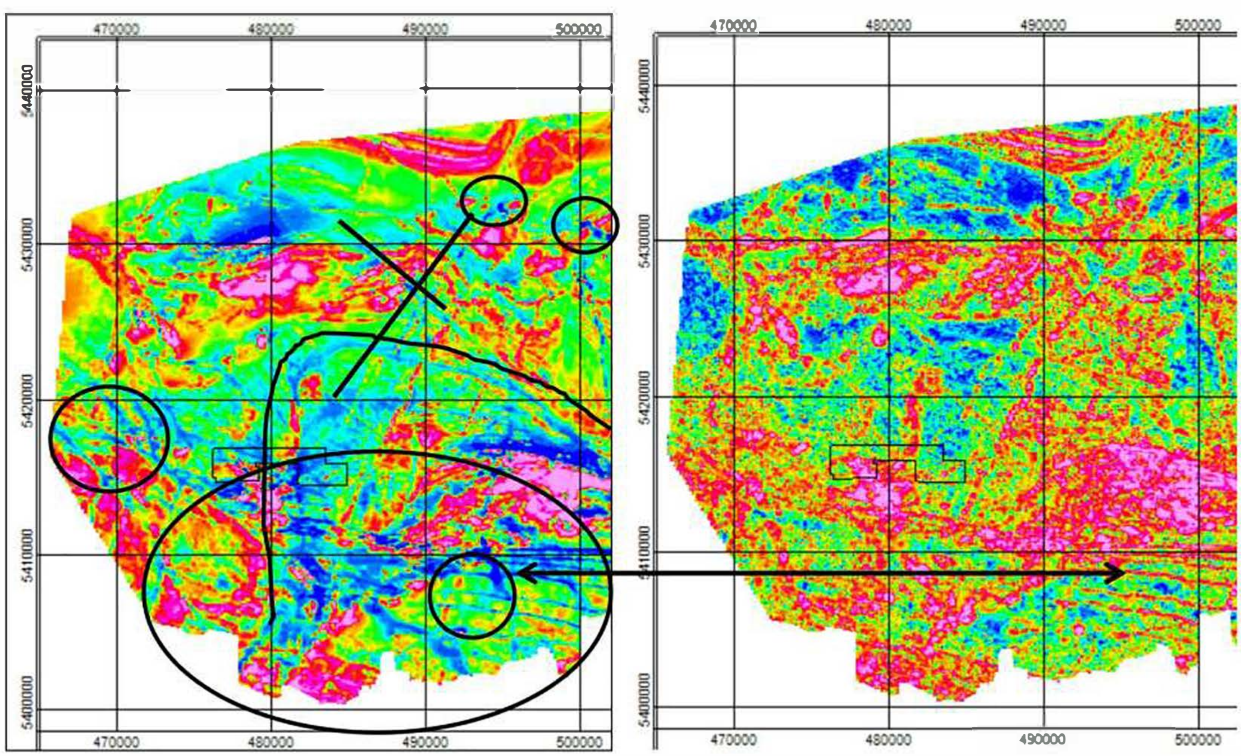

Figure 2. Left Mag TMI Right Mag AS. Probable reversed magnetic features are marked in the Mag TMI are marked by black circles arrows and lines with the lines subparallel to linear features, so the blue mag low is visible.

These anomalies appear as linear features that resemble dyke like features, as well smaller elliptical to elongate features that may be sills (figure 2). There is also an unusual hyperbolic feature marked in the Mag TMI that may be the surface expression of a large planar sill. The abundance of remanent magnetic features indicates that there was an overprint in this area from the main MCR event located just to the south. This suggests that the area is prospective for MCR related Ni-Cu-PGE deposits.

The probable MCR related features cut across otherwise "normal" Superior province granite greenstone terrain (figure 3). Negative magnetic features showing up as prominent mag lows (black) confirm this overprinting. Two of the major linear structural features are highlighted in yellow in figure 4:

- Large NW trending regional linear features. These may be related to other young mafic dyke sets with variable magnetism.
- An E-W structural corridor across the south part of the image that is parallel to the MCR boundary and is likely MCR related.

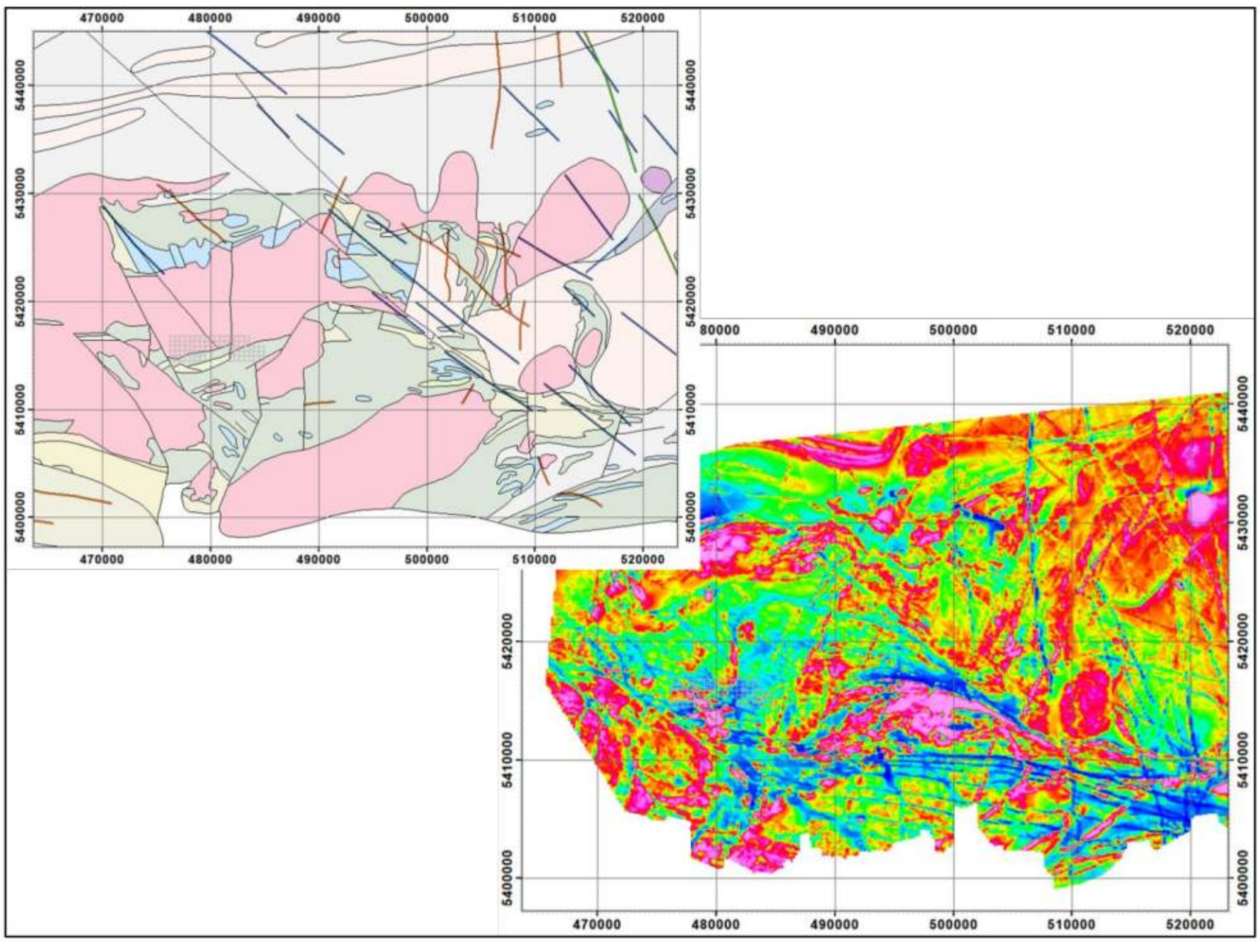

Figure 3. OGS Geology and TMI Mag.

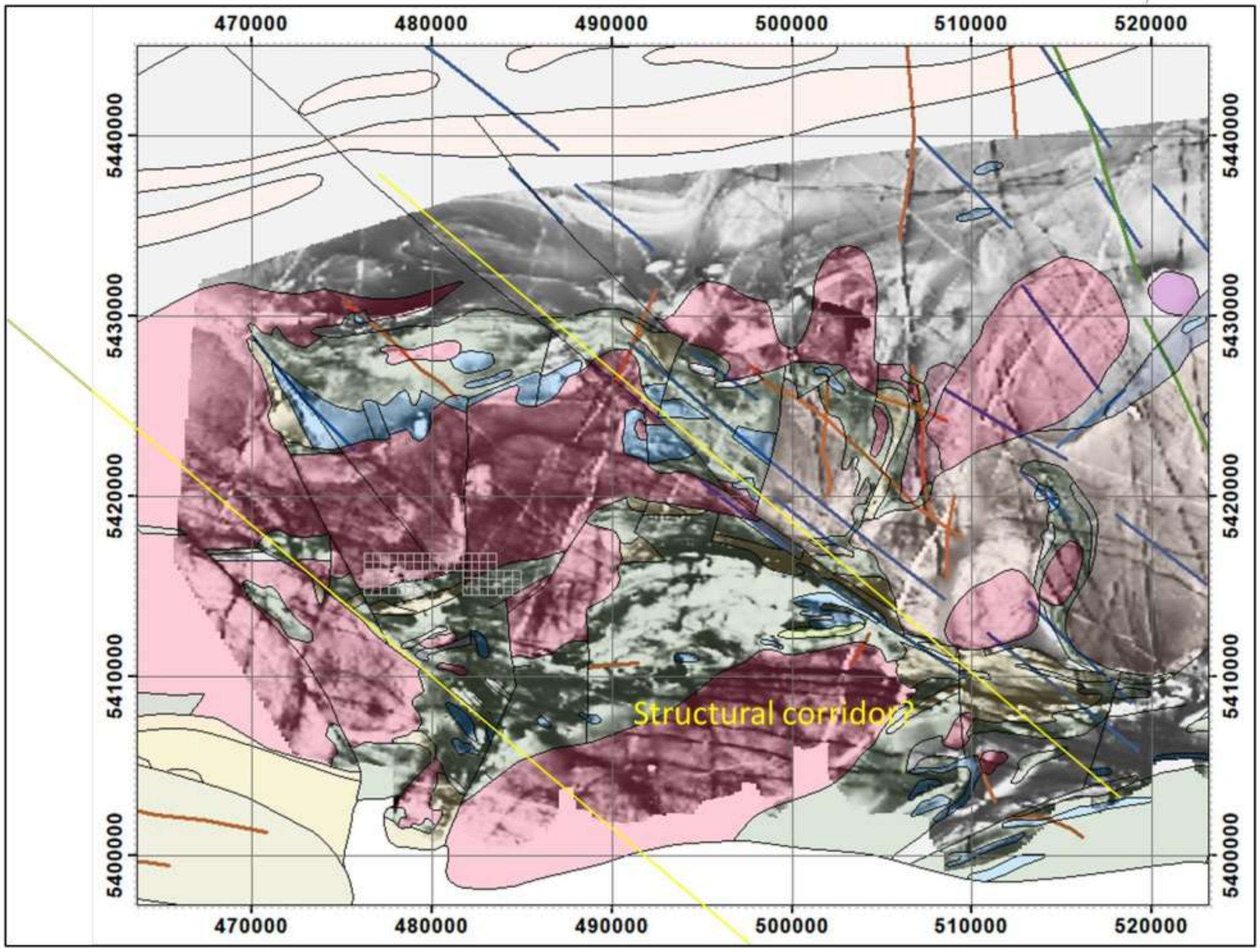

Figure 4. Regional OGS Geology over TMI Mag. Some of the major linear structural features are highlighted in yellow. The Maude lake claim block is shown as cellular claims.

Zooming into the immediate property area in figure 5 reveals similar reversed mag features on a smaller scale. One particularly prominent reversed magnetic anomaly on the western part of the property is indicated in the Mag TMI and Mag AS by the black arrow.

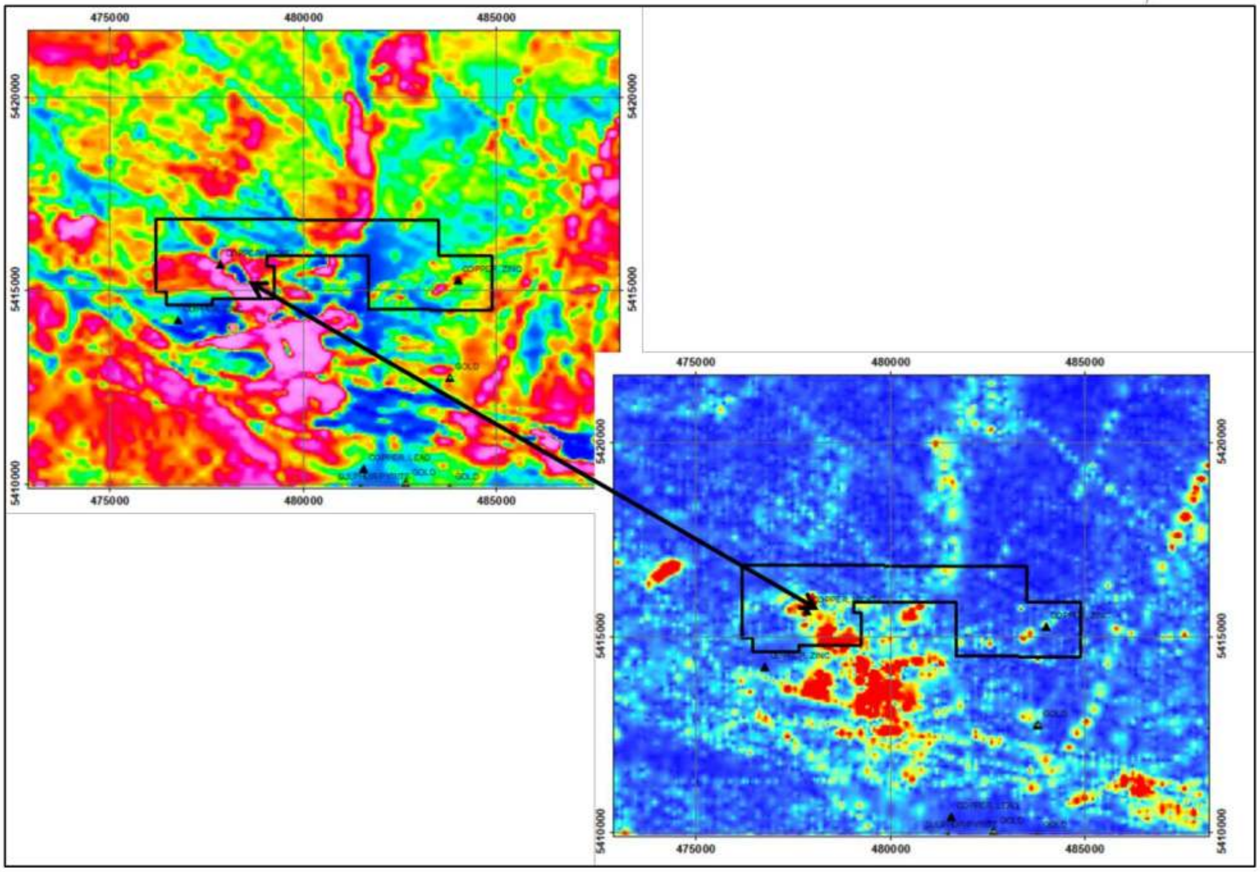

Figure 5. Property area geophysics TMI Upper Left and Mag AS Lower Left.

More local geology from the OGS Map M2665 (M2665 Santaguida, F. 2001. OGS Precambrian geology compilation series–Schreiber sheet) is plotted over Mag TMI (grey scale) in figure 6. The E-W corridor of likely MCR dykes along the southern portion of the image is particularly prominent. This map also more clearly shows the greenstone (green) terrain on and around the property that may be prospective for VMS deposits, and also could have provided sulphur bearing rocks to help localize MCR related Ni-Cu-PGE deposits. Figure 7 displays the same geology map over Mag TMI-1VD, showing the structural elements and lithological trends in more detail.

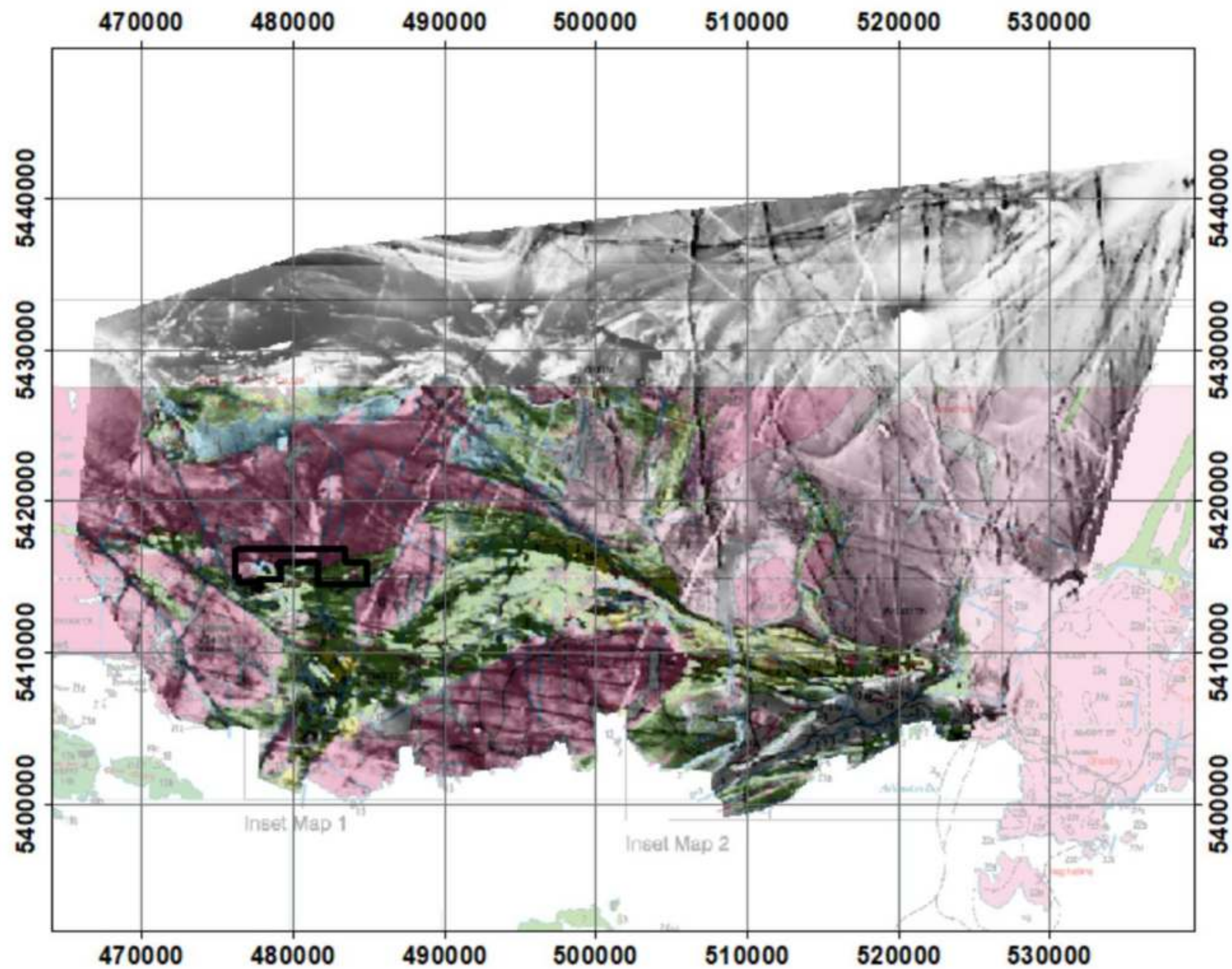

Figure 6. OGS Schreiber Geology over Schreiber Mag TMI.

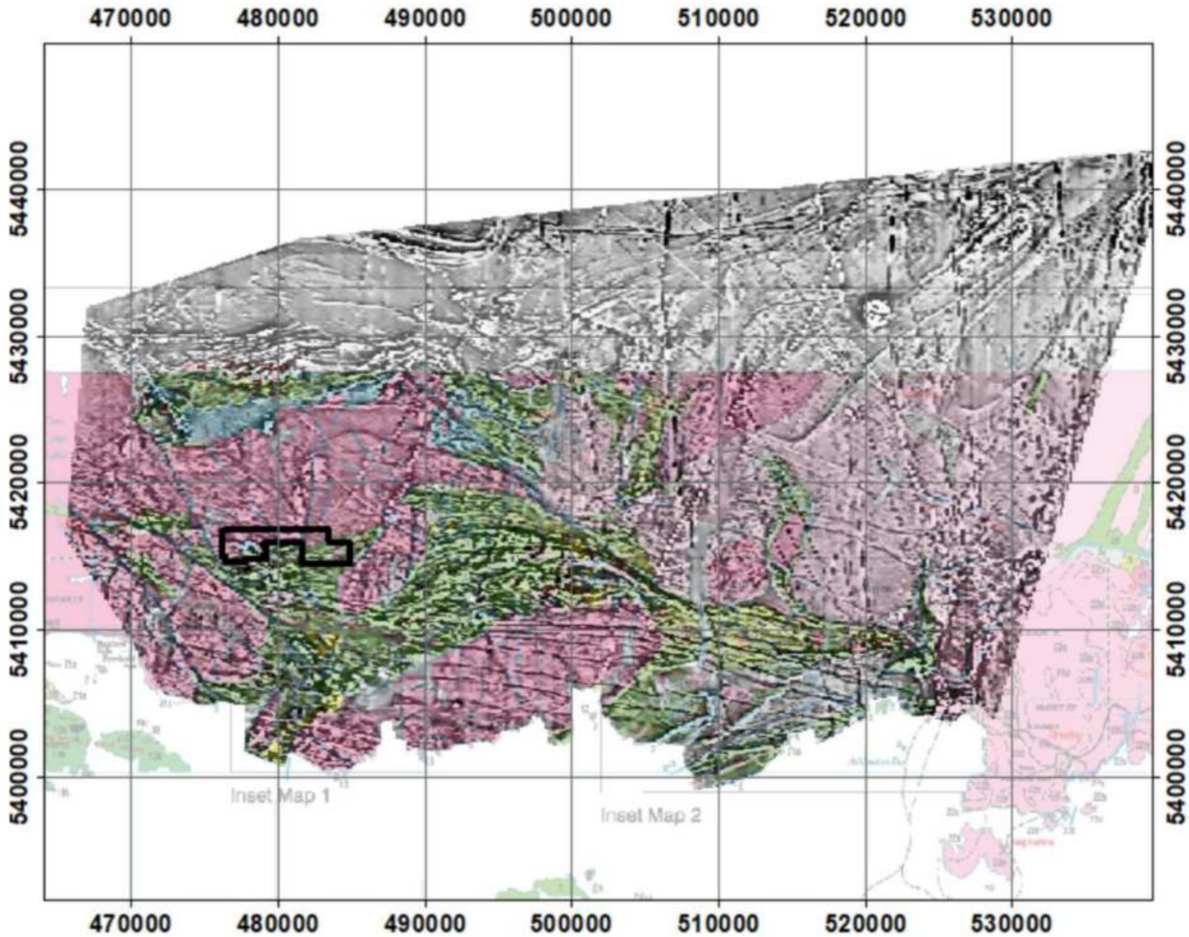

Figure 7. OGS Schreiber Geology over Schreiber Mag TMI-1VD.

2.2 Regional Gravity

The mafic intrusive rocks of the MCR are also characterized by large scale gravity highs in the regional OGS/GSC Bouger gravity data (figure 8). Due to the large spacings between the regional gravity readings, the gravity data shows only the largest regional gravity features. Nevertheless, the data is very good for identifying very large scale lithological and structural features.

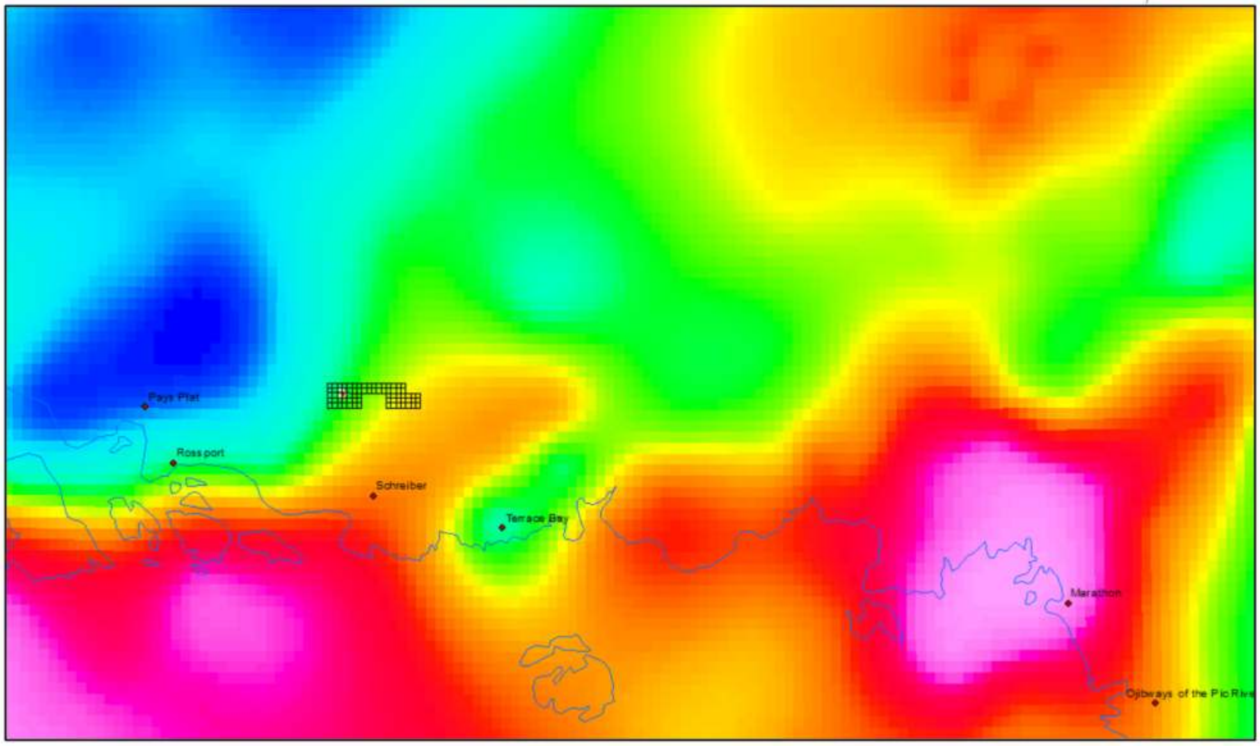

Figure 8. Regional Bouger gravity. Red indicates high gravity, blue low. The Maude Lake claim block is overlain.

The gravity results demonstrate a positive gravity response extending to the NE over the Township of Schreiber from the main MCR anomaly to the south (figure 8). The large roughly circular gravity high on the east side of the map is the well known, very large gravity response over the large Coldwell complex which hosts a large PGE-CU deposit on its eastern edge in early stage MCR gabbros. This all suggests that the gravity high trending across the SE edge of the Maude Lake claims represents another large offshoot of the MCR. Also, as indicated by the nearby MCR related Tamarack and Eagle deposits in the US, high grade Ni-CU-PGE deposits can be located just outside the main gravity/magnetic footprint of the MCR, making the Maude Lake area prospective for this type of deposit.

3 Property Area Geology and Geophysics

The prominent mag low (black) near the center of the west side of the claim block is clear (figure 9). This anomaly as well as a large SE trending Mag AS Magnetization high extends to the SE (figure 10). This feature becomes more apparent in 3D mag inversion results.

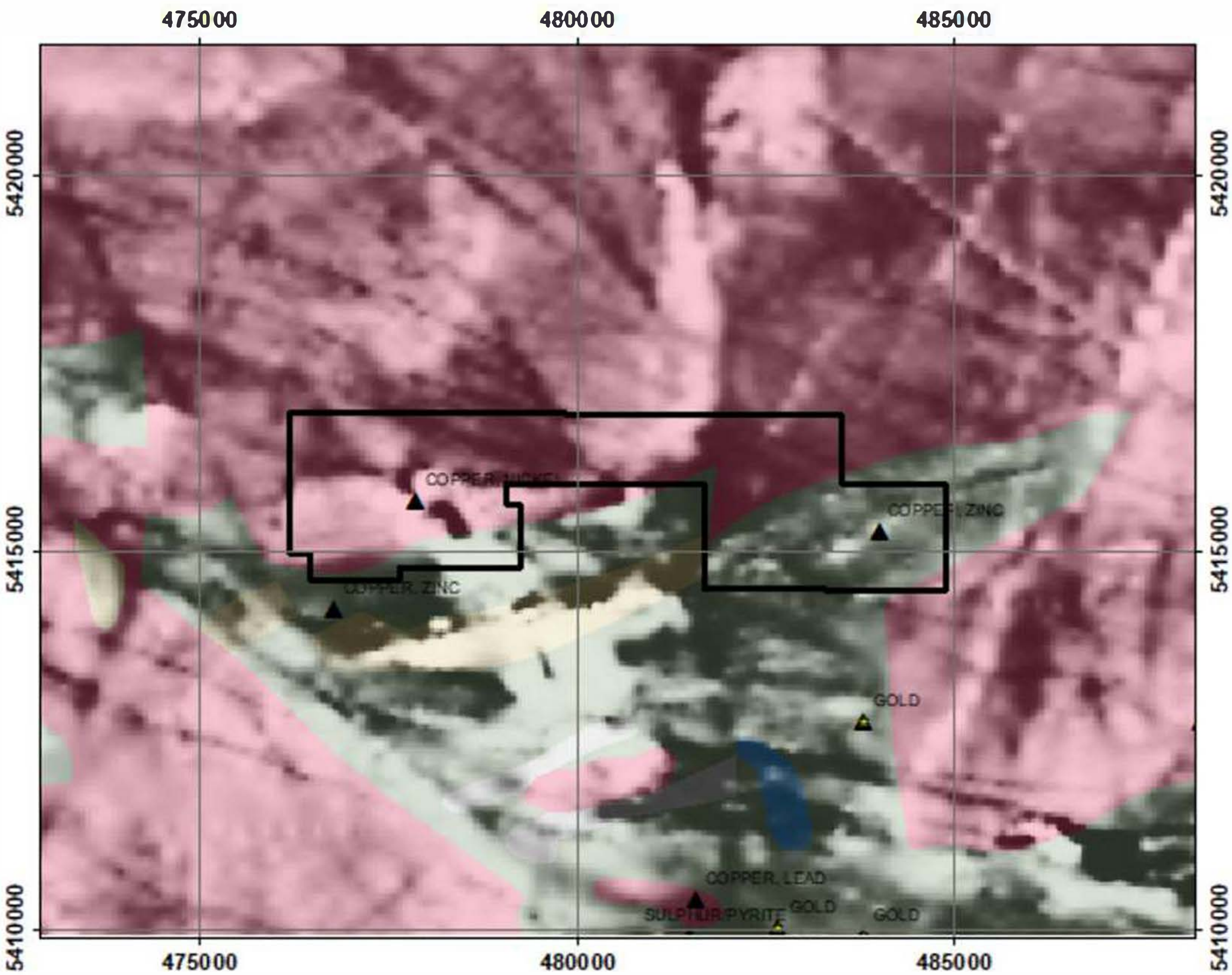

Figure 9. Zoom to Property Regional OGS Geology over TMI Mag.

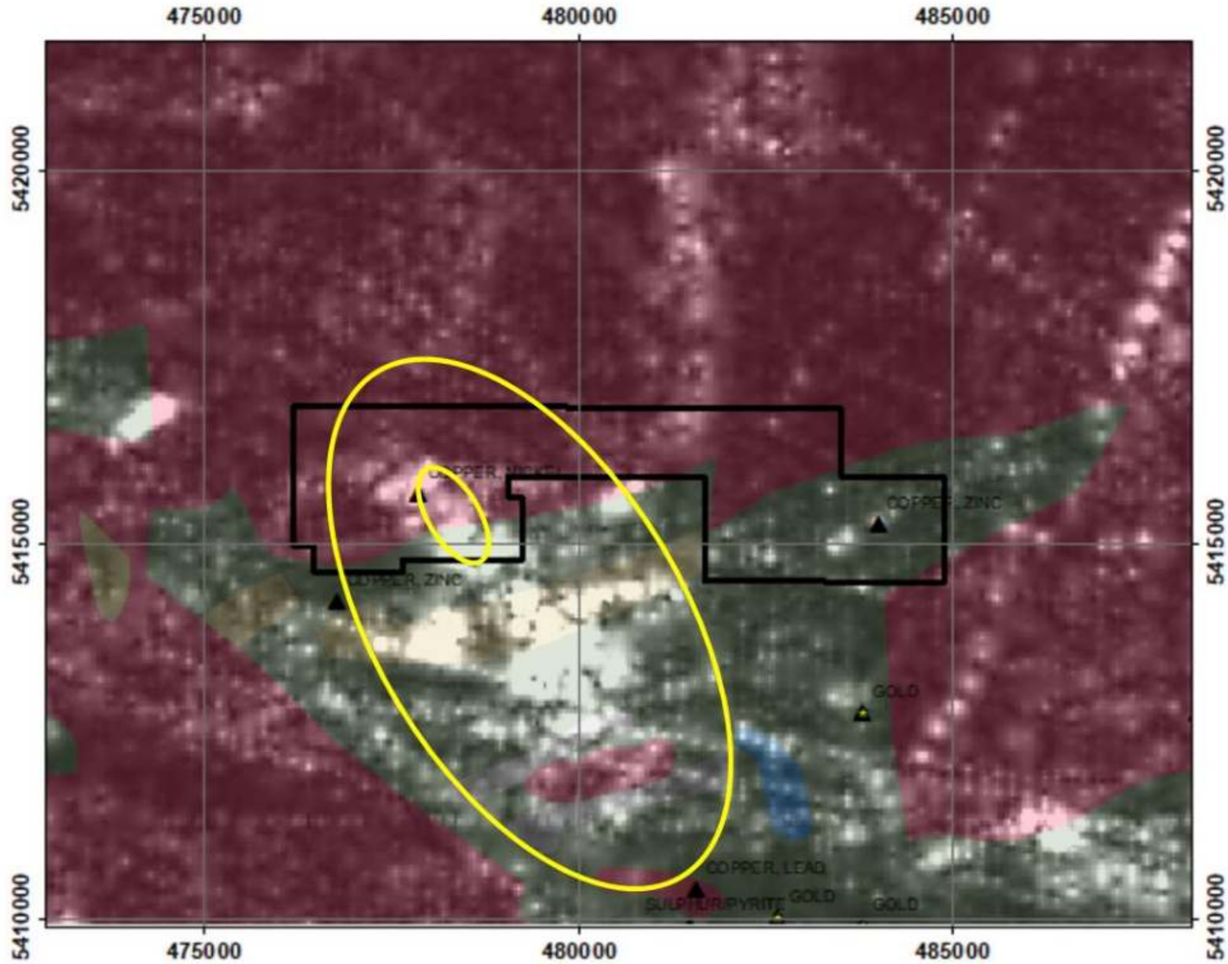

Figure 10. Zoom to Property Regional OGS Geology over Mag AS.

4 Historical Geophysics

There is quite a lot of previous exploration work in the area which includes VMS exploration to the south of the Maude Lake claim block and work over and around the Nicopar showing on the claim block (figure 11). Excerpts and images (figures 12-17) from the assessment reports are provided below. These include summaries of work done and results. These are useful as background for the area and possible future work done on the Maude Lake property.

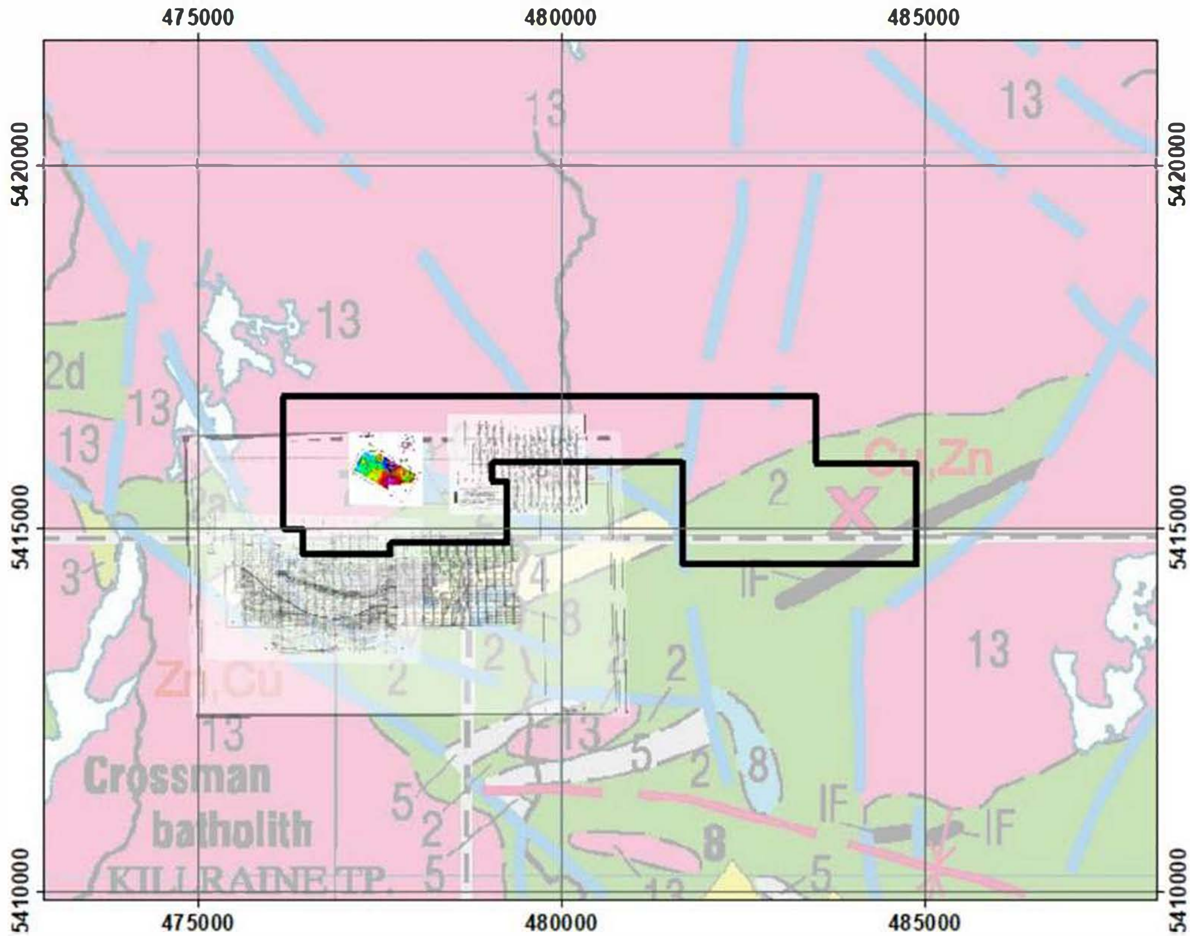

Figure 11. Minnova Victoria Lake work to South Norex 1980s and Minnova with Surface PEM profiles. Novawest VLF over west center and recent surface TEM colour image at Nicopar.

4.1 Norex 1982-1987

Location – just south of Maude Lake Claim block.

Target - Winston Lake Type VMS Targets Geophysics

Work done:

1983 - Limited geology and geophysics including: magnetometer, Max Min Horizontal loop and limited PEM survey.

1984 - 699m of diamond drilling (VL-1 to 4).

1984 - Downhole PEM. 1985 878m of diamond drilling (VL-5).

1984 - Downhole PEM. Drilling done in 2 stages 0-401 m 400m-878.

1984 - 1558m of diamond drilling (VL-6 to VL-9). Down hole pulse and a magnetometer survey.

Results:

Delineation of major Iron Formations and geophysical anomalies associated with them.

Drill testing of Iron Formations and Magnetic anomalies resulted in discouraging trace to nil base metal mineralization.

Off hole Pulse anomaly in VL-4.

VL-5 was designed to test the off hole PBM (Pulse BHEM) anomaly in VL-4. Hole stayed in mafic volcanics until 567m despite the northerly dipping felsic contact located approximately 50m to the south. PBM of VL-5 picked up some off hole response as in VL-4 indicating the source is between the two holes.

Previous drilling concentrated on the central alteration cell and the Scooter Lake Horizon (SLH) . These holes were attempting to test the Victoria Lake Horizon across its entire strike length in the belief that the underlying alteration cells had deposited MS on the FIJI. VL-6 was 'gabbroed out' at the SLH and stopped short of the Victoria Lake Horizon. VL-7 intersected oxide facies iron formation with minor sulphides and poor metal values (<1100ppm Zn, 210ppm Cu)

VL-8 failed to intersect FLH. VL-9 intersected sediment/oxide facies iron formation and was not sampled. Down hole pulse failed to clearly indicate any off-hole conductors.

4.2 Noranda Exploration Company, Limited

42D14SW0026 Norex Mag PEM Jan 87 D. Carierre

Location - Victoria Lake – West Grid. South of Maude Lake Claim block.

Results:

The magnetic variation on this part of the grid is from -2797 to 8277 nT with background in the range of 200 to 500 nT. The dominant feature from the magnetics is the west-northwesterly trending magnetic body labeled A. Between L7125E and L7250E the zone changes character from a magnetic low to a magnetic high indicating a change in the direction of the magnetization. The significance of this is not understood.

The contact between the felsics and the magnetite-rich mafic volcanics is well defined by the magnetic contact labeled B. However, the mafic volcanics on the north part of the gird are magnetically transparent so that the contact with the felsics is not seen.

The results of the Pulse-EM work did not locate any significant responses. Only a swamp was located as a 2-channel response with very rapid decay.

Conclusions:

The PEM survey was unable to locate any conductive targets. The magnetics clearly reflect the geology but do not aid in locating any targets.

4.3 Minova 1991-1992

Location - Victoria Lake grids - South of Maude Lake Claim block

The goals of the program were to a) complete geological mapping and sampling over the entire property b) conduct pulse EM surveys to test the most favourable horizons down to a depth of 400m vertical c) develop a geological model based on geology and lithogeochemistry d) identify favourable horizons associated with strong hydrothermal alteration and synvolcanic structures e) generate drill targets by completing the aforementioned goals.

The above goals were all successfully achieved and have generated a lot of excitement about this property. To date the most favourable horizons appear to have been inadequately drill tested. As a result the Victoria Lake property still carries a very high potential of discovery in the 1991 program

GEOPHYSICS

An inhouse (Crone DeepEM Analog 8 channel) pulse EM survey was carried out over the majority of the Victoria Lake property. A total of 4 loops were surveyed with each loop being oriented to provide maximum current coupling at approximately 400m vertical on the most favourable horizons in the central portion of the property.

The survey picked up the conductive portions of the known iron formations and as well as other significant anomalies. Some PEM anomalies correspond to magnetic anomalies such as the anomaly on L7750 + 7875. The plot of the anomaly would indicate a relatively short strike length (< 250m) with dips near vertical despite the shift in later channels to the south. Depth would be < 250m vertical.

The second anomaly has a much broader crossover and a strike length in excess of 500m. Response is generally good over seven of the eight channels. Depth is on the order of 300-500m.

PN078 - 1991 WINTER DRILLING, VICTORIA LAKE PROJECT

TABLE 3: DDH TECHNICAL DATA

HOLE	LOCATION		AZ	DIP	DEPTH	DRILLED	TARGET	PIERCE POINT COORDS		
	NORTH	EAST			(m)	(m)		NORTH	EAST	ELEV
VL-3	205+35	82+50	180	-70	1045	922	FLH SLH (EOH)	203+87 201+67	82+35 80+92	-405 -955
VL-5	201+90	88+50	180	-70	1002	124	SLH	198+05	86+11	-732
VL-10	203+90	73+00	180	-70	1005	1005	FLH SLH (EOH)	201+66 199+70	72+43 70+86	-573 -863
VL-11	205+50	87+50	180	-60	185	185	PEM	204+87	87+45	-116
	TOTAL					2236				

FLH: FRENCHE LAKE HORIZON - MAFIC-FELSIC CONTACT
SLH: SCOOTER LAKE HORIZON - INTRA-FELSIC IRON FORMATION
PEM: DEEPEM CONDUCTOR - INTER-PILLOW SULPHIDES/MINERALIZED MUDSTONE

Figure 12. Minnova 1991 Drilling. They suggested deepening VL-3 and 5 and Drill VL-10-11.

A pulse EM survey was completed and covered the entire central portion of the property and all of the alteration cells. The survey picked up two, previously undiscovered anomalies as well as portions of the known iron formations. The pulse EM anomalies consist of a small 4 channel response over 2 lines (125m) associated with the Frenche Lake Horizon. The second anomaly is a full 8 channel response over approximately 450m within the Corvette Lake mafic flows. This anomaly is associated with abundant gossanous surface exposure and up to 396 disseminated interpillow sulphides and noisy base metal values up to 4200ppm Zn.

Recommendations included diamond drilling to test the Frenche Lake Horizon (FLH) at 300m vertical on 500m centres. This will effectively test the FLH at the top of strong hydrothermal alteration over a strike length of 1km.

One hole is planned to test a broad off-hole anomaly in VL-5. At present it is unclear whether the response is located on this Victoria Lake Horizon (VLH) east of Titanium fault or on the Scooter Lake Horizon (SLH) on the west side of the fault. Finally the PEM anomaly occurring within the Corvette Lake flows over a strike length of 450m will be drill tested.

Summary:

The 1991 winter drill program at Victoria Lake was conducted between January 21 and April 9, 1991. A total of 2236m was drilled in 2 new holes and deepening of 2 existing holes. Borehole pulse EM surveys were conducted on the holes (April 18, 1991), unfortunately VL-5 was blocked at 825m, 177m from the bottom

Recommendations also include a 300m diamond drill program to test:

1) the Frenche Lake Horizon (FLH) on 500m centers at 300m vertical. This will effectively test the FLH at the top of the strongest and largest alteration zones on the property

2) the off-hole anomaly at the bottom of VL-5 and

3) the PEM anomaly in the Corvette Lake Flows.

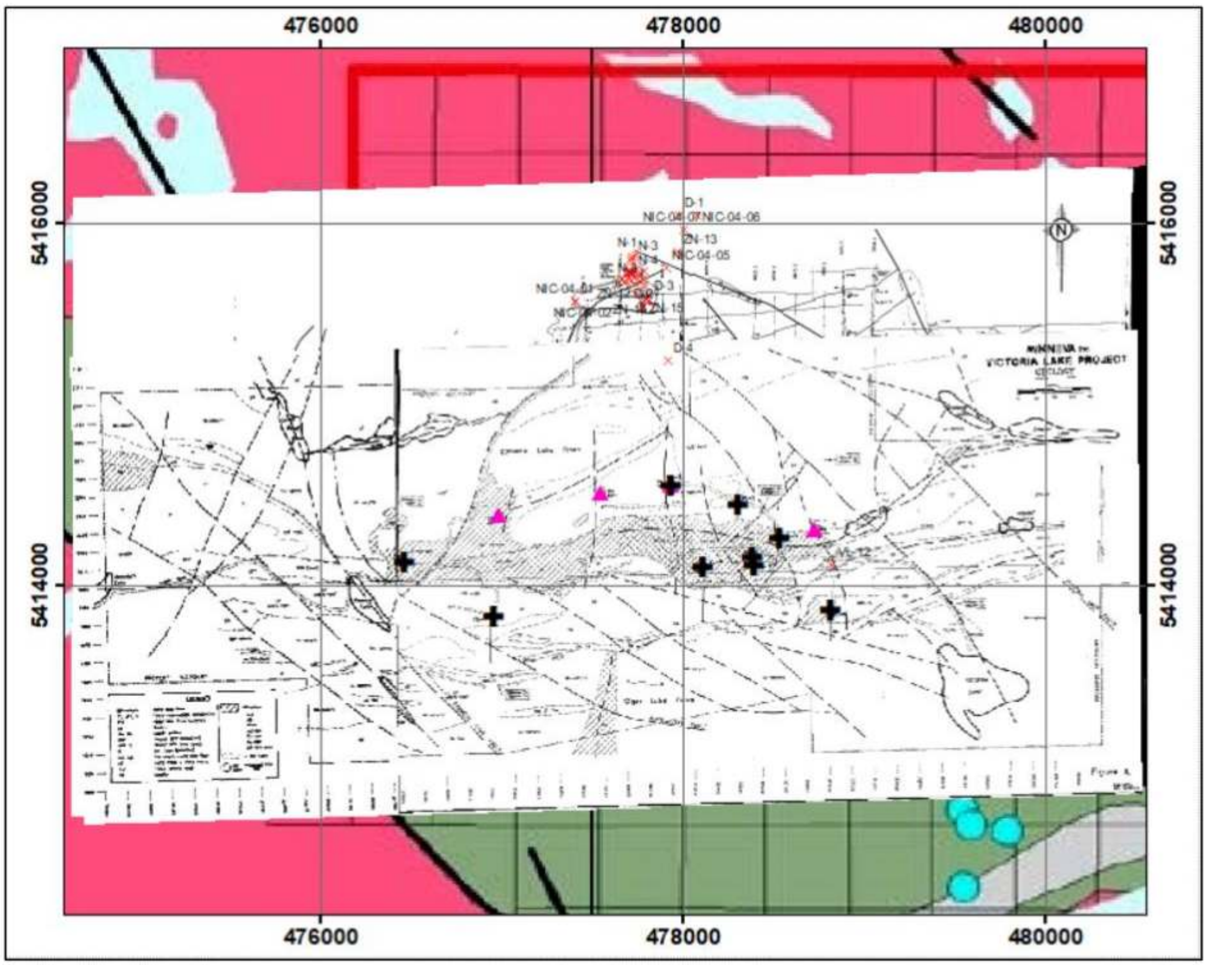

Figure 13. Minnova Victoria Lake Property 1991. Geology blackline maps with Norex 1980s +, PH DHs and Novawest DHs.

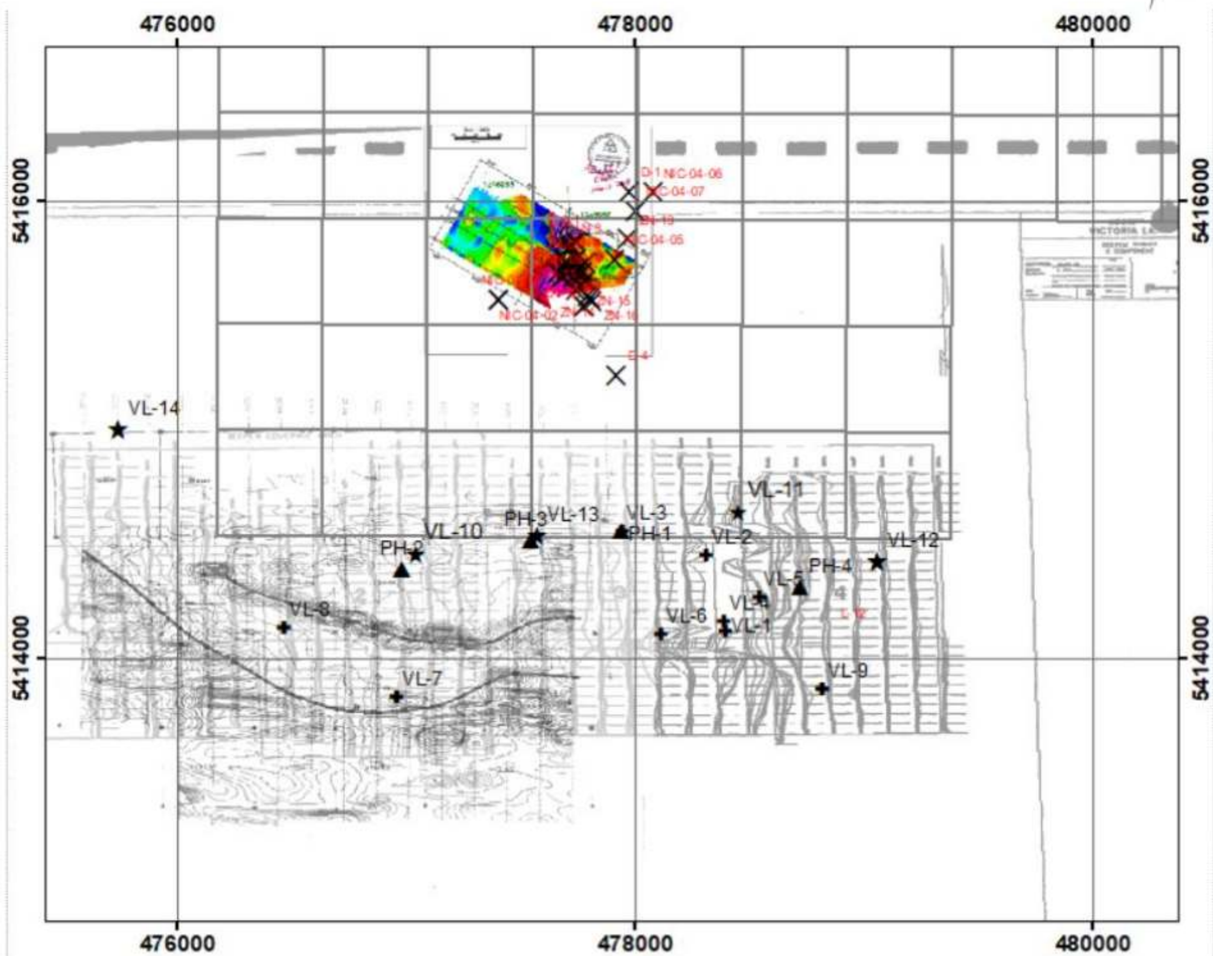

Figure 14. Minnova Victoria Lake Property 1991 Geology blackline maps with Norex 1980s +, Minnova - stars, Novawest DHs x and previous PH DH's- Triangles over Minnova Surface PEM profiles and recent surface TEM colour image at Nicopar.

4.4 Novawest 2001-2004

Location - Fowler Option/Nicopor prospect). This is located on the current Maude Lake Property.

Commissioned Quantec to do BH and surface TEM.

Drilled 11 diamond drill holes Confirmed high tenors of Ni, Cu and elevated PGEs.

Identified 2 conductors from surface TEM and multiple discrete bodies from BH TEM.

Confirms Ni, Cu, PGE grades, expands lenses and suggests a magmatic origin.

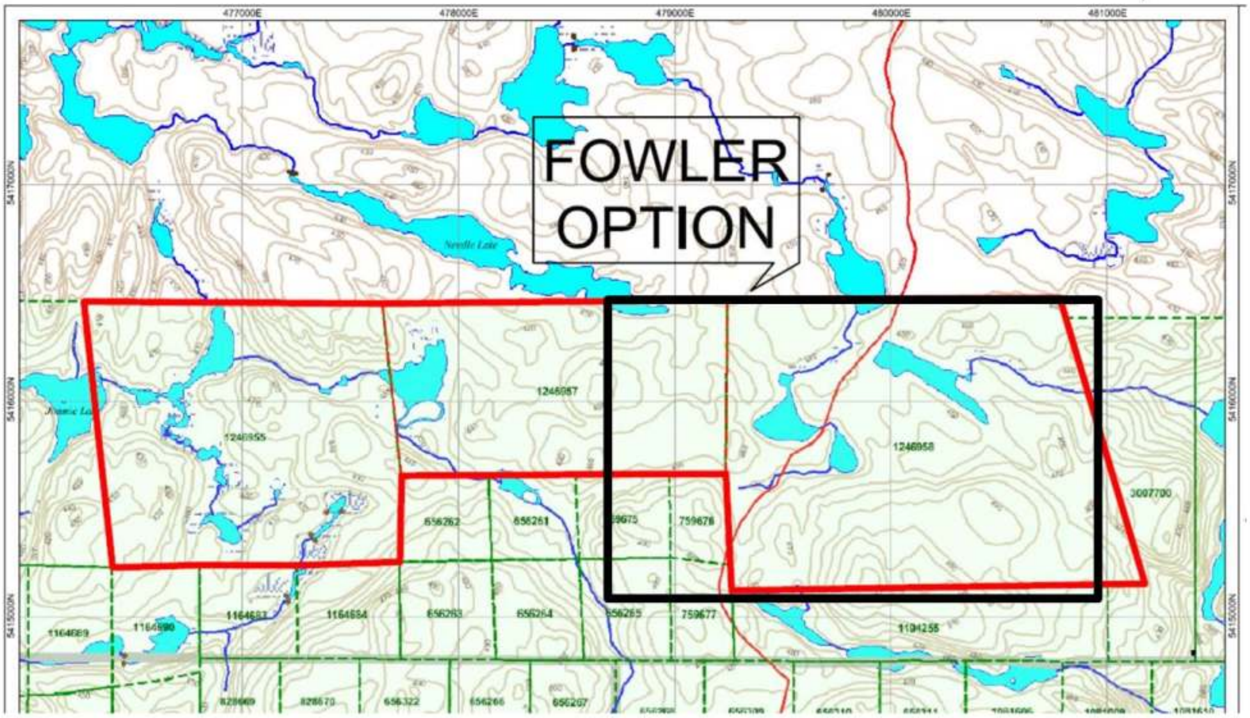

Figure 15. Novawest Mag/VLF work area.

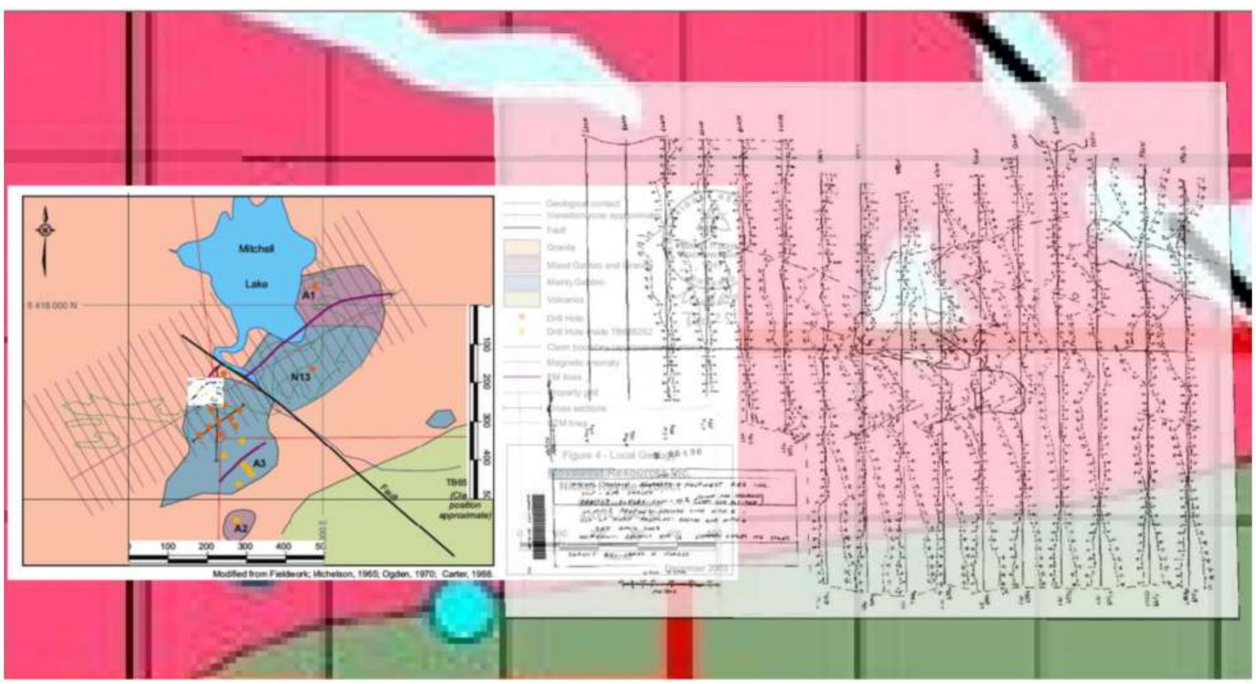

Figure 16. Novawest Mag/VLF Located on the East side of the current Maude Lake claim block.

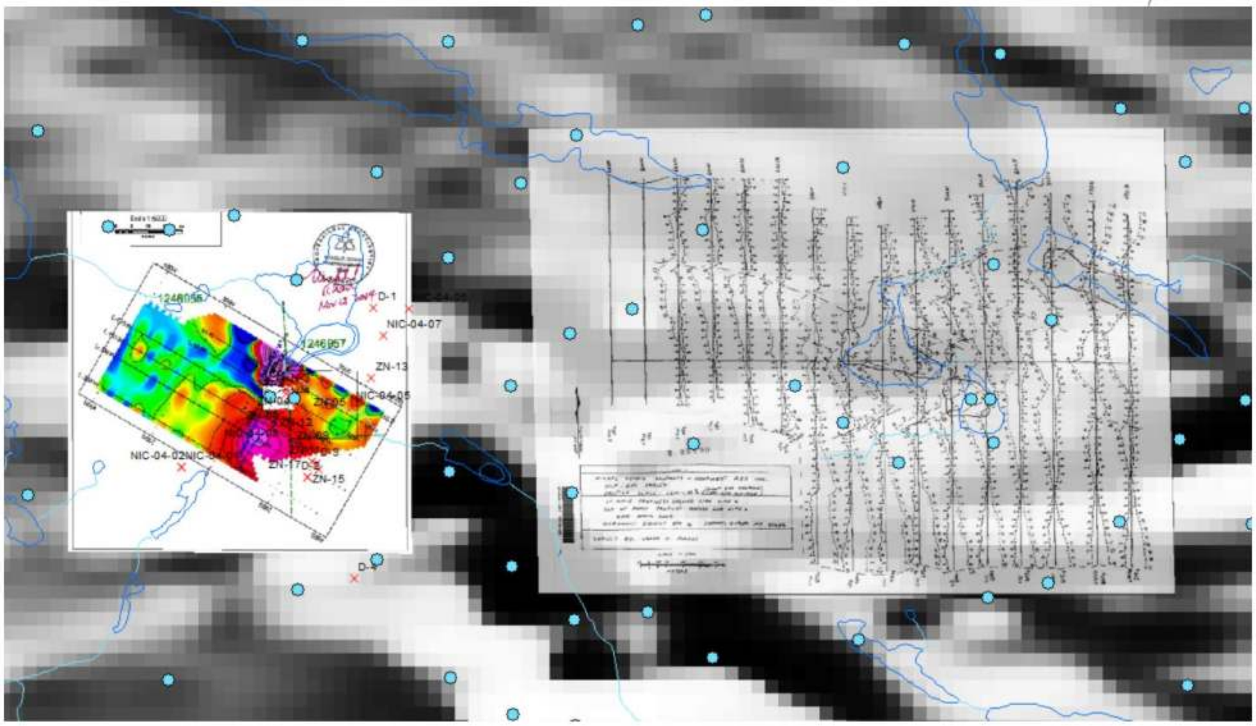

Figure 17. Novawest Trench Map over Surface TEM with VLF to the east all on OGS mag grey scale with FHEM (Helicopter FDEM) weak anomalies from the GDS1104 Schreiber FEM and Mag Survey 2000.

Comments on their results:

- All BHEM plate are small and near the hole
- The BHEM system was not identified but was probably the Geonics off time 30Hz system. This is a good system in general, but does not measure or calculate B field or measure during the on time and hence is not particularly well suited to very high conductance massive Ni-CU-PGE bodies. Thus, it is possible that good quality large targets may have been missed.
- Some of the BHEM modeling is shown in figures 18-21.

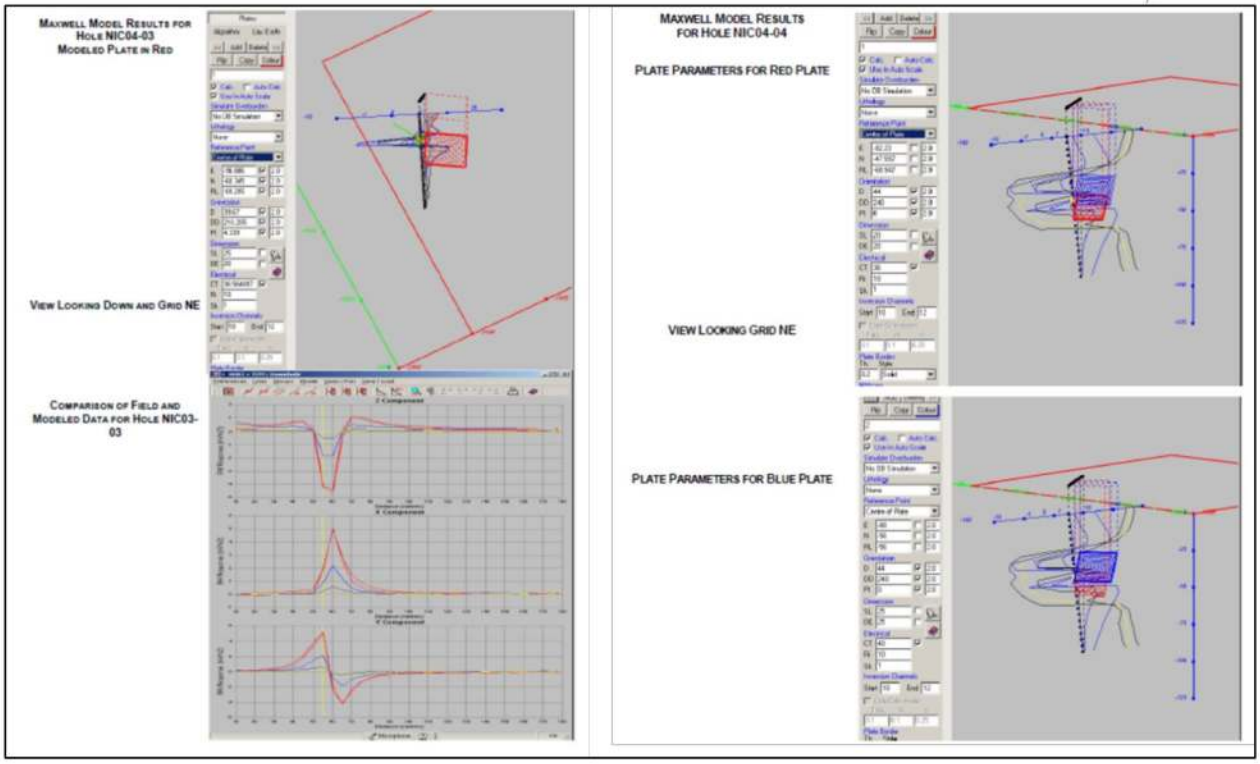

Figure 18. Novawest BHEM NIC04-03 and 04-04.

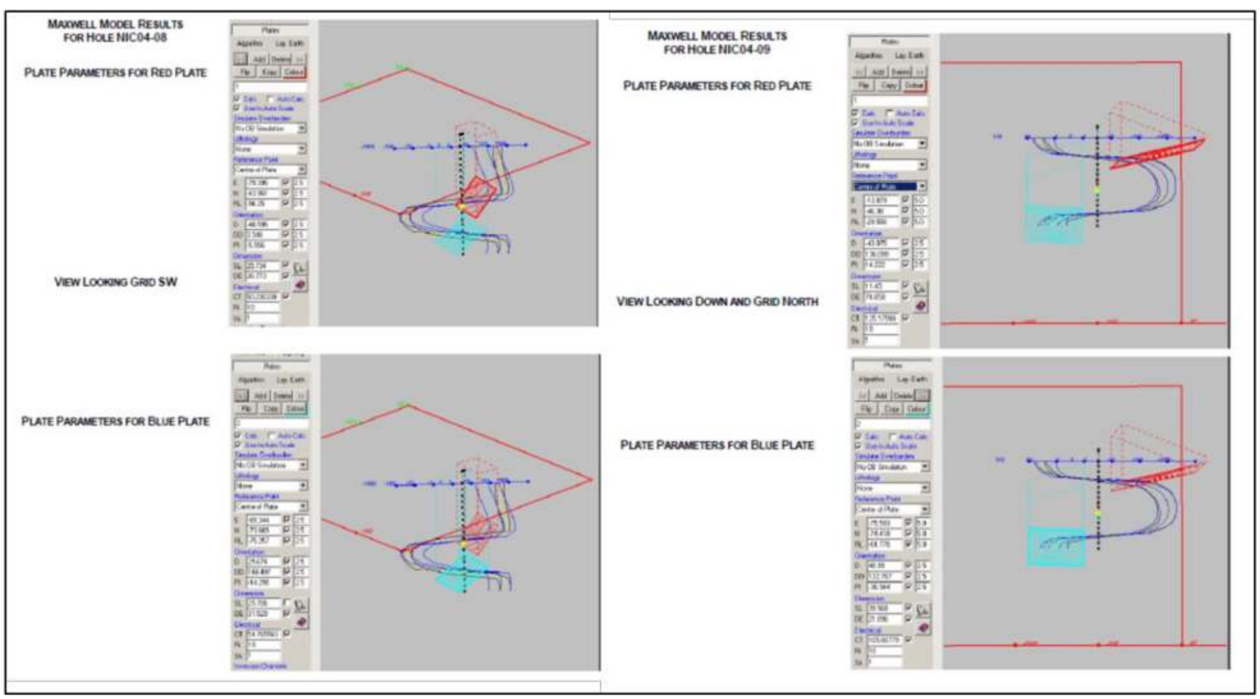

Figure 19. Novawest BHEM NIC04-08 and 04-09.

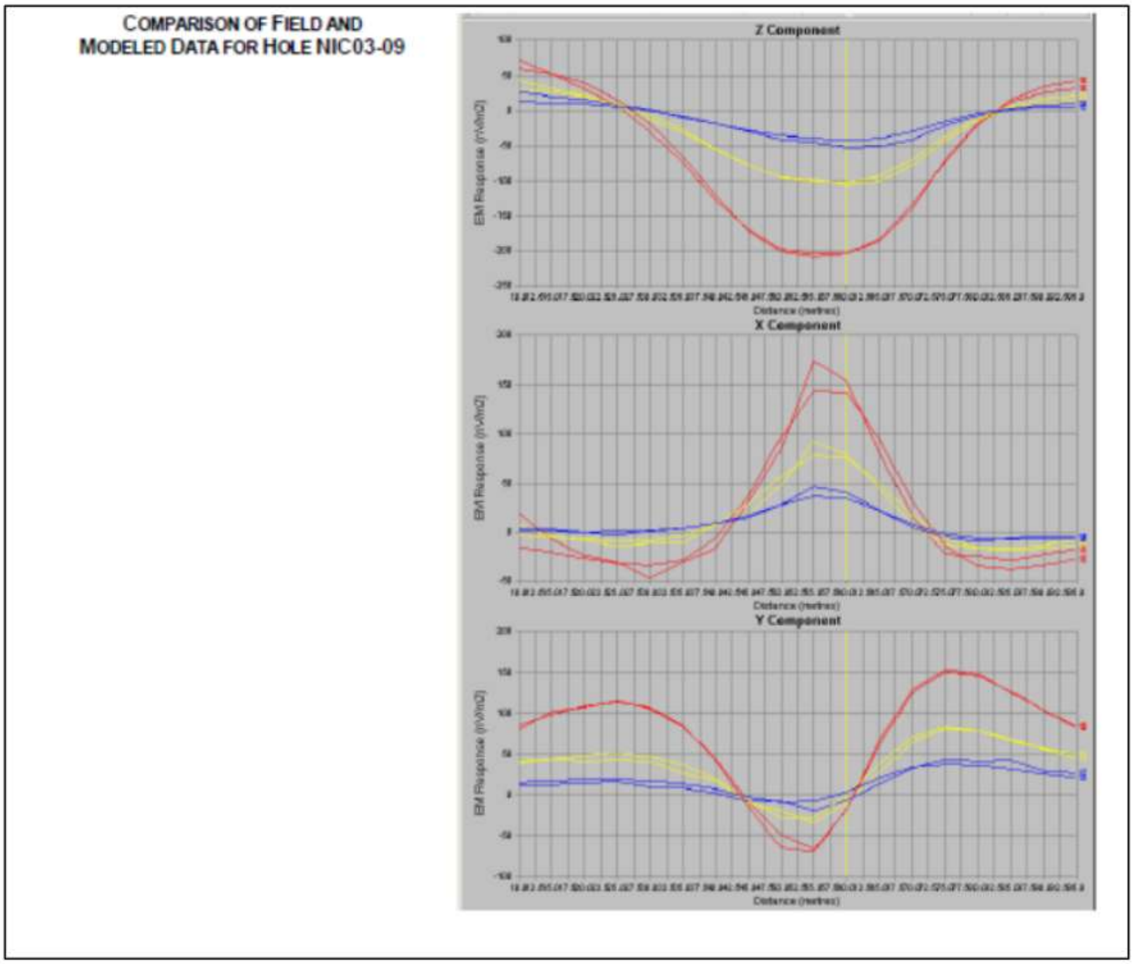

Figure 20. Novawest BHEM NIC03-09.

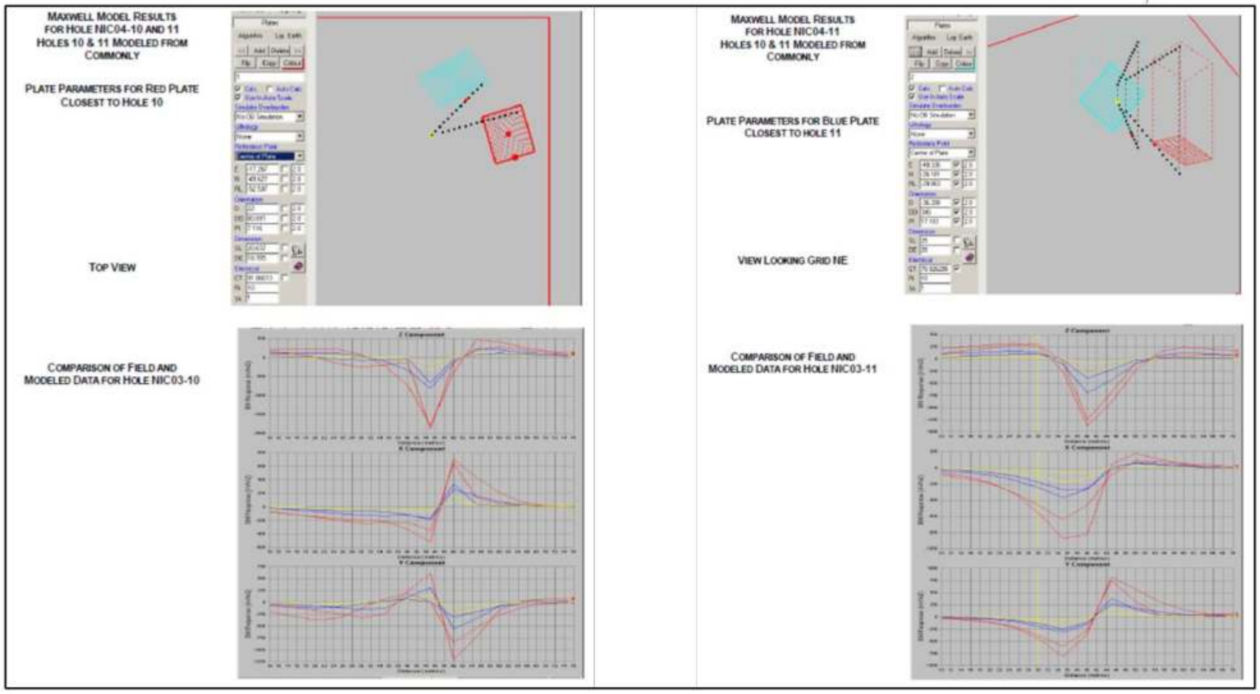

Figure 21. Novawest BHEM NIC04-10 and 04-11.

Figure 22 displays the surface TEM work over the Nicopar occurrence and the Victoria Lake belt to the south along with the AEM picks in the area from the FHEM (Helicopter FDEM) anomalies from the GDS1104 Schreiber FEM and Mag Survey 2000. It is interesting to note that there are no moderate to good quality conductors located by the AEM survey and correlation with the moderate to good conductors located by the ground TEM surveys is poor. This suggests that the relatively high frequency low power FDEM AEM system was mainly seeing conductive overburden without penetrating far into bedrock.

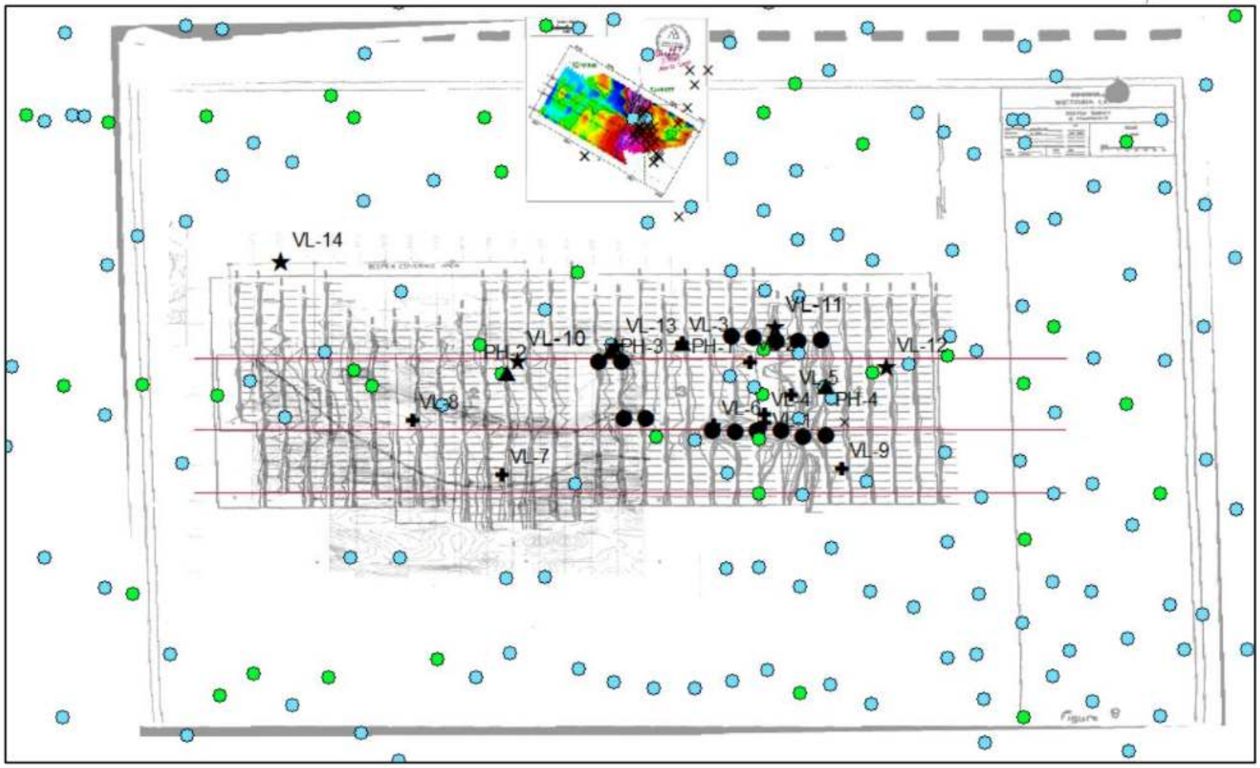

Figure 22. Schreiber FD-AEM anomaly Picks over Minnova (PEM Profiles) and Novawest (Colour image) ground TEM AEM Blue dots 0-1.6S, Green 1.6-5.4S Hor. Sheet model

5 Regional Inversions

The regional magnetic and gravity data was inverted into 3D models to assist in mapping the large-scale distribution of dense magnetic mafic rocks that could host magmatic Ni-CU PGE's. The results are presented in figures 23 and 24

5.1 Magnetics

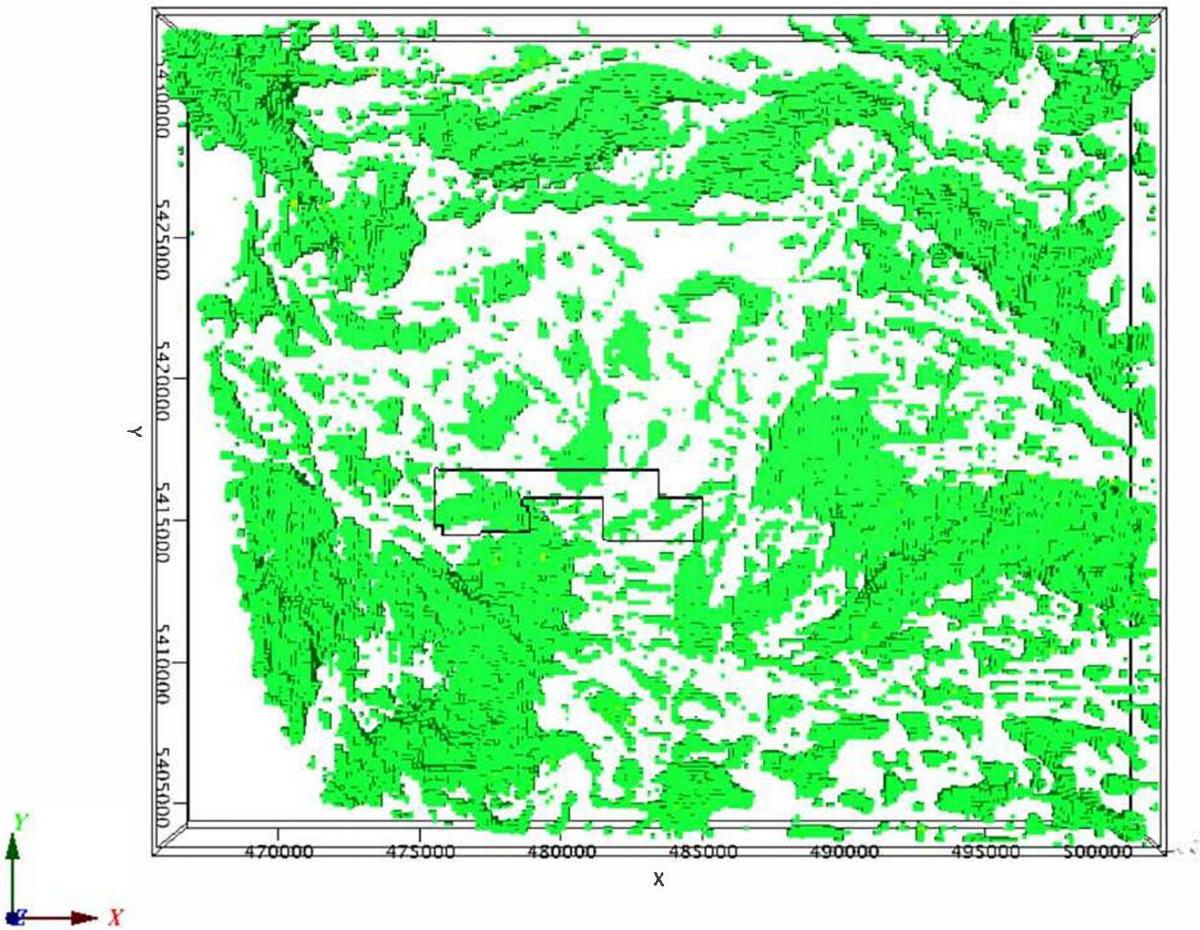

Figure 23. Mag Susc inversion (mag inv hisens regional 150m_2019-03-22_17-17-20_susc).

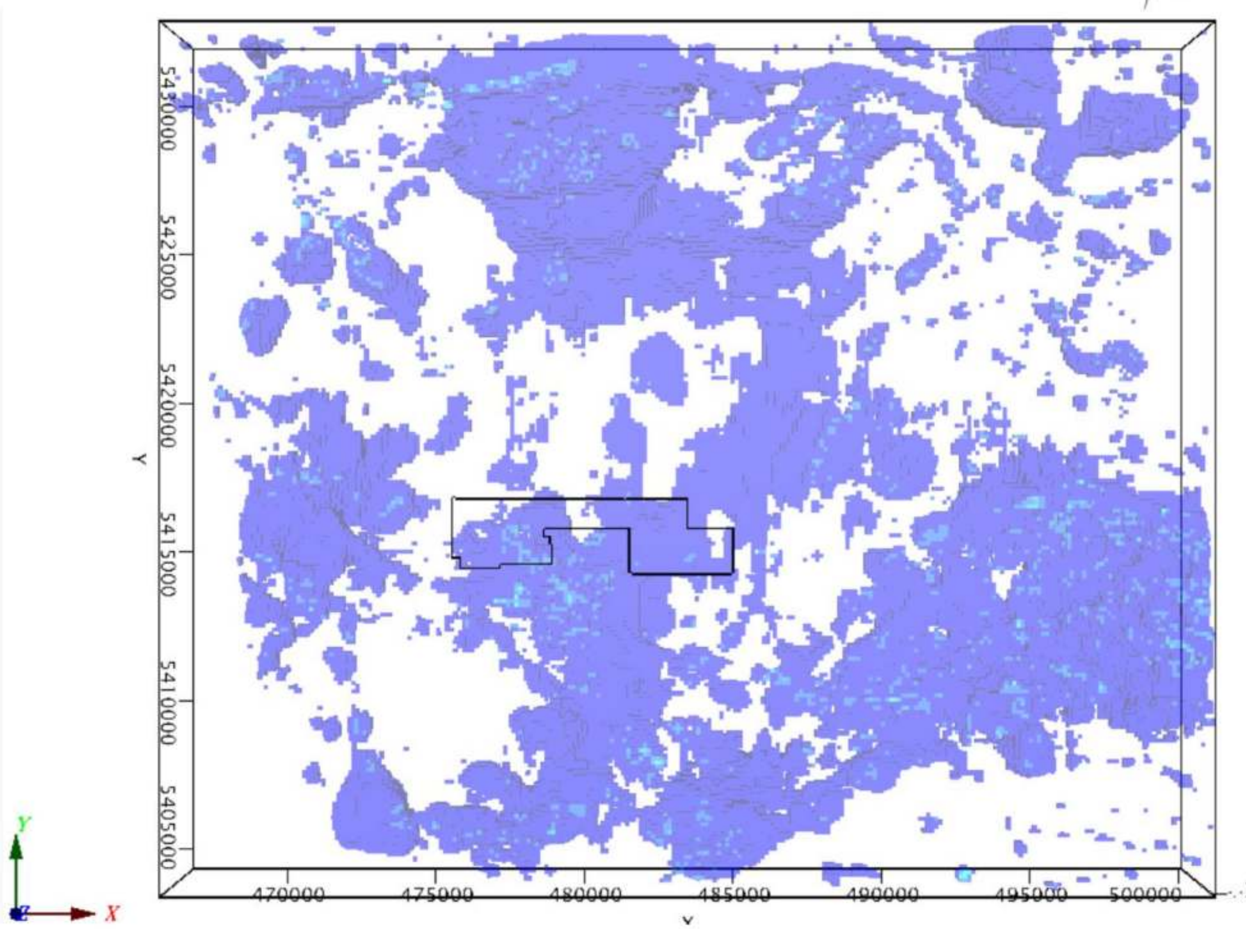

Figure 24. Mag MVI inversion (mag inv hisens regional 150m-mvi_2019-03-23_07-30-06_ampl).

Due to the observed remanent magnetism magnetic vecor inversion (MVI) was requried in addition to regular magnetic susceptibility methodology. The Mag Susc inversion provides more detail but is less accurate in areas of Mag remanence (figure 25). Whereas the Mag MVI inversionusally provides less detail but is more accurate in areas of Mag remanence.

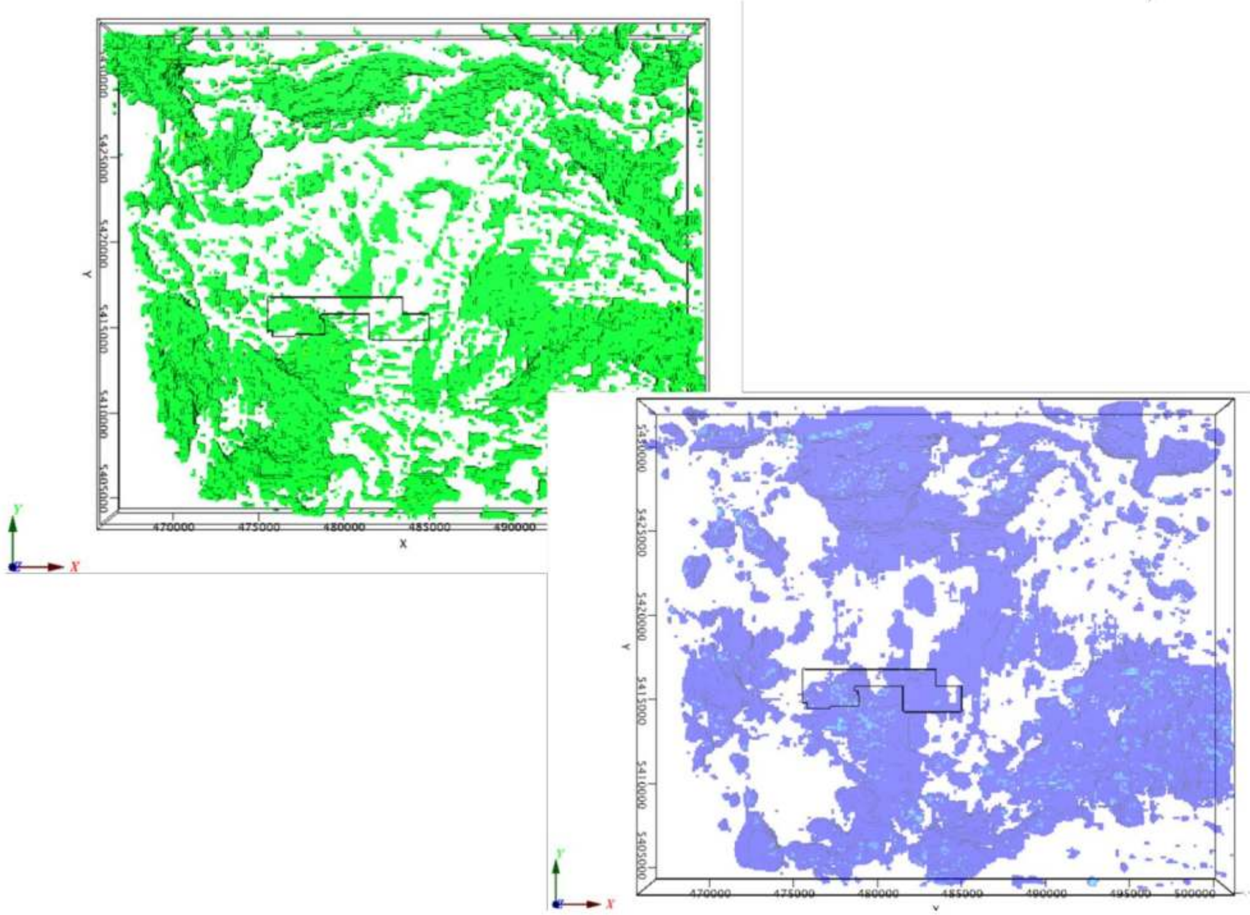

Figure 25. Mag Susc inversion – more detail, less accurate in areas of Mag remanence. Mag MVI inversion – less detail, more accurate in areas of Mag remanence.

5.2 Gravity

Regional gravity inversions can assist with mapping of large volumes of high-density mafic rocks which, in this area, can reveal the extent of MCR related features. Results are plotted in figures 26 and 27; and indicate the extent of large scale MCR features into the Maude Lake property area.

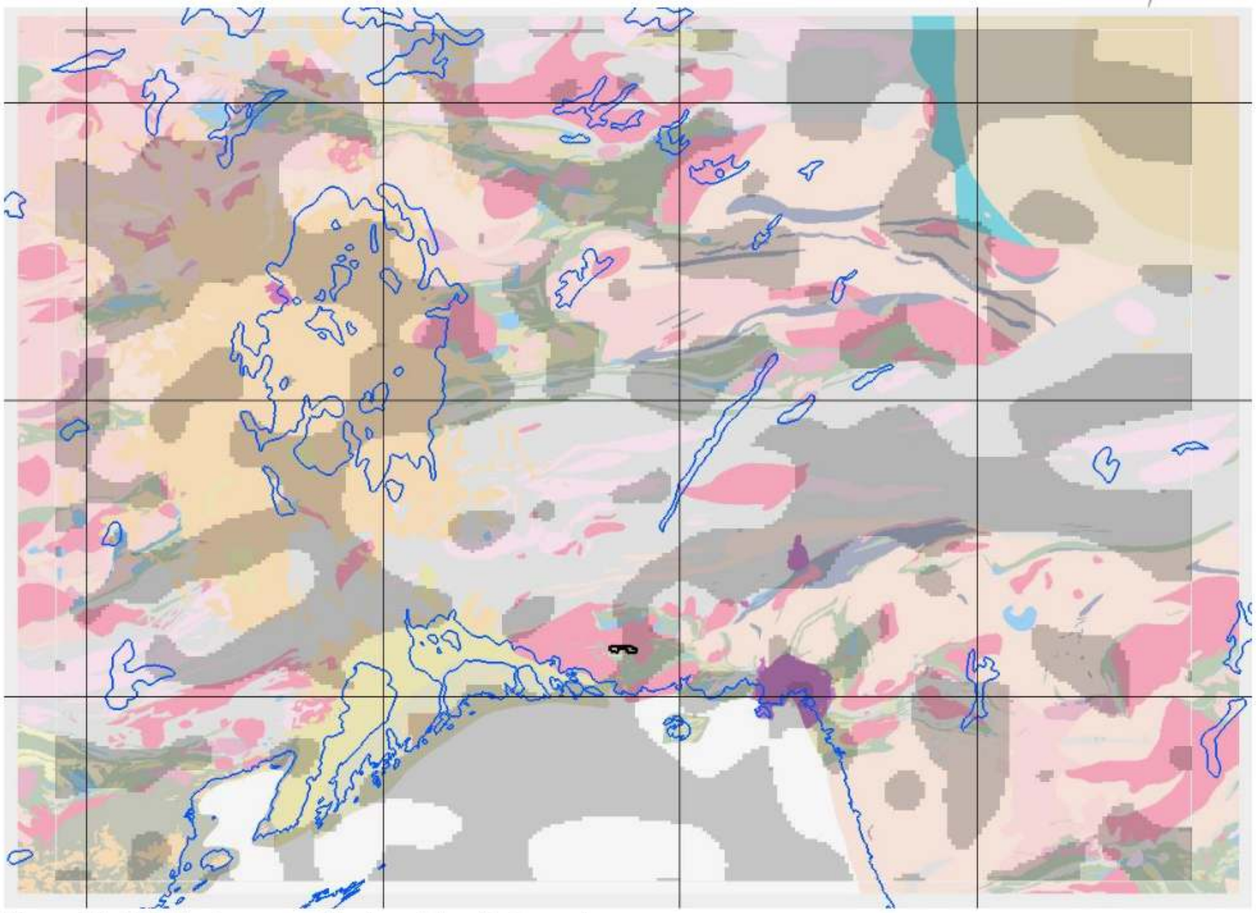

Figure 26. OGS Geology over Regional Gravity Inversion.

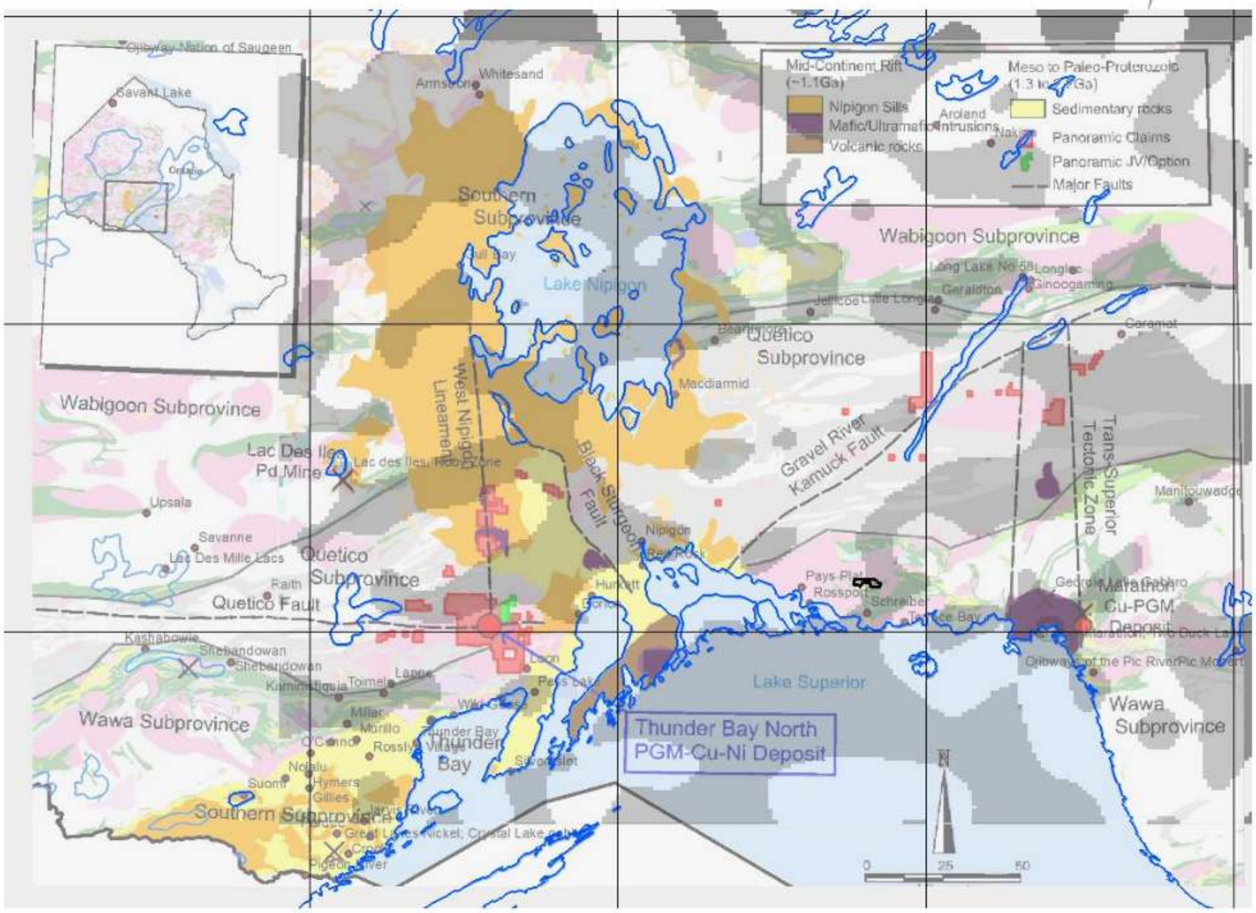

Figure 27. Thunder Bay North and regional geology over regional gravity inversion.

6 Data Integration

Following the inversion of the mag and gravity data, all relevant 2D sets were merged into 2D GIS (figure 28), and 2D and 3D data sets were combined into a 3D Geoscience Analyst model (figures 29 and 20). These products are part of the deliverables for this project and should serve as valuable assets in local and regional assessments.

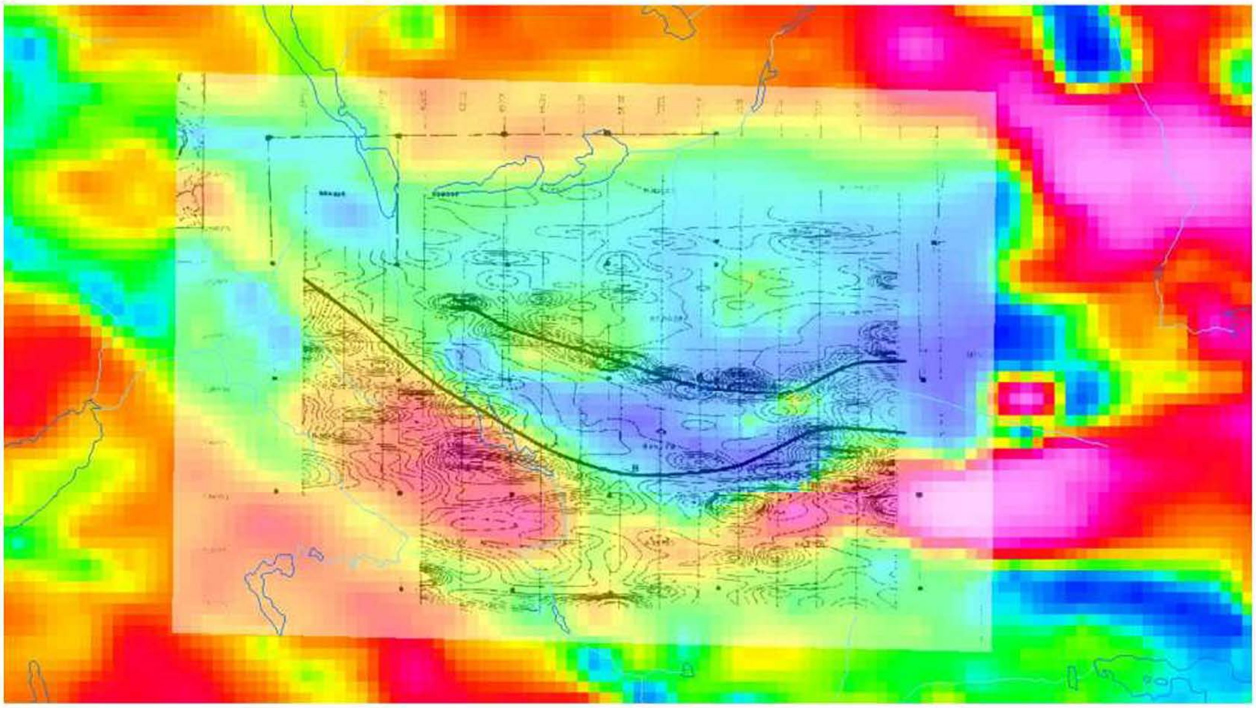

Figure 28. Noranda Victoria Lake West Mag over new OGS Schreiber Airmag.

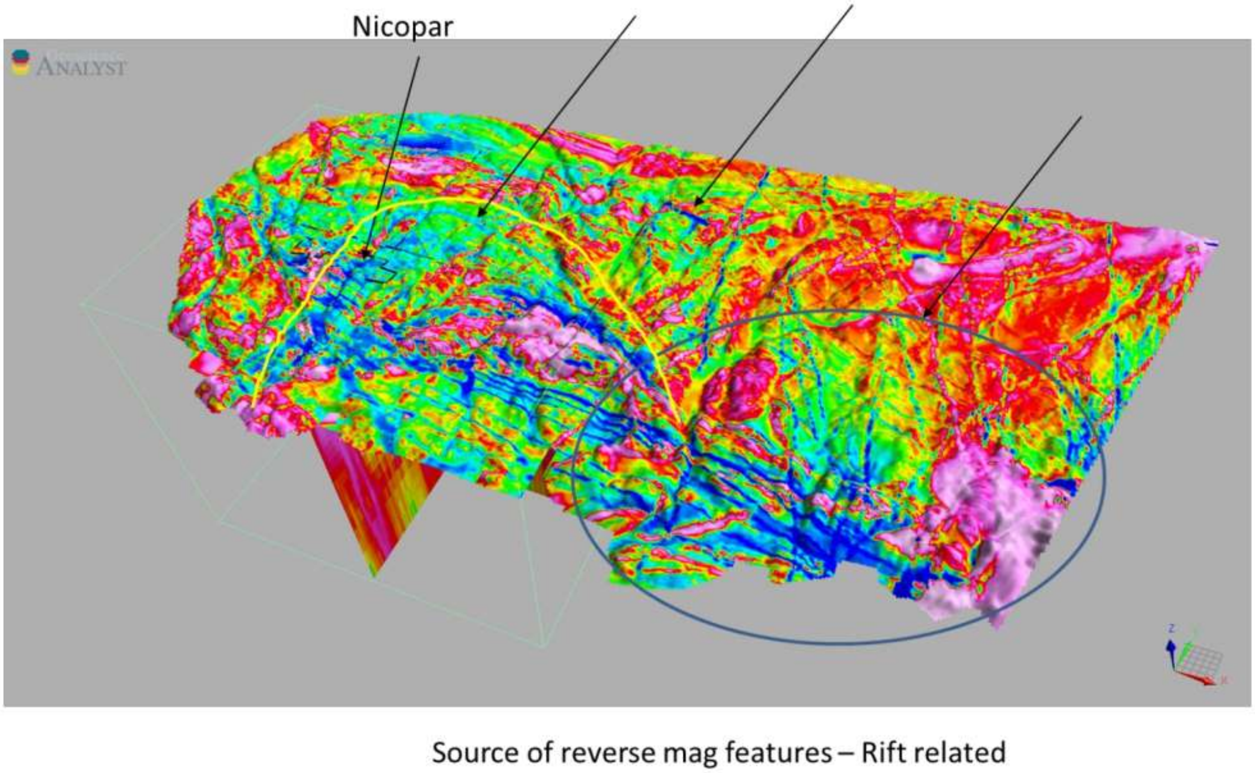

Figure 29. Mag TMI on topo with 5x exaggeration. Arrows pointing to possible reversed mag sills.

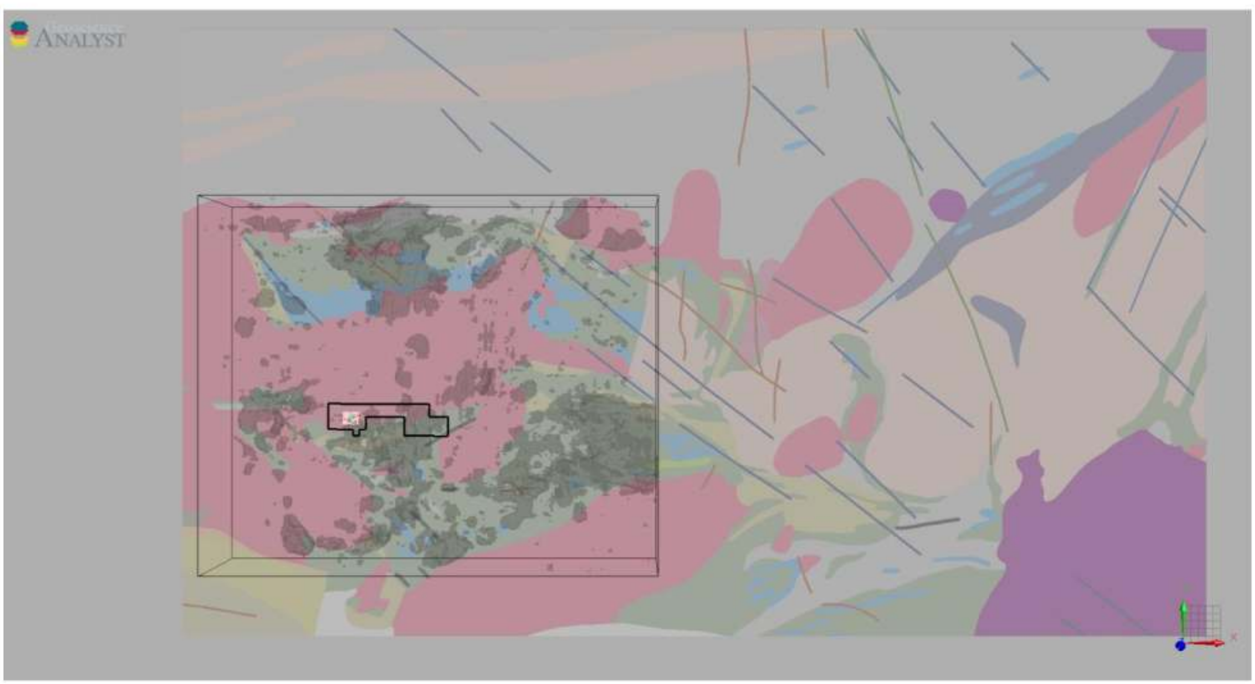

Figure 30. OGS regional geology over regional Mag MVI.

The mag MVI reveals a large magnetic complex dipping down to SE from the vicinity of the Nicopar showing, which suggests that the relatively small showing may be part of a larger system (figures 31 and 32).

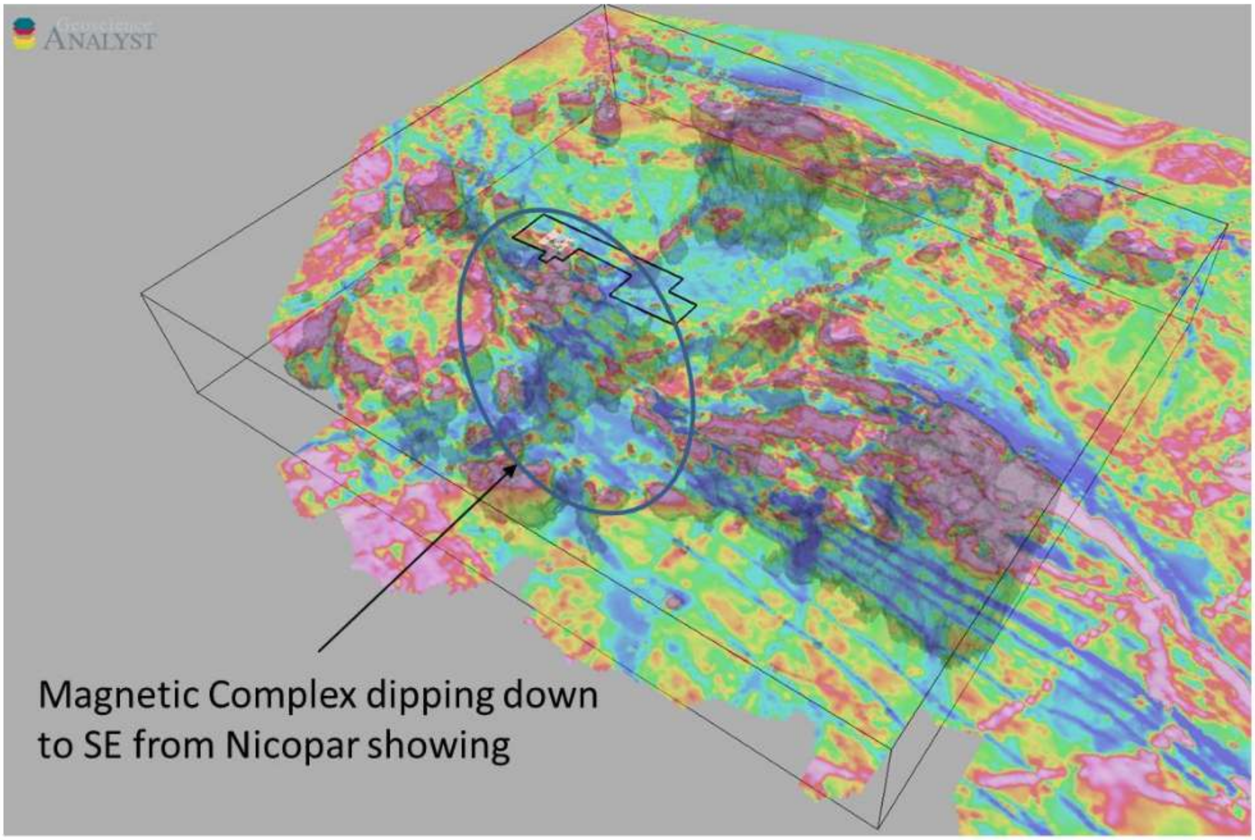

Figure 31. Mag TMI over Mag MVI Inversion 130m cells. Looking from SE

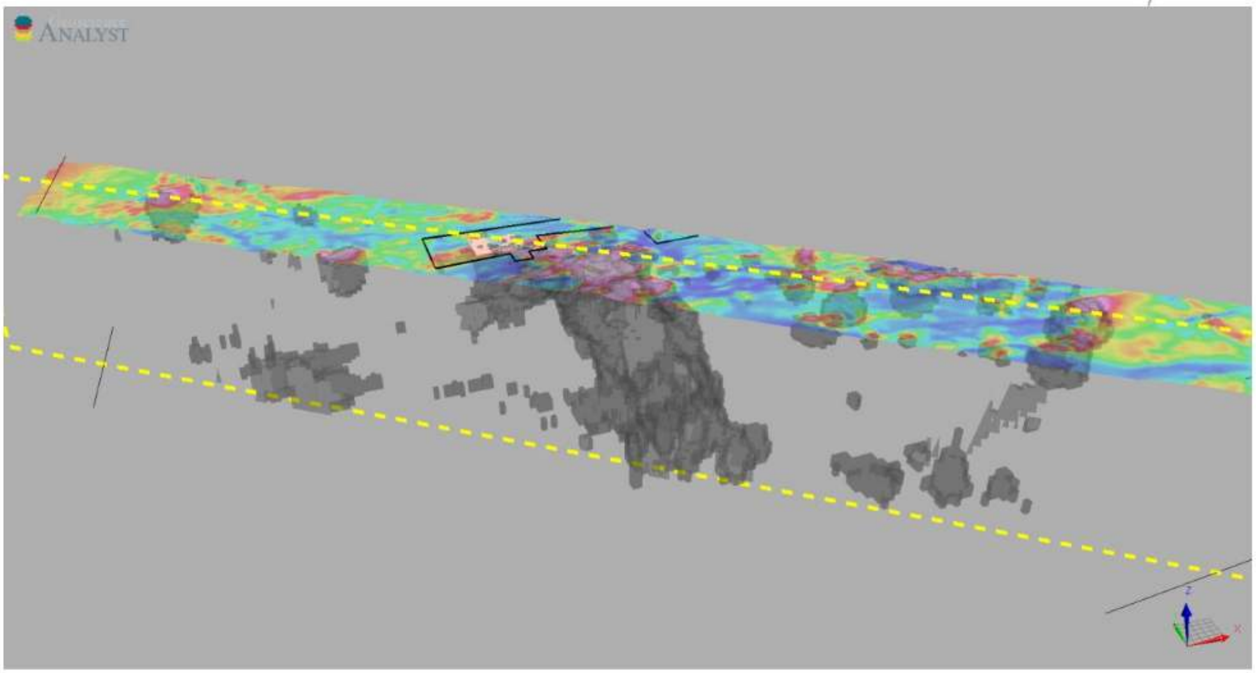

Figure 32. NW-SE slice through Mag TMI over Mag MVI 130m cells.

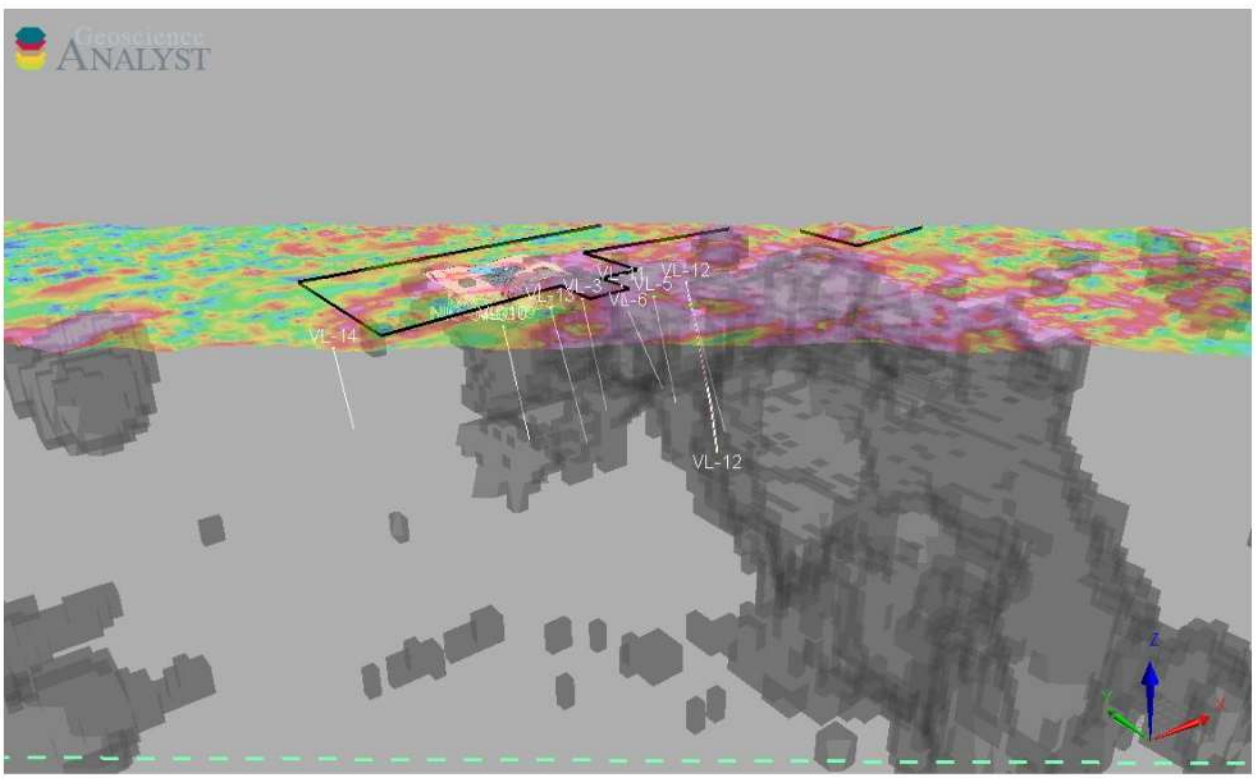

Figure 33. Magnetic complex dipping down to SE.

As noted above, the responses in the older AEM flying were subdued. As part of the review of the specifications of this, the flight height above terrain was plotted (figure 34) to determine if it may be to blame for the reduced responses. As can be seen in figure 34, the flight height was pretty good for locally very rough terrain with few points at 100m or greater. This suggests again that the system itself was somewhat underpowered for the local conditions and new AEM surveys with much higher power and depth penetration would be worthwhile.

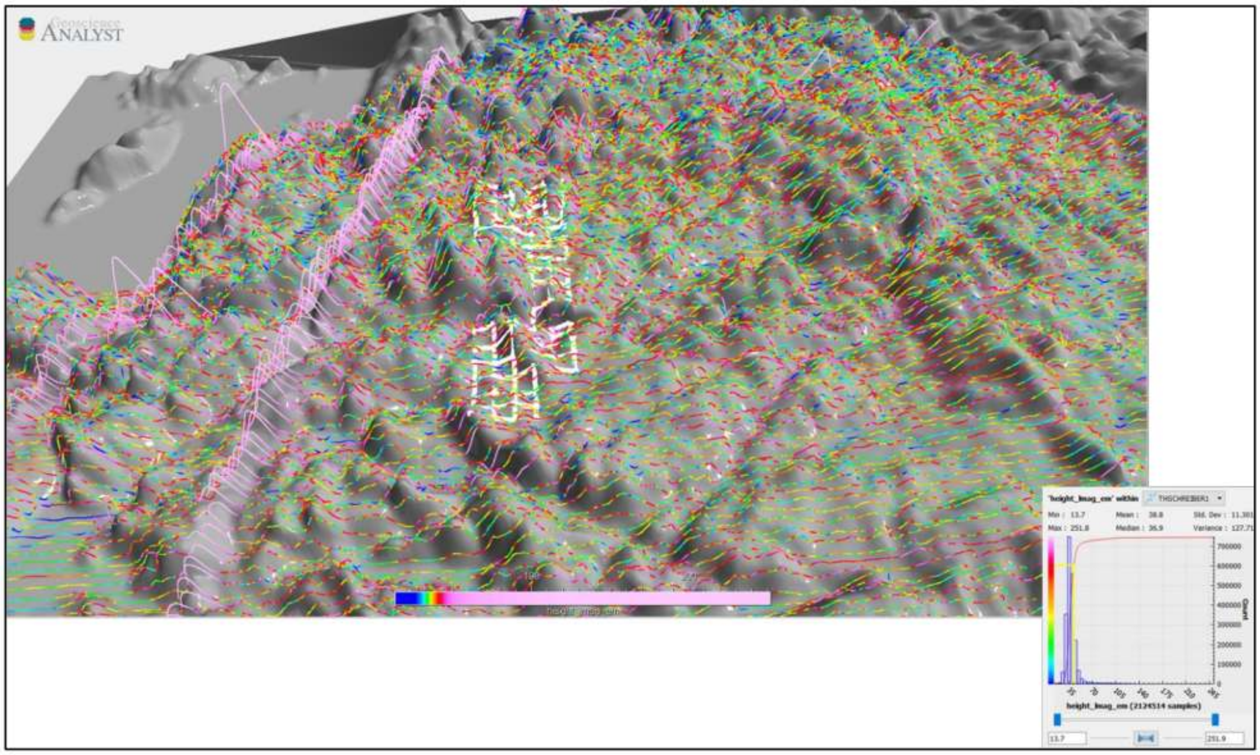

Figure 34. Schreiber Heli FD AEM/Mag Survey lines draped on topo and colour coded by EM bird altitude specification is about 35m (green). Yellow color is greatest and greater than specification

7 New VTEM Survey and Interpretation

7.1 Description

A New VTEM AEM/Mag survey was flown in early 2022 and the results are shown in the following figures 35 to 39. The Mag TMI (top) and Mag AS (below) grids are shown in Figure 35. The well-defined Mag low on the west part of the survey area and property is shown by the black arrow. This and other isolated Mag Lows are likely due to MCR related mafic intrusions.

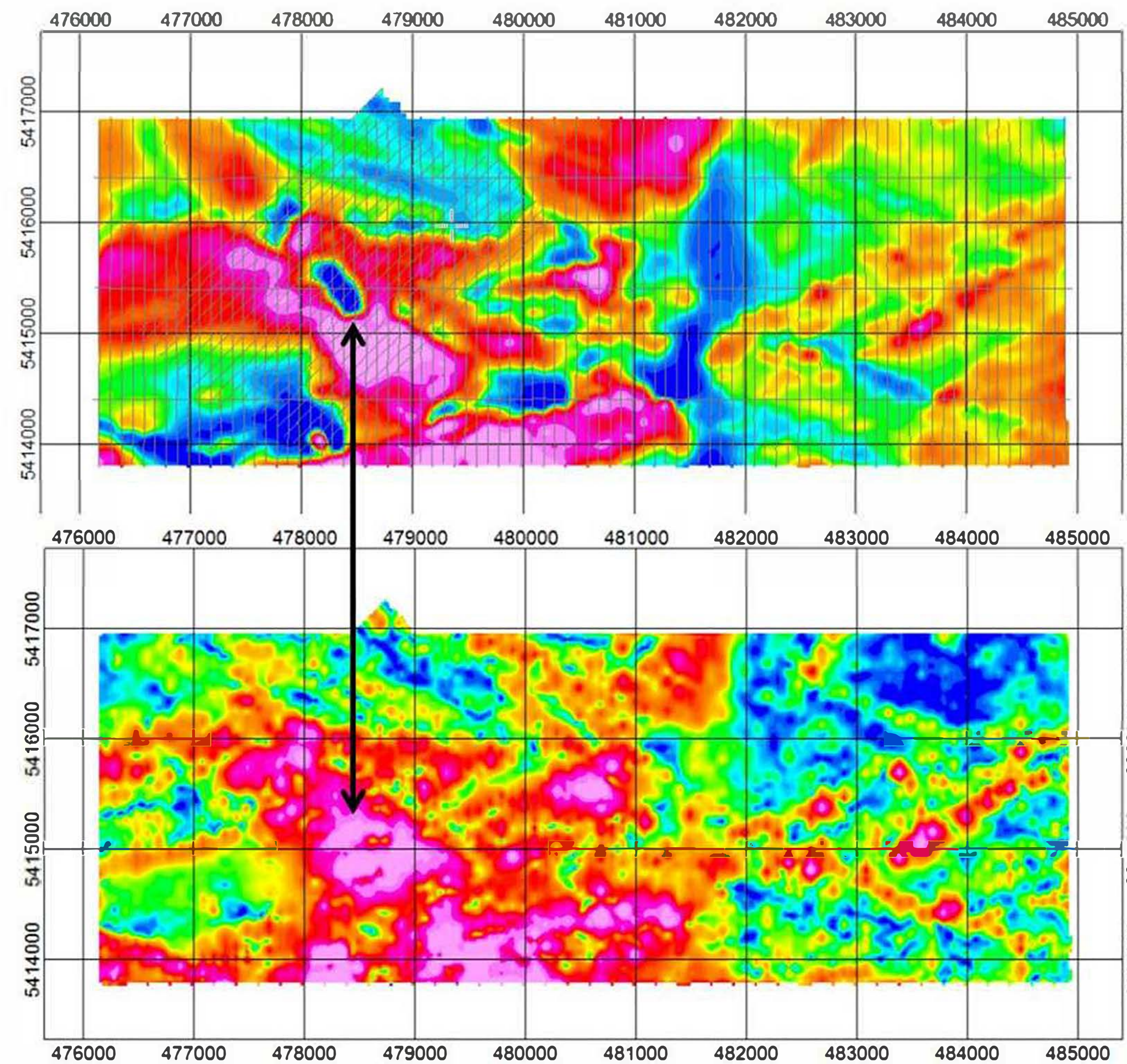

Figure 35. New AEM VTEM survey Mag TMI (top) and Mag AS (bottom). Mag Lows may be related to MCR.

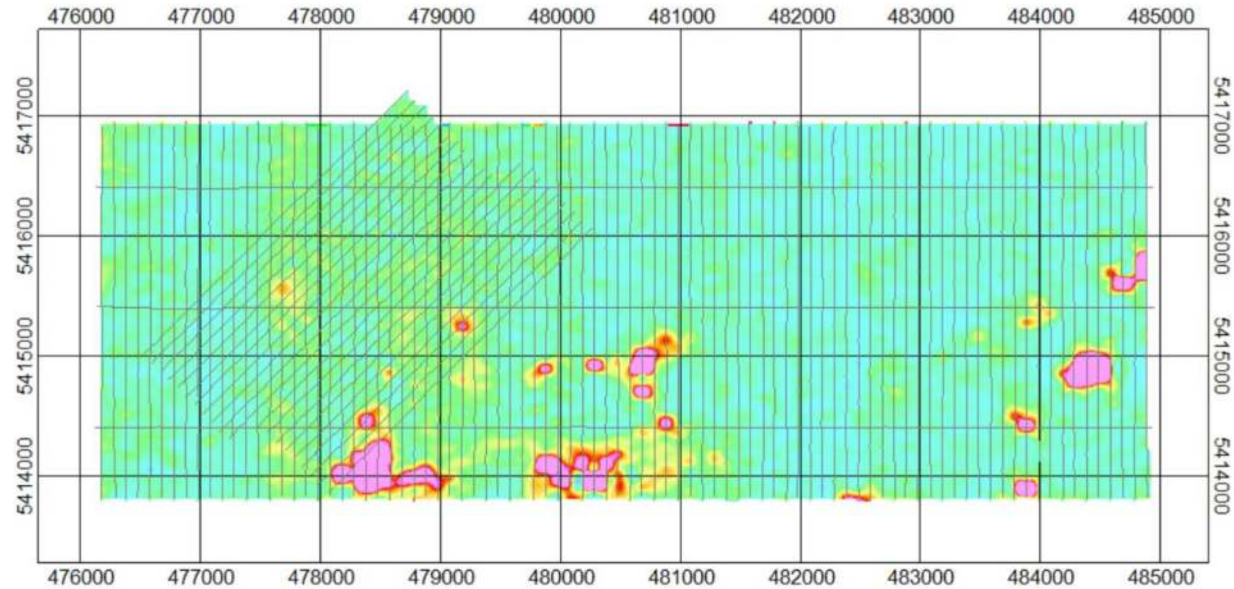

Figure 36. B Field CH 35.

A number of areas of moderate to strong conductivity were located the survey in the B Field CH 35 gridded data (figure 36) and in profile data (figures 37 and 38).

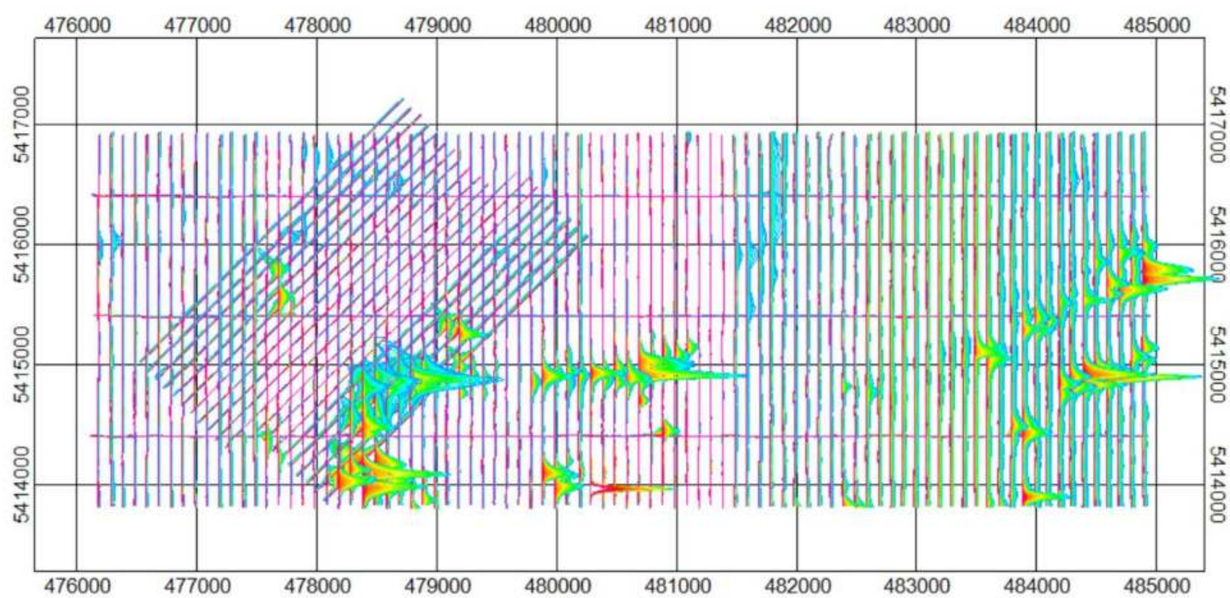

Figure 37. All B field profiles.

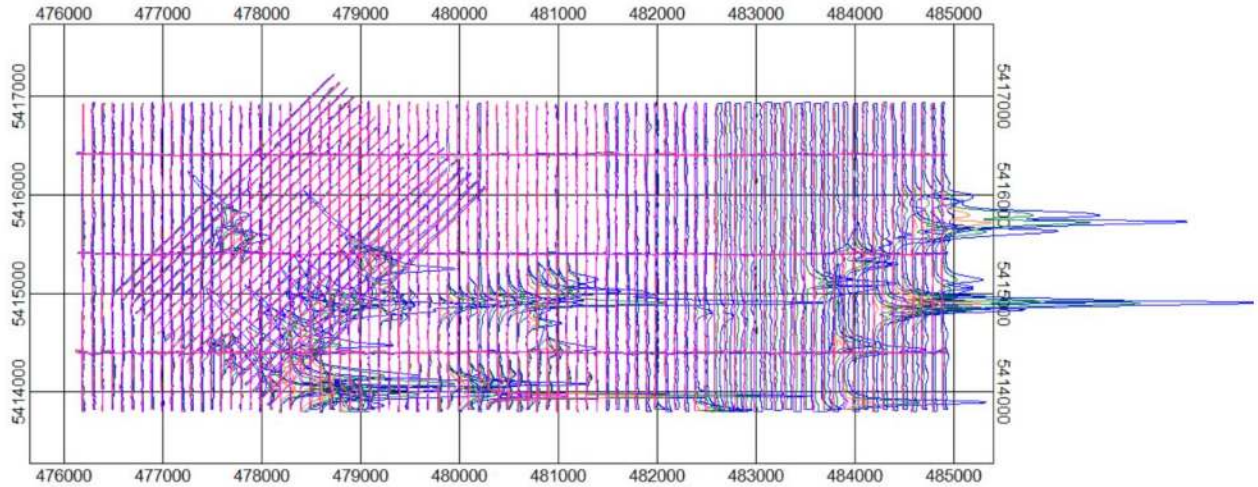

Figure 38. B field profiles channels 15, 25,35 and 45.

AEM anomalies were picked on the profiles and tau maps and are displayed in figure 39. There are 2 areas of strong conductance labelled S1 and S2, and 16 moderately anomalous areas labelled M1-16

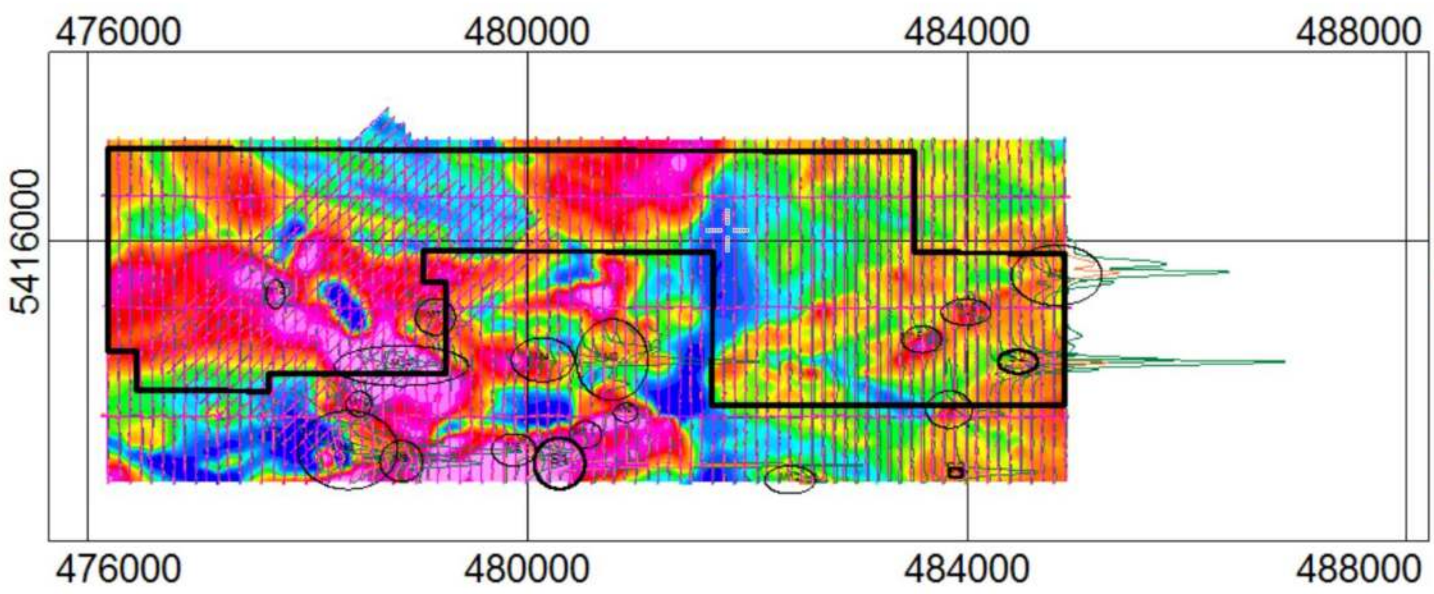

Figure 39. VTEM anomaly picks, strong (dark outline) and moderate conductance. Maude Lake property outline as a thick black line.

7.2 Quantitative Interpretation

A total of seven moderate AEM anomalies and one strong anomaly were located on the Maude Lake property. These anomalies were quantitively interpreted using the Maxwell EM modeling software and the results are plotted in the figures 40-46. The resulting model plates were exported as .dxf and Maxwell .pte files. Modeling projects and plates are identified by anomaly number, survey line and conductance in Siemens (S). In general, the interpreted conductance ranges from 70S to 100S, and conductors appear fairly deep. Some of the anomalies may also be affected more or less by Super ParaMagnetic (SPM) effects which, at worst, can result in spurious anomalies. These affects should be carefully checked before further follow-up.

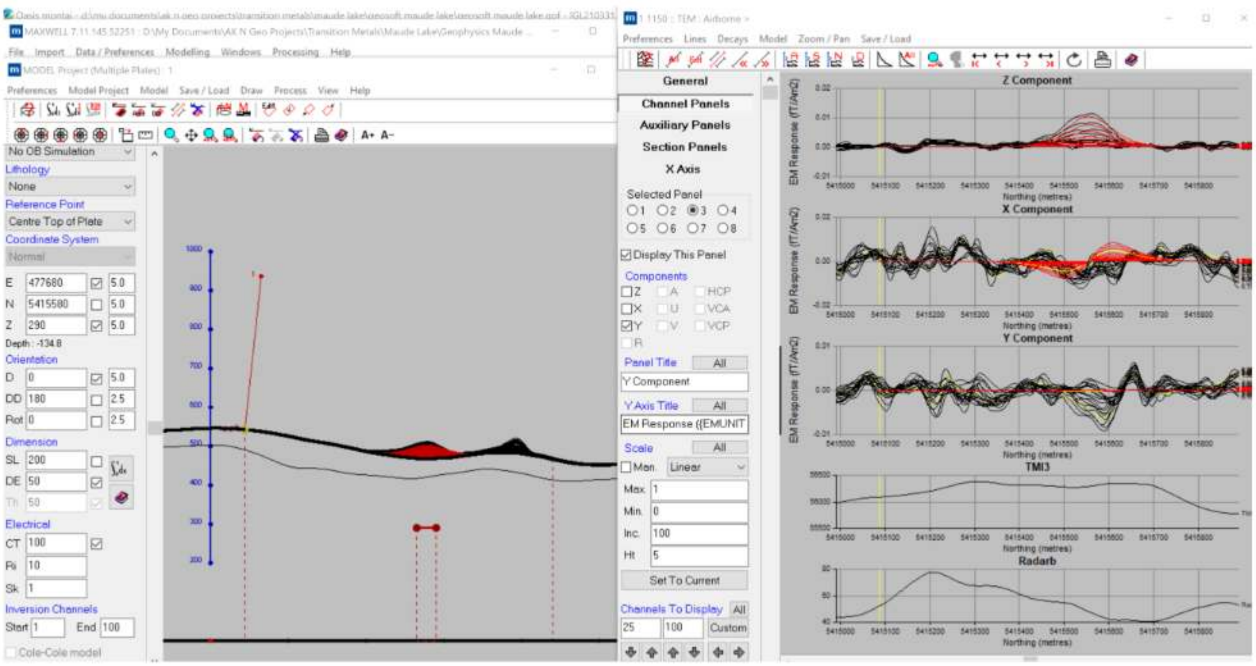

Figure 40. Maxwell plate An M13 B field L1150 1P| 100S.prj

The anomaly displayed in figure 40 has some but not all the characteristics of SPM.

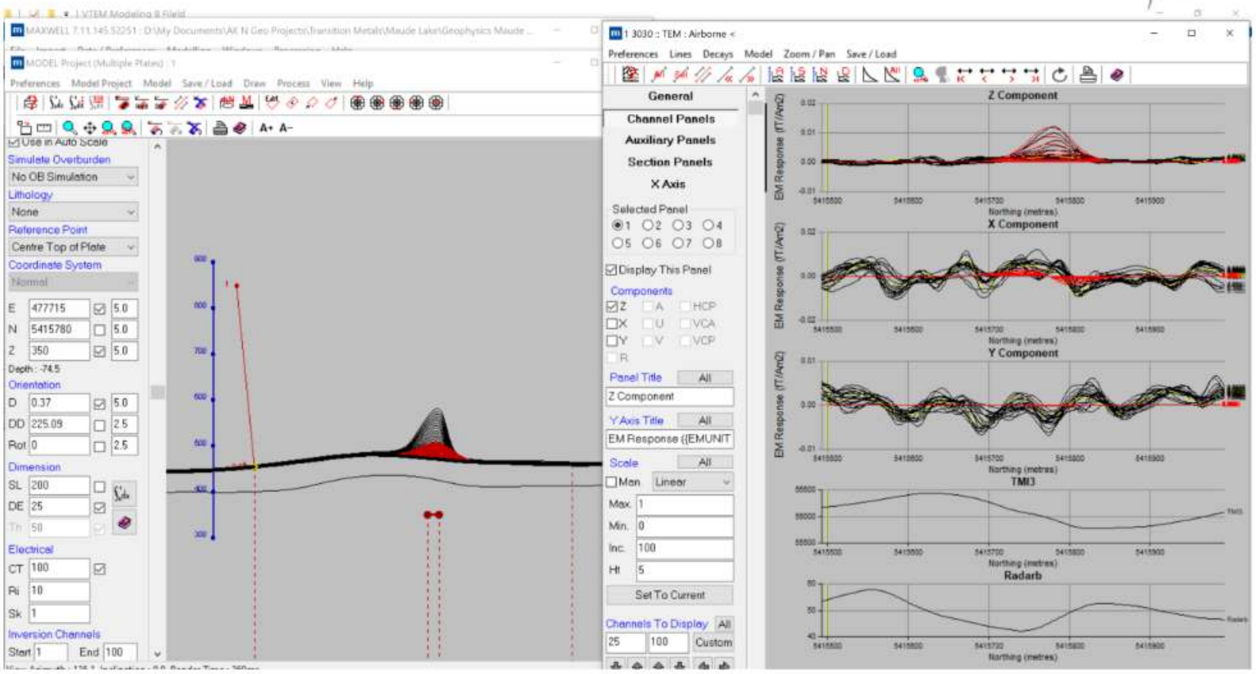

Figure 41. Maxwell plate An M13 L3030 1Pl 100S.prj

The anomaly displayed in anomaly figure 41 has definite characteristics of SPM.

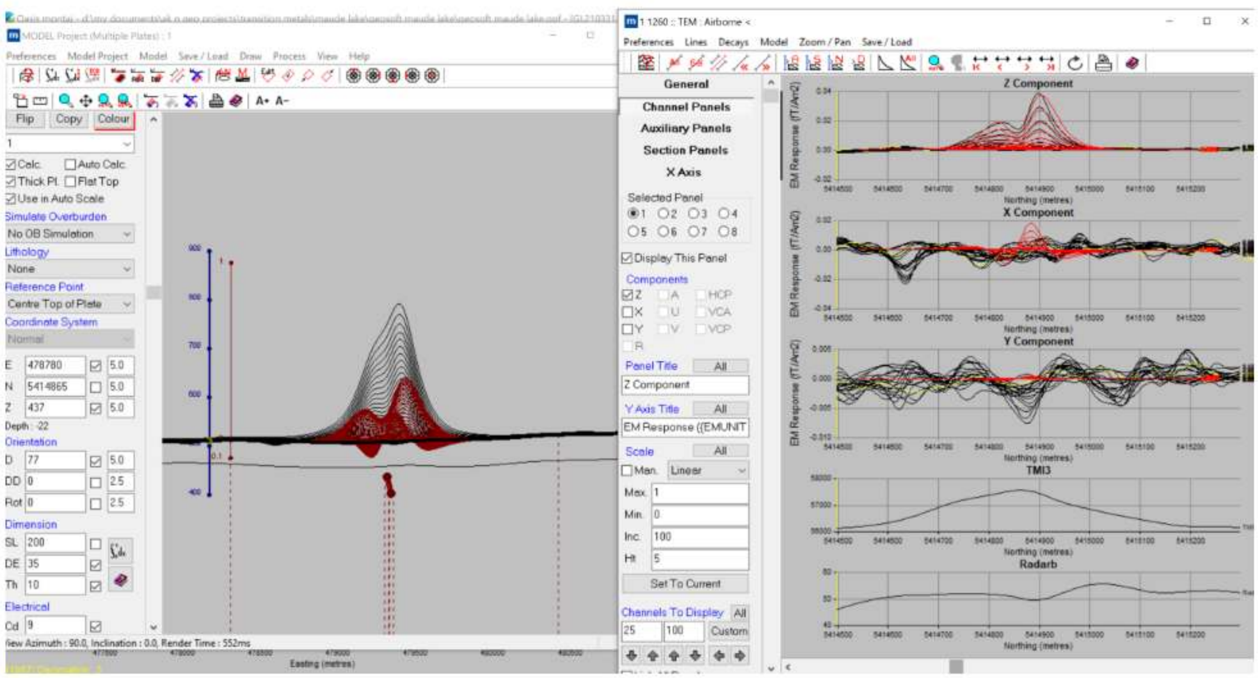

Figure 42. Maxwell plate An M14 L1260 1Pl 90S.prj

The anomaly displayed in figure 42 has characteristics of SPM but also induction.

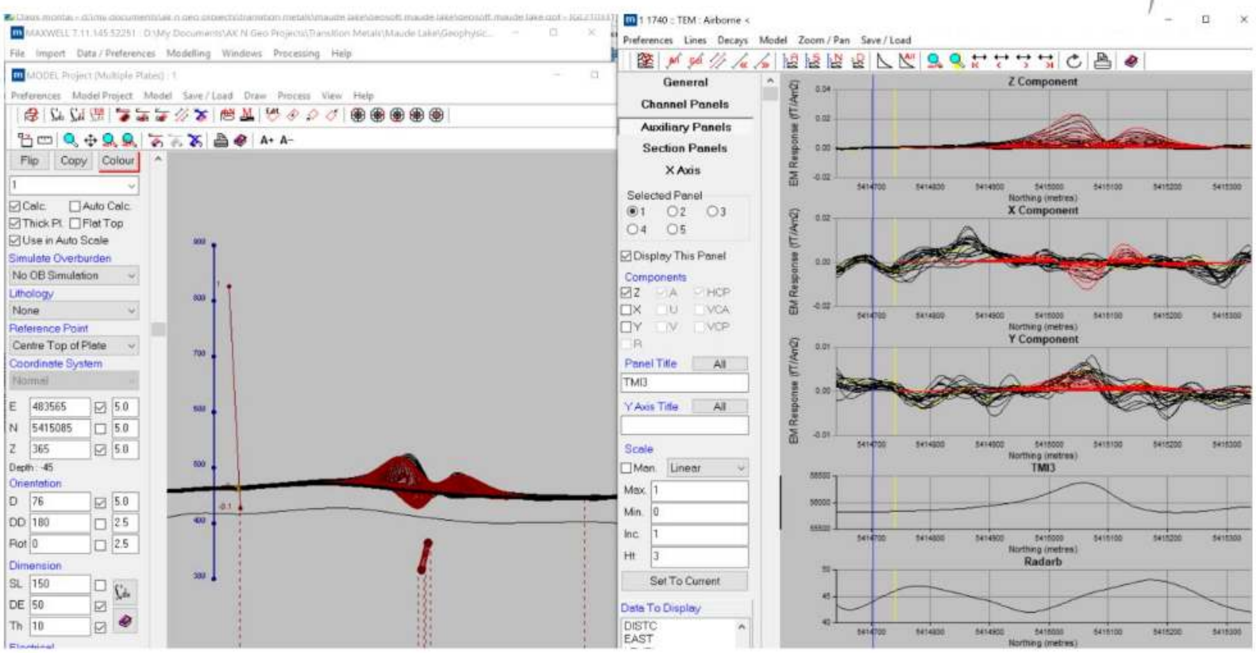

Figure 43. Maxwell plate An M15 B Field L1740 1Pl 70S

The anomaly displayed in figure 43 shows good Mag correlation and moderate Y correlation (X is a bit noisy on low X signal).

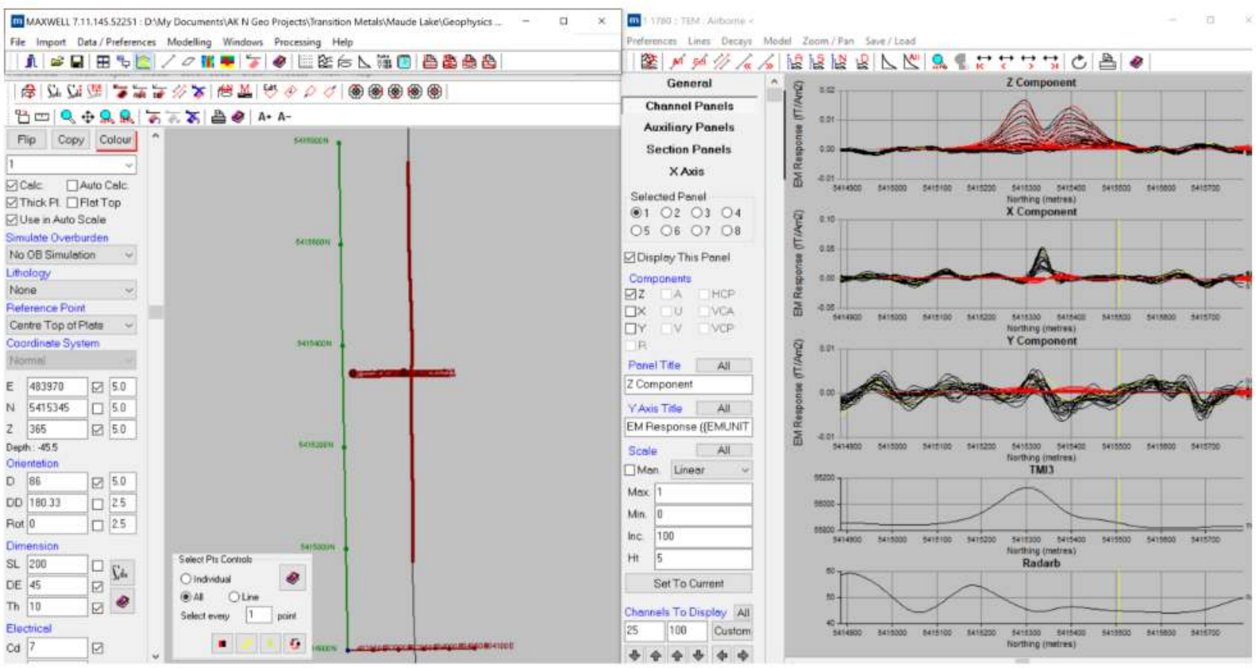

Figure 44. Maxwell plate An M16 B Field L1780 1Pl 70S.prj

The anomaly displayed in figure 44 shows good Mag correlation but poor X and Y correlation (Y is a bit noisy on low Y signal).

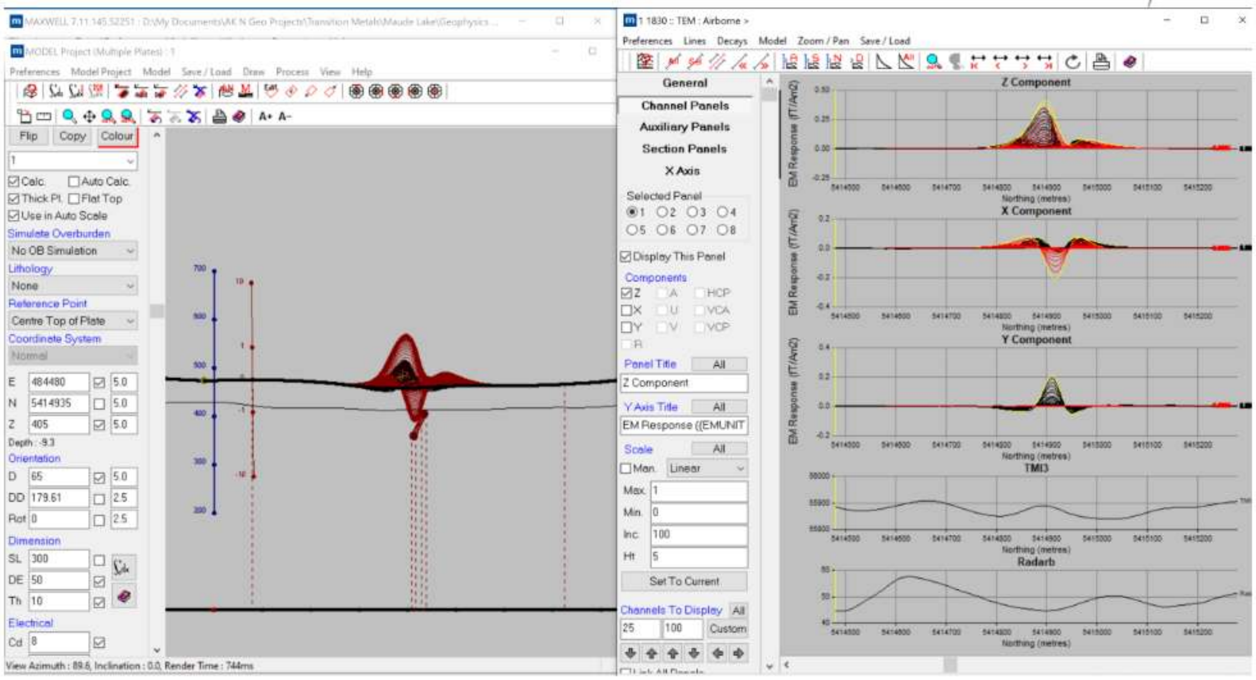

Figure 45. Maxwell plate An S2 L1830 1Pl 80S.prj

The anomaly displayed in figure 45shows some Mag correlation. Also, X had to be reversed and the X and Y fits are poor. There appears to be some complexity not captured in the model.

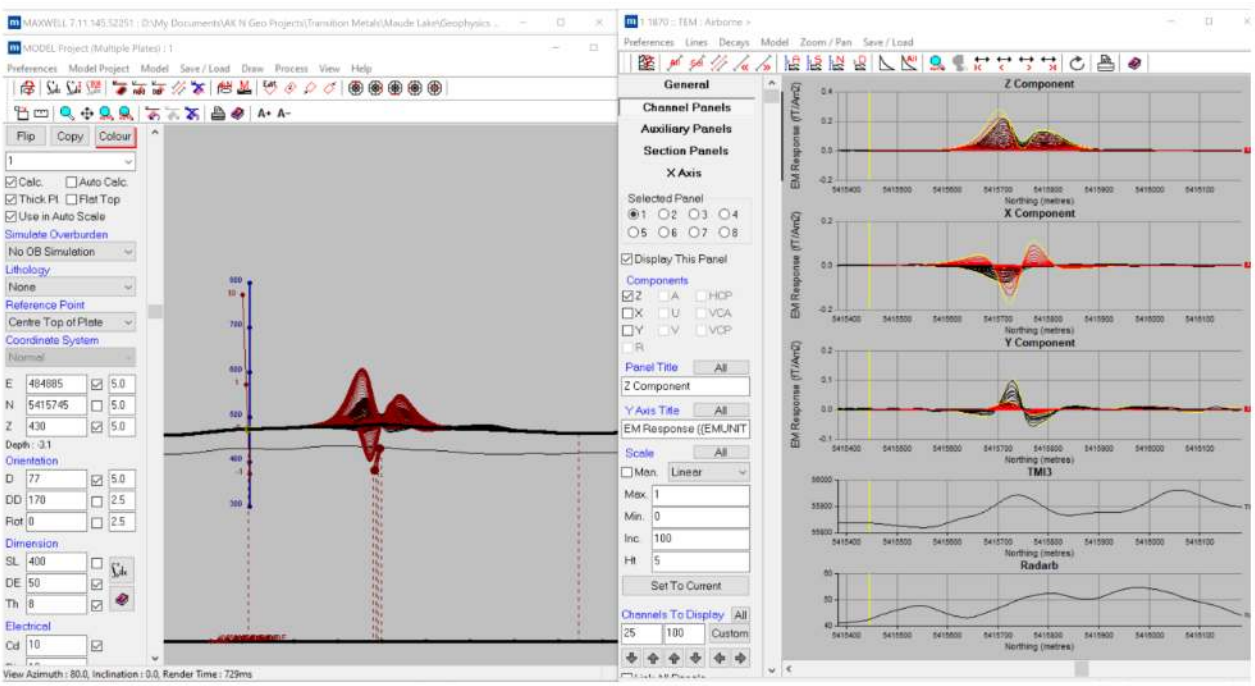

Figure 46. Maxwell plate An M1 L870-1Pl 80S.prjz

The anomaly displayed in figure 46 anomaly demonstrates good Z and X fits with moderate Y fit and magnetic correlation.

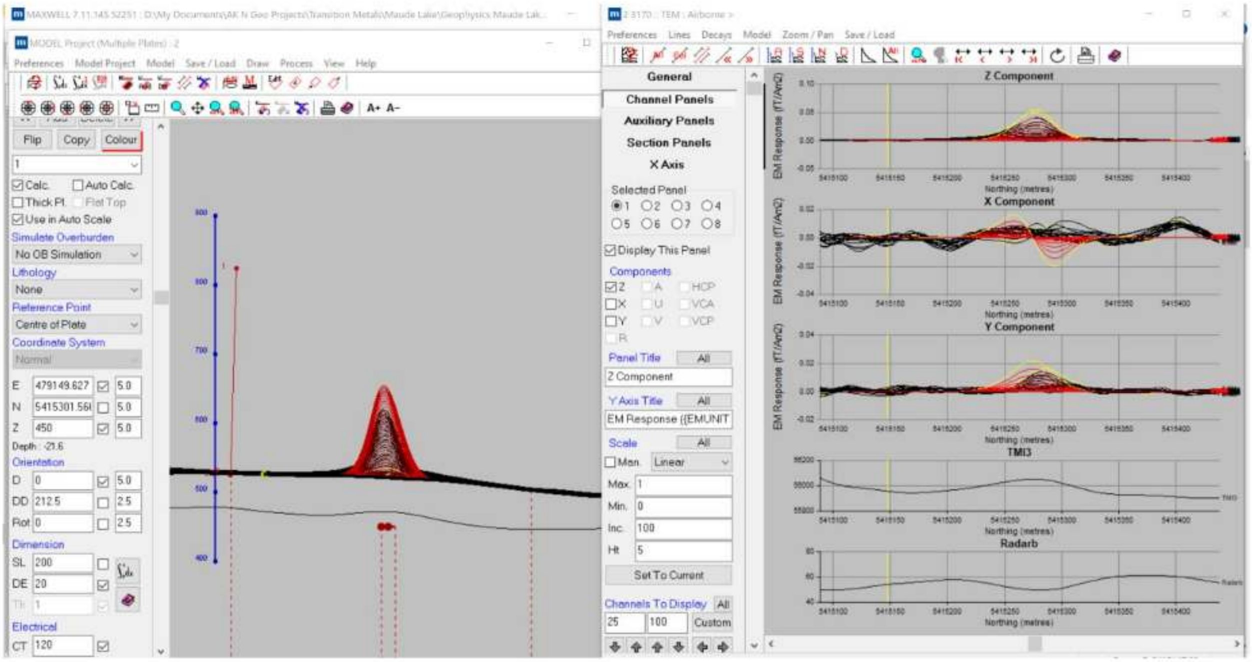

Figure 47 An M7 B Field L3170 1Pl 120S.prj 1

An M7 shows some SPM characteristics

Finally, the AEM picks from the VTEM survey were correlated with previous AEM FDEM picks and ground TEM (Figure 48). The poor correlation with previous FDEM is apparent while the VTEM anomalies show a better correlation with the ground TEM results where ground TEM data is available.

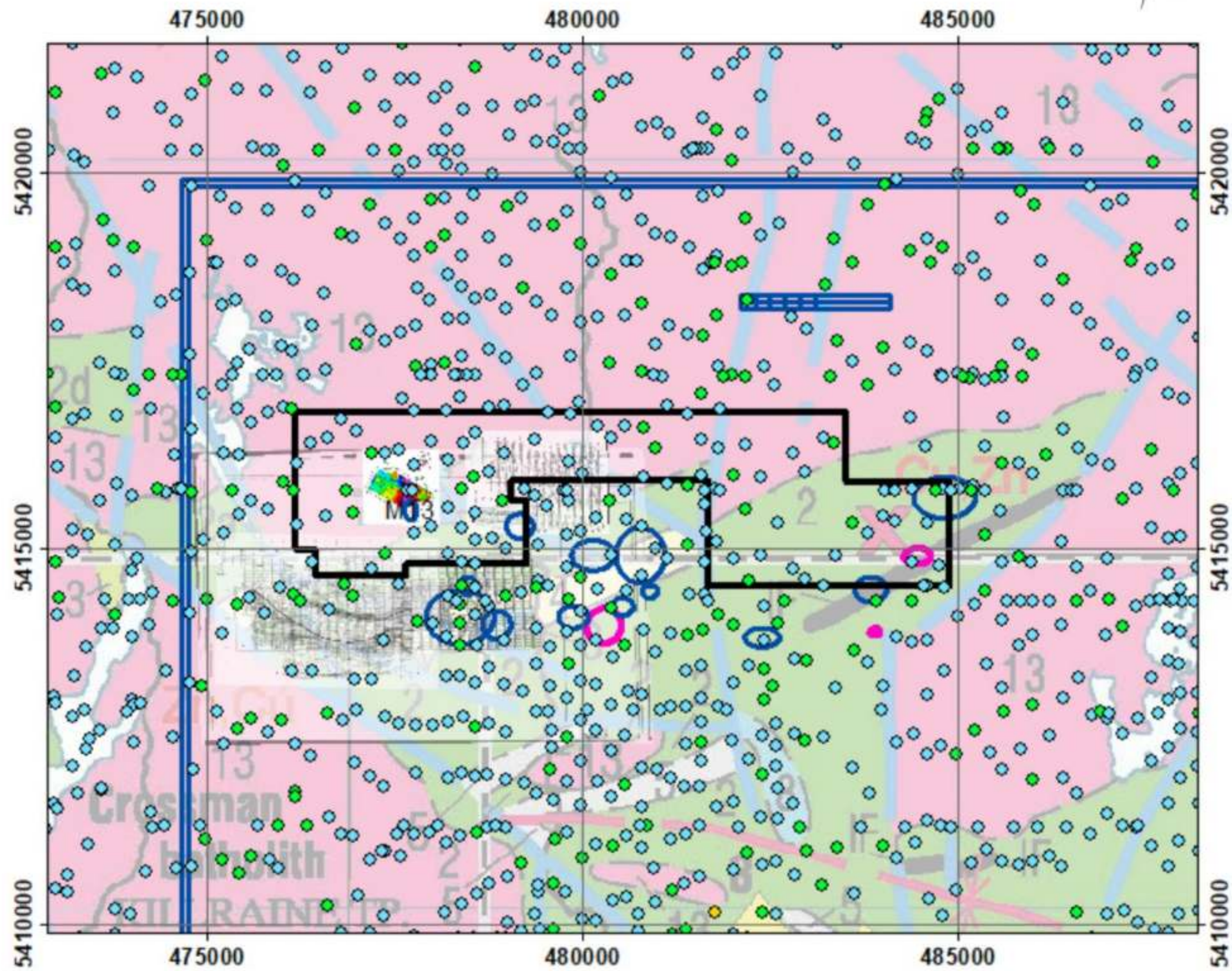

Figure 48. Correlation with previous geophysics.

8 Comments and Discussion

8.1 Magnetics

Based on the apparent mag remanence in the area, it is likely that extensive/complex MCR related mafic intrusions extend into the area of the property

Mag MVI inversion shows large magnetic body dipping to SE from the surface showing. This deep, down dip magnetic volume has been tested to some extent by a number (VL1-14) of moderate depth to deep drill holes (~1000m), most with BHEM, for VMS targets in VMS style alteration zones in work by Norex and Minnova on the Victoria Lake property to the South. This work should be reviewed in detail for any deep conductors that may be related to MCR type intrusives.

8.2 Gravity

The regional gravity data also show a large tongue of high-density material extending to the northeast from the main MCR gravity high to area of the property.

8.3 EM

The previous FDEM AEM data (OGS 2000 Schreiber AEM FD AEM) appears to have only shallow penetration (about 100m) with mainly weak overburden responses in the area.

Ground TEM - Ground TEM surveys by Novawest over the Nicopor occurrence located small, good conductors consistent with the showing. Crone DeePEM by Norex and Minnova over the grid located to the South on the Victoria Lake property located several good conductors. These have been largely tested for VMS targets with negative results.

BHEM - BHTEM by Novawest in the Nicopor Drill Holes located several small, good conductors near the holes. Crone BHEM by Norex and Minnova on the Victoria Lake property to the south have largely been explained by subeconomic VMS type mineralization and/or Iron Formations. No on time data collection or B Field field processing was done on the surface or BHEM TEM data leaving open the possibility of undetected more subtle anomalies from very good conductors.

New VTEM survey - A total of 7 moderate AEM anomalies and one strong anomaly were located on the Maude Lake property. These anomalies were quantitively interpreted using the Maxwell EM modeling software. The interpreted conductance ranges from 70S to 100S and modeled conductors appear fairly deep. Some of these anomalies have responses typical of sub-vertical bedrock conductors and are likely real induction type anomalies while others may more or less affected by SPM which at worst can result in spurious anomalies. These effects should be carefully checked before further follow-up.

The older FDEM AEM data is a valuable resource as it may be less affected by SPM effects. The data may be useful for screening the new VTEM data for SPM. It is possible that some of the lack of correlation between the older FDEM AEM picks and the new VTEM anomalies could be due to the lesser effect of SPM on the FDEM data.

9 Summary

Prior the recent VTEM survey, there had been no modern deep penetrating AEM survey in the area. The new VTEM survey would have increased depth penetration to ~400 m for large targets. Some of the new VTEM anomalies appear to be due more or less to SPM affects, however others appear to represent genuine bedrocks conductors.

In previous surface and borehole TEM on the Nicopar showing, there was no on-time data collection or B field processing done. This leaves open the possibility of undetected, more subtle anomalies from very good conductors.

Regional magnetic and gravity data show strong MCR type intrusive potential in the area.

Deep drilling for VMS just to the south of the Maude Lake Property may have partially tested the SE dipping large magnetic volume.

Any future ground or borehole TEM should have on-time readings and B field measurements or processing. This is critical for large very conductive targets.

The probable occurrence of MCR related intrusives in the area and presence of the Nicopar showing indicate substantial potential for additional MCR related Ni-CU-PGE mineralization in this area. The VMS potential of the Victoria Lake belt to the south of the Maude Lake property has been fairly well tested but some of the new VTEM conductors outside the Norex/Minnova may also have potential for VMS.

10 Suggestions and Recommendations

- Age date and geochem on Nicopor intrusives to see if they are MCR related
- Do BHEM with on-time (UTEM or Crone STP) for large very conductive targets in all available old and new holes
- Any new surface TEM should be On-time (UTEM or Crone STP)
- Get geological logs on all deep VL 1-14 holes to see if MCR type mafic intrusives have been intersected.
- Compile all Novawest Ni-Cu-PGE showings
- BHEM Plates from Novawest work can be digitized into 3D
- Get Novawest TEM and BHEM data if possible
- A targeting exercise with Transition geologist is recommended to evaluate individual targets

References

GDS1104 Schreiber FEM and Mag Survey 2000

Transition Metals website 2022 www.transitionmetalscorp.com/projects/available-projects/maude-lake-property

Santaguida, F. 2001. M2665, OGS Precambrian geology compilation series–Schreiber sheet;

Statement of Qualifications

I, Alan R. King, B.Sc, M.Sc, P.Geo, declare that:

1) I am a Consulting Geophysicist with residence in Sudbury, Ontario and am presently employed in this capacity with Geoscience North Ltd., Sudbury, Ontario;

2) I obtained a Bachelor of Science Degree (B.Sc.), in Geology from the University of Toronto in 1976, and a Master of Science Degree (M.Sc.), in Geophysics from Macquarie University in 1989;

3) I am a registered geophysicist with a license to practice in the Province of Ontario (APGO member # 1178);

4) I have practiced my profession continuously since 1976 in North and South America, Australasia;

5) I am a member of the Society of Exploration Geophysicists, and the Australian Society of Exploration Geophysicists;

6) I have no interest, nor do I expect to receive any interest in the properties or securities of the company, its subsidiaries or its joint-venture partners;

7) I am the Professional Geologist/(Geophysicist) and a member in good standing of APGO who has coauthored this Report;

8) The statements made in this report represent my professional opinion in consideration of the information available to me at the time of reviewing this report.

Dated this 11th Day of March, 2022.

Signature

Alan King

Geophysicist

Geoscience North Ltd.

Statement of Authorship

I, Christopher W. Mancuso, B.Sc, M.Sc, declare that:

1) I am a PhD Candidate in Geophysics with residence in Sudbury, Ontario and am presently employed in this capacity with Geoscience North Ltd., Sudbury, Ontario;

2) I obtained a Bachelor of Science Degree (B.Sc.), in Geology from Brandon University in 2018, and a Master of Science Degree (M.Sc.), in Geology from Laurentian University in 2021;

3) I am a member of the Society of Exploration Geophysicists;

4) I have no interest, nor do I expect to receive any interest in the properties or securities of the company, its subsidiaries or its joint-venture partners;

5) I have drafted, revised, and critically reviewed the contents of this report.

Dated this 11th Day of March, 2022.

Signature

Christopher Mancuso

PhD Candidate at Laurentian University

Geoscience North Ltd.