BMC Minerals Ltd.

2016 GEOPHYSICAL REPORT ON THE PELLY PROPERTY

Located in the Watson Lake Mining District, Yukon
NTS 105G/8 and 9
61˚ 27’ N Latitude; 130˚ 12' W Longitude

Field Work Completed Between July 10th and July 17th, 2016

-prepared for-

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March 21st, 2017

EQUITY

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SUMMARY

The Pelly Property is 100% owned by BMC Minerals Ltd ("BMC") and consists of 422 quartz claims covering 7220 hectares (72.2 km^2) of south-central Yukon. The approximate center of the Property is at 61˚ 27' N latitude and 130˚ 12' W longitude on NTS map sheets 105G/8 and 9, within the Watson Lake Mining District. The Property can be divided into three mostly contiguous claim blocks (JACK, GO, WOL), one of which hosts the downdip extension of the Wolverine volcanogenic massive sulphide (VMS) deposit. This deposit hosts measured, indicated and inferred resources of 6.2 Mt at 12.7% Zn, 1.3% Cu, 1.6% Pb, 370.9 g/t Ag and 1.8 g/t Au (Bradshaw. et al., 2008; Yukon Zinc, 2006).

For the 2016 exploration season, BMC commissioned an airborne magnetic and versatile time domain electromagnetic (VTEM™) survey that was flown between July 10th and July 17th, 2016. The airborne survey comprised 400.5 line-km plus 81.1 line-km of re-flights to meet QA/QC standards, for a total of 481.6 line-km flown. Flight lines covered only the JACK and GO blocks, and are continuous with the 2015 VTEM survey over the WOL block to the north. Aims of the 2016 survey were to complete the acquisition of VTEM data over the entire Pelly Property and generate new anomalies that could represent additional VMS deposits.

This report presents a preliminary description of the airborne data through comparison with regional- and property-scale geological mapping. Key findings include (1) strong formational responses from the Wolverine horizon (magnetics) and underlying carbonaceous argillite, (2) a thicker and more continuous Wolveine horizon on the JACK block than shown by regional mapping, (3) an unexplained, 1.7 km long, string of small but high magnetic anomalies along a regional-scale contact between carbonaceous phyllite and underlying felsic volcanic of the Wolverine Group, and (4) a minimal 700 m offset between the MINFILE and probable historical coordinate for the Puck prospect.

Recommended follow-up work includes (1) integration of the 2015/16 VTEM surveys with historical regional- and property-scale geological mapping, (2) ground-truthing of Wolverine horizon on the northern JACK block and the 1.7 km string of magnetic highs and, most importantly, (3) processing of 2016 VTEM data by an expert geophysicist.

1.0 INTRODUCTION

This report has been prepared for BMC Minerals Ltd. ("BMC") in order to document the procedures and results of the 2016 exploration work on the Pelly Property and to satisfy assessment reporting requirements for the Yukon Department of Energy, Mines and Resources ("EMR"). Equity Exploration Consultants Ltd. ("Equity") was tasked to prepare this assessment report on the basis of personal observations, previous assessment reports filed with EMR, data and reports supplied by BMC and regional geological publications by the EMR. A complete list of references is provided in Appendix A.

2.0 RELIANCE ON OTHER EXPERTS

In Section 3.0, the authors have relied entirely upon information provided by BMC concerning their purchase agreement with Teck Mining Worldwide Holdings Ltd ("Teck") and the extent of any underlying interests and royalties. Also in Section 3.0, the authors have relied entirely on the Geomatics Yukon website for downloaded shapefile tenure data. The authors have not relied upon a report, opinion or statement of another expert concerning legal, political, environmental or tax matters relevant to this assessment report.

3.0 PROPERTY DESCRIPTION AND LOCATION

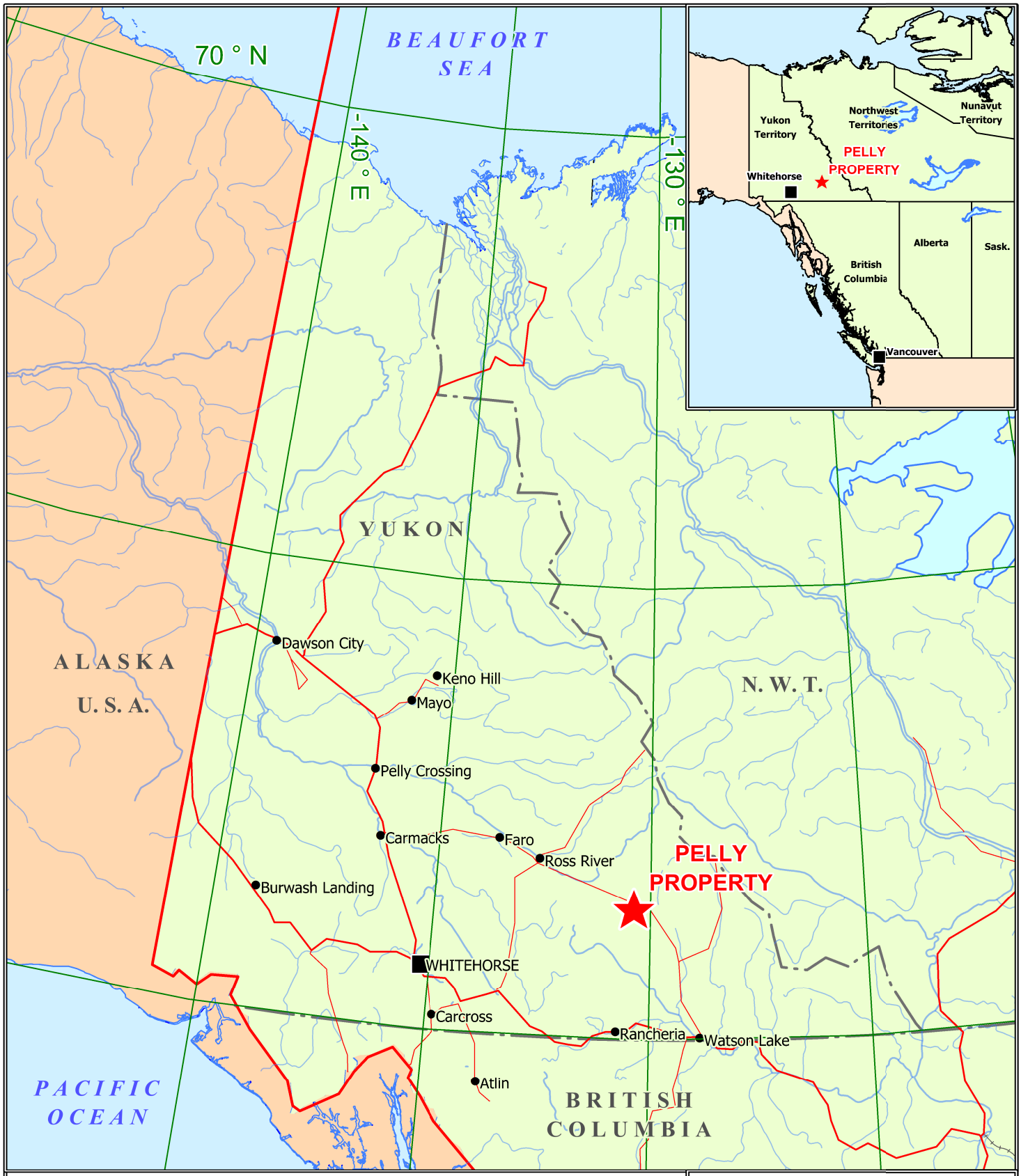
The Pelly Property consists of 422 quartz claims that cover an area of 7220 hectares (72.2 km^2) in the south-central Yukon, approximately 140 km southeast of the town of Ross River and 280 km ENE of Whitehorse (Figure 1). It is centred at 61° 27' N latitude and 130° 12' W longitude (NAD83 UTM Zone 9: 436500E 6814000N) on NTS map sheets 105G/8 and 9, within the Watson Lake Mining District. A complete list of claims is provided in Appendix C.

The Pelly Property can be sub-divided into three separate claim blocks (Figures 2a, 2b); (1) JACK and WOL claims lying immediately northeast of the Wolverine mining property ("JACK block"), (2) GO, BOOT and JACK claims lying immediately southwest of the Wolverine mining property ("GO block"), and (3) WOL, TAG and LOW claims that begin ~5 km northwest of the Wolverine mining property and stretch northwest along Wolverine Lake ("WOL block"). The JACK and GO blocks respectively flank the northeast and southwest sides of the Wolverine mining property, which is just 900 m wide.

The JACK block is a mostly contiguous group of 66 claims that cover 6.5 km^2, the only non-contiguous part of which is the JACK18 claim lying 30 m to the south. The GO block consists of 134 mostly contiguous claims covering 24.6 km^2 that includes a satellite block of 10 claims (GO53-62) lying 25 m to the south. The WOL block lies consists of 222 contiguous claims that cover 41.1 km^2, and is thereby the largest of the three blocks. All claims were initially acquired through staking on the ground, with the area covered by each claim determined by the location of the two claim posts on the ground.

All claims are 100% registered in the name of BMC Minerals Ltd. following the purchase of the Pelly Property from Teck Worldwide Holdings Ltd ("Teck") on 24th January, 2015. There are no royalties or back-in rights in this agreement, and no significant environmental liabilities are reported from the Property.

The claims confer title to hard rock mineral tenure only. Surface rights are held by the Crown, as administered by the Yukon Territory. Trapping rights over most of the Pelly Property are held under Single Holder Trapline #250 whereas the northeastern-most claims fall under Group Trapline #405 held by the Ross River Dena Council (RRDC). The Property falls entirely within Outfitter Concession #20, held by Yukon Big Game Outfitters. There are several parcels of land in the vicinity of the Pelly Property that have been reserved for a future land claim settlement with the RRDC, including RRDC-RR16A that abuts the northwestern side of the GO block. Currently, there is a staking moratorium in the Pelly project area as a result of on-going dialogue between the Yukon government and the Kaska Dene.



0 200,000
metres
Scale: 1:6,500,000

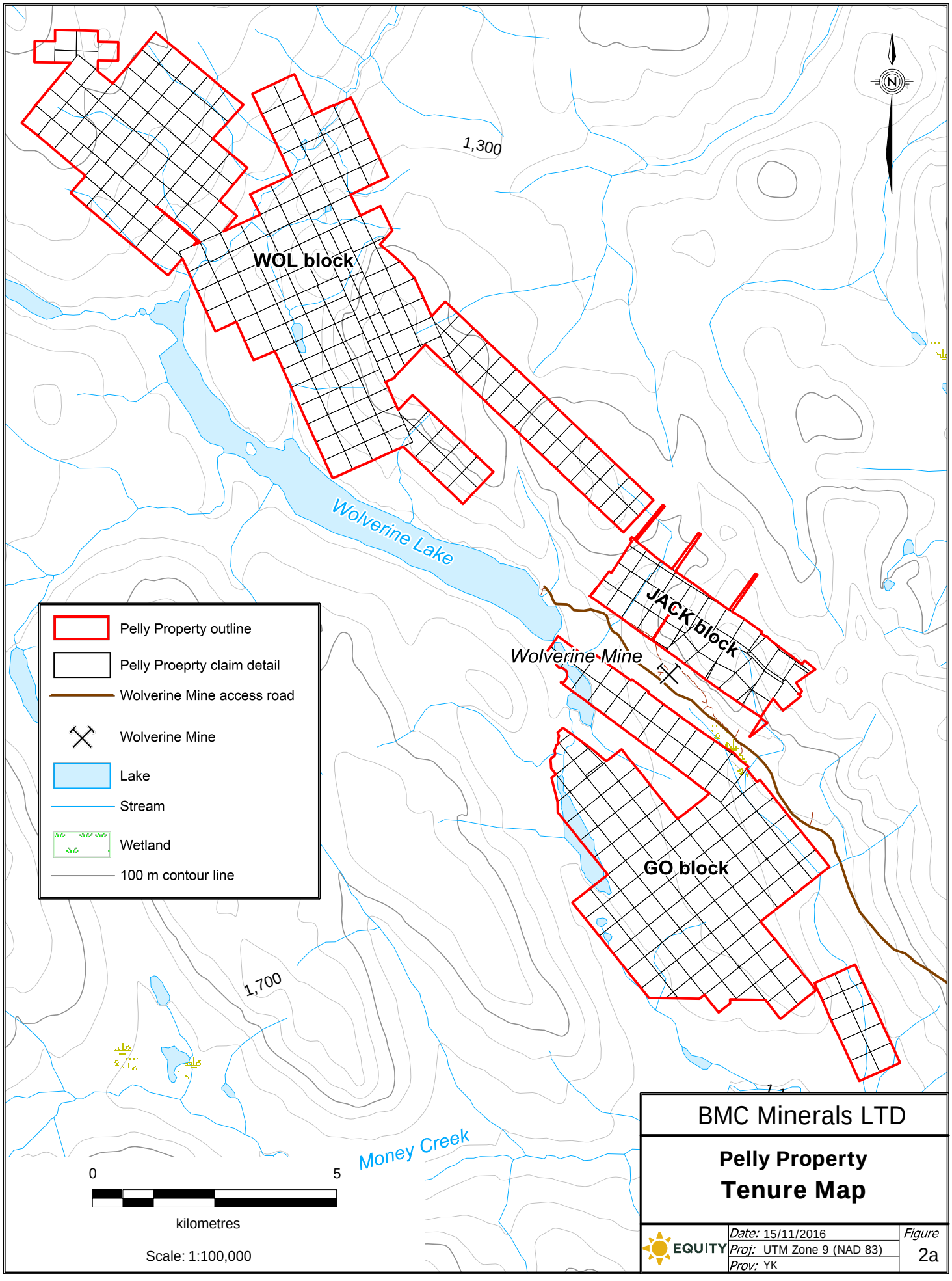
BMC Minerals LTD

Pelly Property

Location Map

EQUITY

Date: 15/11/2016	*Map* 1
Proj: UTM Zone 9 (NAD 83)	
Prov: YUKON	


WOL block
JACK block
GO block
Wolverine Lake
Wolverine Mine
Money Creek
1,300
1,700
Pelly Property outline
Pelly Proeprty claim detail
Wolverine Mine access road
Wolverine Mine
Lake
Stream
Wetland
100 m contour line
0
5
kilometres
Scale: 1:100,000
BMC Minerals LTD
Pelly Property
Tenure Map
EQUITY
Date: 15/11/2016
Proj: UTM Zone 9 (NAD 83)
Prov: YK
Figure
2a

426,000 mE
428,000 mE
430,000 mE
432,000 mE
434,000 mE
436,000 mE
438,000 mE
440,000 mE
442,000 mE
444,000 mE
446,000 mE

6,826,000 mN
6,824,000 mN
6,822,000 mN
6,820,000 mN
6,818,000 mN
6,816,000 mN
6,814,000 mN
6,812,000 mN
6,810,000 mN
6,808,000 mN
6,306,000 mN
6,804,000 mN
6,802,000 mN
6,800,000 mN

Robert Campbell Highway (Hwy 4)

WOL block

JACK block

GO block

Wolverine Lake

Wolverine Mine

Money Creek

0 2,000
metres
Scale: 1:25,000

- Pelly Property outline
- Pelly Property claim detail
- Robert Campbell Highway (Hwy 4)
- Limited Use Road
- Wolverine mine access road
- Wolverine Mine
- Stream
- Lake
- Wetland
- 20m Intermediate Contour
- 100m Index Contour

BMC Minerals LTD

Pelly Property
Detailed Tenure Map

EQUITY

Date:	15/11/2016	Figure
Proj:	UTM Zone 9 (NAD 83)	2b
Prov:	YK	

Yukon law requires eligible assessment expenditures of $100/claim/year on the Pelly Property to extend tenure ownership past the current expiry dates. A single claim grouping comprising all 422 claims making up the Pelly Property, referred to as “Pelly Group 1”, was filed with EMR to allow the representation of work done on one or more claims to be distributed to other claims where work was not done.

Exploration programs in Yukon are divided into Class 1 (grassroots) through Class 4 (advanced), depending on threshold levels of camp man-days, fuel storage and extent of exploration activities. In the Pelly project area, Class 1 and 2 programs require notifying the EMR whereas Class 3 and 4 programs involve submittal of an operation plan that, if approved by the EMR, will provide a Quartz Mining Land Use Permit that is necessary to undertake exploration activities. The 2016 Pelly exploration work was completed under the auspices of Mining Land Use Permit LQ00424, which is valid from 2015 to 2020. The strictly airborne work required no ground disturbance, dedicated camp or fuel storage facilities.

The Pelly Property lies within the traditional territory of the Ross River Dena Council. Land claims have not been settled in this part of Yukon and their future impact on Property access, title or the right and ability to perform work remain unknown.

4.0 ACCESSIBILITY, LOCAL RESOURCES, INFRASTRUCTURE, PHYSIOGRAPHY, CLIMATE

4.1 Accessibility

The Wolverine Mine access road reaches to within 100 m of the JACK and GO claim blocks, and 2 km from the WOL block. This 31 km long privately owned and maintained gravel road connects to the Robert Campbell Highway (Highway 4) near Frances Lake, at a point 175 road-km east of Ross River and 195 road-km northwest of Watson Lake. Fixed wing aircraft can land on Frances Lake.

The mainly gravel Robert Campbell Highway connects the Property to the paved Alaska Highway at the town of Watson Lake, as well as the paved Klondike Highway near the town of Carmacks, giving access to Whitehorse and points south (Figure 1). Most road access into the Property is maintained by the government except for the Wolverine Mine access road, which is maintained by Yukon Zinc Corporation (“Yukon Zinc”). Parts of the Property are therefore accessible to skid-based drilling with the cooperation of Yukon Zinc although helicopters are necessary to access most of the Property, especially the more remote WOL block.

4.2 Local Resources and Infrastructure

The nearest settlement to the Pelly Property is the town of Ross River (population 300), which lies 140 km northwest of the Property and provides basic services (groceries, fuel, accommodation and meals). The city of Whitehorse (population 25000) is located 280 km west-southwest of the Pelly Property (Figure 1) and offers a full range of services and supplies for mineral exploration and mining, including skilled labour, bulk fuel, freight, heavy equipment, groceries, hardware and daily jet service to Vancouver.

The Yukon electrical grid supplies 138 kV electrical power to the town of Faro, located 195 km northwest of the Pelly Property, but only 25-34 kV electricity to Ross River. Concentrates from the Wolverine Mine were trucked 900 km south to port facilities at Stewart, BC, prior to the mine’s temporary shutdown in early 2015.

Surface rights over the Pelly Property are owned by the Crown and administered by the Yukon Territory; they would be available for any eventual mining operation. The Property has abundant water and water rights could be obtained for milling. It is still too early to determine potential tailings storage areas, potential waste disposal areas, and potential processing plant sites.

4.3 Physiography and Climate

The Pelly Property lies in the Pelly Mountains and entirely within the Liard River watershed. Creeks within the WOL block either drain northeast into the Finlayson River or southwest into Wolverine Lake, whereas creeks on the JACK and GO blocks tend to drain west into Wolverine Lake or southward towards Money Creek. Topography is fairly rugged with elevations ranging from 1100 m near Wolverine Lake to nearly 1800 m on the peaks to the northeast.

White and black spruce are the most common tree types below the tree line (1350-1500 m). Black spruce is usually dominant in wetter areas whereas white spruce predominates in drier areas. Paper birch, aspen, balsam and lodgepole pine are also present. Alpine fir grows near tree line. The understory is dominated by feather moss in dense coniferous stands and by willows and heath-like shrubs in more open areas. Sedge or sphagnum tussocks are common in wetlands and under black spruce. Shrub birch and willow occur in the sub-alpine and extend well above the tree line.

The climate is cold continental with a mean daily summer temperature of 15˚C and a mean daily winter temperature of -25˚C. Precipitation falls fairly evenly throughout the year, predominantly as rain from May through September and then as snow from October to April. The mean annual precipitation is 655 mm. Groundwork on the Property is possible from June until October, although snow may cover parts of higher elevations late into the summer. The drilling season is limited only by freezing temperatures and lack of liquid water for drilling.

During the last glacial period, ice moved across the eastern part of the area in a northwesterly to westerly direction and extended to heights of about 1525 m (Ritson, 2000).

5.0 EXPLORATION HISTORY

The following description of the exploration history for the Pelly Property has been, in part, adapted from Bannister (1998).

The earliest records of exploration activity on what is now the Pelly Property was staking of the JAY claim group by Hi-Boy Mining and Exploration in 1966. These claims covered the so-called Jay occurrence or Fisher zone, although no work or any indication of any mineralization was recorded.

In 1973, Finlayson Joint Venture (FJV) staked the Fetish showing at the south end of Wolverine Lake and, in the same year, conducted grid soil mapping, geological mapping, trenching and drilling of two holes for 249 m. Additional soil sampling was done in 1974. Mineralization at the Fetish showing consists of trace chalcopyrite and galena in strongly leached, limonitic chloritic schists and quartz float. Drilling intersected thin bands of chalcopyrite and sphalerite in a soft, contorted, talc-sericite-chlorite schist unit up to 20 m thick. Several magnetite iron formations were found stratigraphically above the mineralized horizon.

Claims lapsed and were re-staked by Atna Resources Ltd in 1994 and then optioned to Westmin Resources Ltd (“Westmin”) in 1995. Drilling by Westmin lead to the discovery of the Wolverine VMS deposit in 1995, with the best intercept returning 8.3 m of 14.2% Zn, 0.6% Cu, 7.6% Pb, 1351 g/t Ag and 3.5 g/t Au. The Fetish showing is no longer recorded in the Yukon MINFILE database as it is considered part of the Wolverine deposit.

Cominco Ltd (“Cominco”) conducted silt and soil sampling across parts of the Pelly Property in 1977 as well as reconnaissance geological mapping in 1993. In 1994, they staked the WOL claims to cover geophysical targets identified during an airborne survey done earlier that year (Holroyd, 1995). Additional work included geological mapping and soil sampling on the WOL, GO and NAD claims (MacRobbie, 1995a, b). Results from the soil sampling defined several zones of anomalous Pb, Zn, Ag and Ba, with the most promising of these associated with elevated Cu and Au values and occurring downslope of favourable stratigraphy (MacRobbie, 1995b).

The following year, Cominco conducted geological mapping, soil sampling and ground-based geophysical surveys on their GO, NAD (MacRobbie, 1996b), WOL (Lajoie, 1996; MacRobbie, 1996c) and BOOT (MacRobbie, 1996a) claims that was followed, in 1996, by more such surface work and diamond drilling

(Senft and Hall, 1997). The 1996 geophysical surveys were done over five grids and found numerous EM conductors flanked by strong magnetic features that were interpreted as graphitic sedimentary rocks. Four of these five grids were also covered by detailed soil geochemistry, with sampling on the “main grid” producing three distinct linear zones of anomalous Cu, Pb, Zn ± Ba. A total of 601.1 m of diamond drilling was completed in three holes, with two of these collared on the main grid. Drilling highlights include intersection of a felsic volcanic-hosted exhalite in hole WO96-02, comprising a stratigraphic analogue to the nearby Fisher zone (Senft and Hall, 1997). The following year, soil-sampling was done on an extension of the main grid and on several contour lines, and additional ground-based HLEM surveys were done on extensions of the WOL8 and WOL10 grids (Bannister, 1998). Results of this work extended the size of the main grid soil anomaly and helped characterize the WOL8 and 10 conductors as graphitic sedimentary rocks (Bannister, 1998).

In 2000, Expatriate Resources Ltd (“Expatriate”) drilled three holes on the WOL219 claim (Duncan et al., 2001), which now forms part of the JACK claim block. Hole WW-00-03 intersected 2.5 m of massive and semi-massive sulphide at 8.33% Zn, 1.32% Pb, 1.55% Cu, 293 g/t Ag and 1.17 g/t Au, which is interpreted as the downdip extension of the Wolverine deposit (Expatriate, 2000). Drill hole WW-00-02 intersected only weak mineralization.

In 2015, BMC conducted a 269.4 line-km airborne VTEM survey over the WOL block (Voordouw and Jones, 2016). Integration of survey results with historical mapping identified several strong formational responses and a folded band of high EM response located near a fault contact between Mississippian and Permian rocks.

6.0 2016 EXPLORATION PROGRAM

Exploration work done on the Pelly Property in 2016 comprised a 400.5 line-km airborne magnetic and versatile time domain electromagnetic (VTEM™) survey. Of this total, 81.1 line-km was re-flown to address QA/QC concerns identified by BMC.

The airborne survey was designed to follow up on several historical EM and magnetic targets, test the area surrounding the Puck zone mineral occurrence and generate new anomalies that could represent additional VMS deposits. Work was undertaken by Geotech Ltd. from North Aurora, Ontario, between 10th July and 17th July, 2016, who provided their own Astar 350 B3 helicopter and pilot. The survey was flown as part of a larger survey that also covered BMC’s flagship KZK and newly acquired Wolf properties.

The Pelly survey block covered an area of approximately 91 km² and was flown at an azimuth of 048° (perpendicular to stratigraphy) and traverse line spacing of 150 m. Tie lines were flown perpendicular to the traverse lines at a spacing of 1500 m. Navigation was achieved using a NovAtel WAAS enabled GPS receiver and screen display for the pilot and a NovAtel GPS antenna mounted on the helicopter tail (Venter et al., 2016). During the survey an average altitude of 70 m above ground surface was maintained for the transmitter-receiver loop using a Terra TRA 3000/TRI40 radar mounted beneath the bubble of the helicopter cockpit. The survey was flown at an average speed of 80 km/hr.

Data acquisition was made with a Geotech Versatile Time Domain electromagnetic (VTEM™plus) system with receiver and transmitter coils in a concentric-coplanar and Z direction oriented configuration. The receiver system also included a coincident-coaxial X direction coil. The transmitter-receiver loop was towed at a mean distance of 31 m below the helicopter with measurements consisting of the vertical (Z) and In-line horizontal (X) components of the EM fields. The aeromagnetic total field was measured using a horizontal magnetic gradiometer with two caesium sensors. The sensors are mounted 12.5 m apart on a separate loop, 10 m above the transmitter-receiver loop. A GPS and gyro inclinometer are also installed on this loop to accurately record the tilt and position of the magnetic bird. A base station for GPS and magnetometer corrections was also utilised and set up away from all infrastructure. Base station data was used during the post-processing of survey data at the end of each day. A logistics and results report written by Geotech (Venter et al., 2016) is included as Appendix D.

Quality assurance and quality control (QA/QC) was monitored by Jules Lajoie of Vancouver, BC. QA/QC checks included assessment of (a) horizontal deviation from the planned flight path, (b) terrain

clearance, (c) noise on magnetic recordings, (d) magnetic diurnal variation, (e) recording failures in the navigational systems or deliverable instrumentation, (f) number of navigational satellites used, (g) along line sampling and (h) the normally processed last time gate for the Z component. Excessively high terrain clearance led to 81.1 line-km of re-flights to bring the survey within QA/QC specifications.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Finlayson Lake district comprises part of the Yukon-Tanana terrane of the Yukon Territory and Alaska, which is composed of polydeformed metamorphosed sedimentary, volcanic and plutonic rocks that are interpreted as the product of mid-Palaeozoic continental arc magmatism. Syngenetic volcanogenic massive sulphide (VMS) mineralization occurs in several settings in this terrane. The Finlayson Lake portion of the Yukon-Tanana terrane is a crescent-shaped area, approximately 300 x 50 km in size and extending from Ross River in the north to Watson Lake in the south, and is composed of Devonian to Mississippian volcanic, intrusive and sedimentary rocks. It is juxtaposed with Proterozoic and Palaeozoic strata of the ancient North American continental margin along the Tintina Fault Zone to the southwest and with late Palaeozoic rocks of the Slide Mountain Terrain to the northeast (Figure 3). The main part of the Yukon-Tanana terrane, which underlies most of west-central Yukon, is contiguous with the Finlayson Lake district after restoration of 456 km of Late Cretaceous right lateral strike-slip movement along the Tintina Fault (Layton-Matthews et al., 2008).

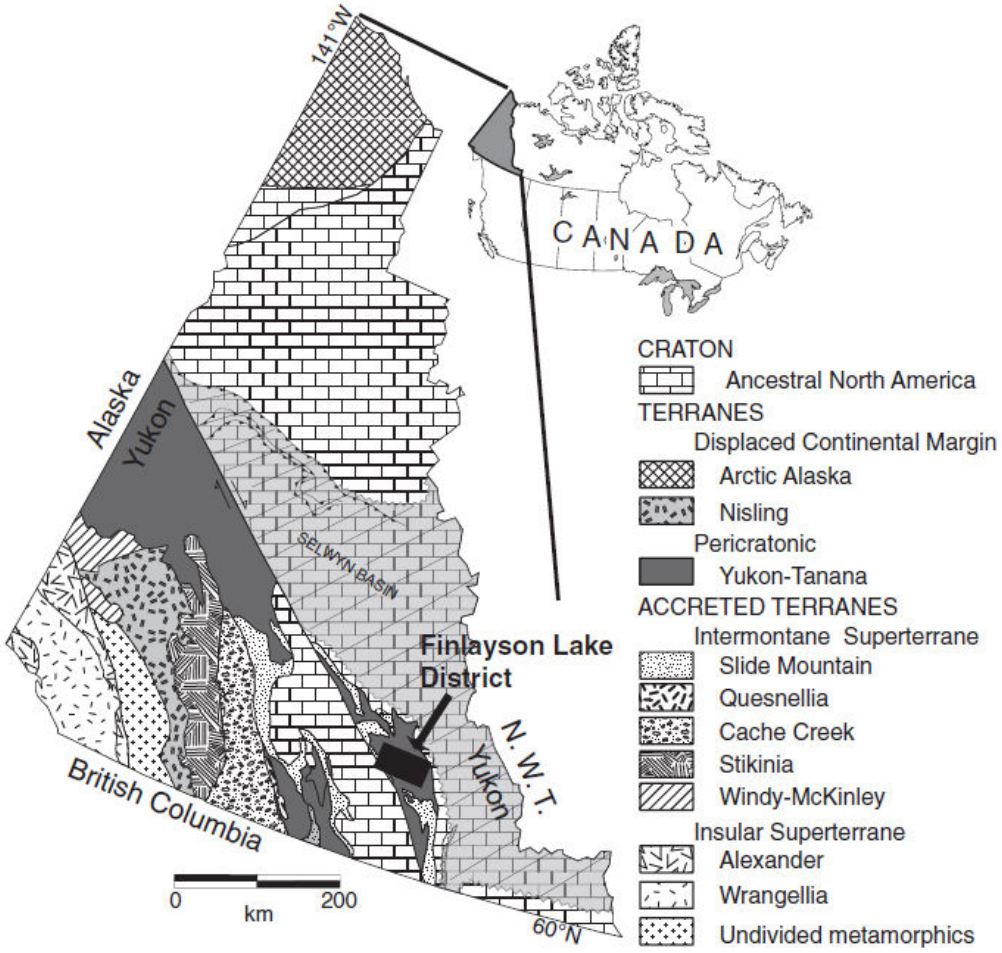


Figure 3: Regional geology of the Finlayson Lake District from Layton-Matthews et al (2008)

7.2 Local Geology

The Yukon-Tanana terrane in the Finlayson Lake district is composed of greenschist- to lower amphibolite-grade meta-sedimentary, -volcanic and -plutonic rocks (Figures 4a, 4b). The Finlayson Lake district was imbricated by Permian thrust faulting into three thrust sheets (Cleaver Lake, Money, Big Campbell), with the final stage of thrusting placing this rock package onto North America in Late Triassic to Early Jurassic (MacRobbie and Holroyd, 2005a). The Pelly Property lies within the Big Campbell thrust sheet, in what is structurally the deepest part of the Yukon-Tanana terrane. This thrust sheet is formed by the Grass Lakes and Wolverine groups, which are both bound by unconformities. Klippe of late Palaeozoic Slide Mountain Terrane occur along the eastern margin of the Big Campbell thrust sheet (and within the Pelly Property) and are locally referred to as Campbell Range Formation.

The **Grass Lakes Group** consists of pre-Early Mississippian (pre-365 Ma) quartz-rich, non-carbonaceous metaclastic rocks (**Dm**, **Dfv**, **Dqm** and **Dq**) that are conformably overlain by 30 to >200 m of the *c.* 365 to 360 Ma mafic metavolcanic schist and phyllite of the Fire Lake Formation (**DF**). Bonninite units at the top of the Fire Lake Formation hosts the Fyre Lake Cu-Co-Au VMS deposit. The Fire Lake Formation is conformably overlain by felsic volcanic and sedimentary rocks of the Kudz Ze Kayah (KZK) Formation (**DK**, **DKcp** and **DKcs**), which hosts the ABM and GP4F Zn-Pb-Ag ± Au-Cu VMS deposits. The KZK Formation grades conformably upwards into a thick sequence of carbonaceous to locally calcareous phyllite of the Wind Lake Formation (**DMq**, **DMm**, **DMcp**, and **DMcg**). Coeval with the KZK and Wind Lake formations are Devonian-Mississippian (360 ± 1 Ma) peraluminous K-feldspar porphyritic to megacrystic granites of the Grass Lakes suite (**MGg** and **MGag**), which are inferred to be subvolcanic feeders to the felsic volcanic rocks (MacRobbie and Holroyd, 2005b; Murphy et al., 2001; Piercey et al., 2001).

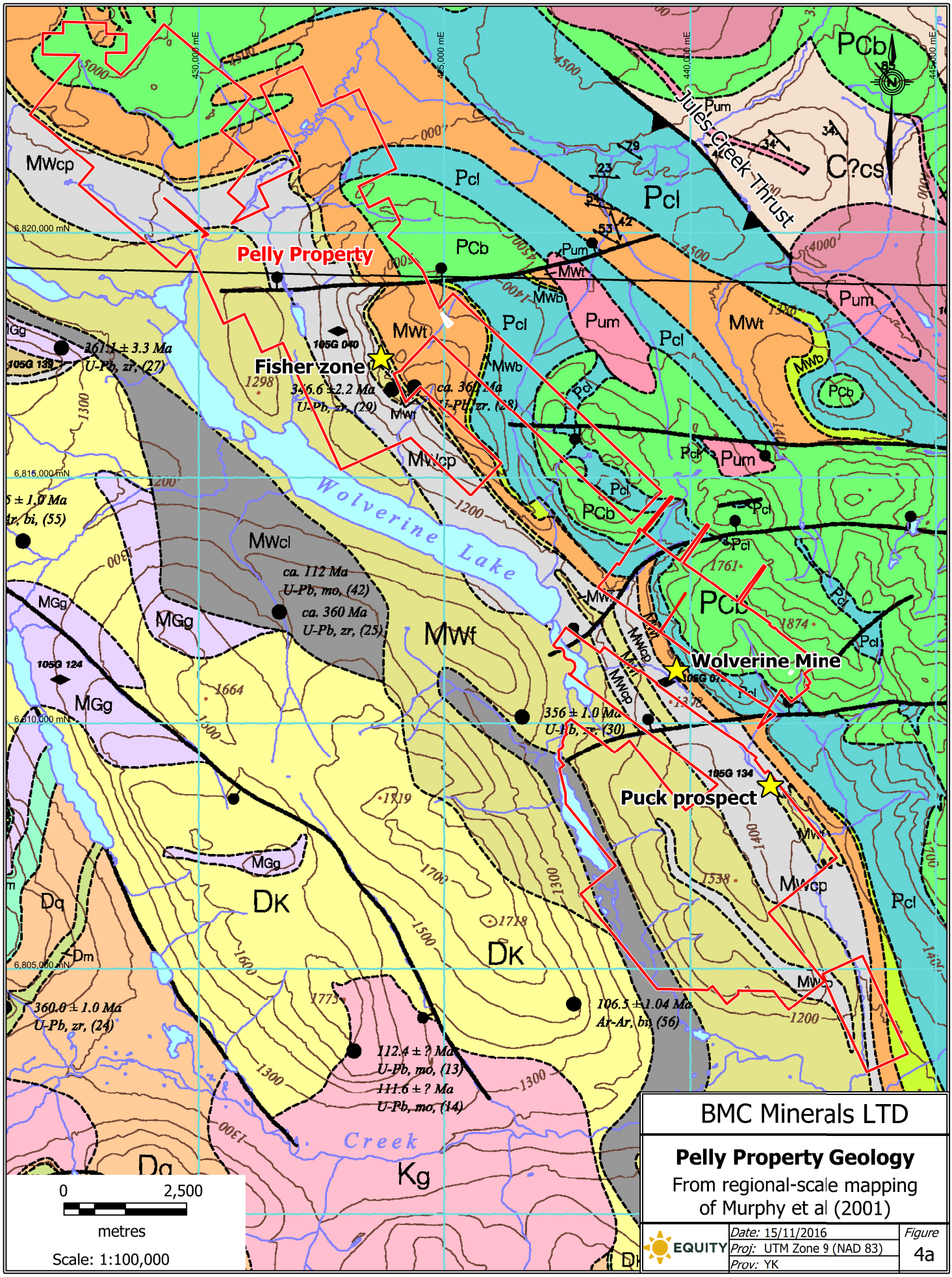
The Wolverine Group unconformably overlies the Grass Lakes Group and consists predominantly of Early Mississippian (*c.* 356-346 Ma) felsic volcanic and carbonaceous sedimentary rocks (**MWb**, **MWt**, **MWf**, **MWcp** and **MWcl**). From bottom to top, the succession comprises a lower conglomerate, lower felsic volcanic, carbonaceous argillite, the immediate footwall felsic volcanic and subvolcanic rocks to the Wolverine VMS deposit, and a hanging wall consisting of aphyric rhyolite and carbonaceous sedimentary rocks that, near their top, host basalt flows. Rocks of the Wolverine Group are interpreted to have formed within an ensialic back-arc rift basin that evolved to sea-floor spreading (Layton-Matthews et al., 2008). The Kuroko-style Wolverine deposit occurs at the contact between footwall felsic volcaniclastic rocks and either hanging wall carbonaceous argillite or exhalite (Murphy et al., 2001; Piercey et al., 2001).

The Campbell Range Formation (or Slide Mountain Terrane) consists of weakly deformed Permian basalt (**PCb**) and chert (**PCl**) that unconformably overlies the Wolverine Group. Basaltic rocks are locally pillowed and fragmental, show widespread epidote and/or hematite alteration and are interbedded with reddish jasperoidal silica (Murphy et al., 2001). Thin layers of chert that occur within mafic volcanic are typically foliated and internally folded, in contrast to the weakly deformed nature of the surrounding volcanic rocks. The PCl unit consists of thin- to medium-bedded chert with subordinate interbedded siliceous phyllite. Both the basalt and chert units are cut by leucogabbroic (**Plg**) and ultramafic (**Pum**) intrusions.

7.3 Property Geology

The following description of the property geology has been adapted from the assessment reports covering the WOL, BOOT and GO properties by Senft and Hall (1997) and MacRobbie (1996a, b, c). The property geology based on this mapping is shown in Figure 5. Parts of the Property not mapped by these workers are covered by the regional-scale mapping of Murphy et al (2001).

The Pelly Property is located near the eastern margin of the Big Campbell thrust sheet and its boundary with the Slide Mountain Terrane. Exposure on the Property is generally poor with outcrops restricted to creeks and higher elevations. Stratigraphy generally trends northwest and is moderate to steeply northeast dipping.



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Pelly Property Geology

From regional-scale mapping of Murphy et al (2001)

EQUITY

Date: 15/11/2016
Proj: UTM Zone 9 (NAD 83)
Prov: YK

Figure 4a

LEGEND FOR PELLY LOCAL GEOLOGY (OPEN FILE 2001-33)

POST-THRUST INTRUSIVE ROCKS

CRETACEOUS

Kg Equigranular biotite-muscovite granite

JURASSIC

Jg Equigranular hornblende-biotite granite

YUKON-TANANA TERRANE

Footwall of Jules Creek Thrust

PERMIAN

Pum Variably serpentinized ultramafic

PERMIAN TO CARBONIFEROUS

CAMPBELL RANGE SUCCESSION

Pmc Phyllite, ribbon chert, sandstone, grit, conglomerate

PCb Chlorite-feldspar-quartz phyllite (intermediate metavolcanic rocks)

C?cs Phyllite, ribbon chert, sandstone, grit, conglomerate

C?iv Chlorite-feldspar-quartz phyllite (intermediate metavolcanic rocks)

Hanging wall of Jules Creek Thrust

PERMIAN

Pcl Phyllite, chert, conglomerate, greywacke, diamictite, limestone

Hanging wall of Money Creek Thrust

PENNSYLVANIAN

Pq Quartz sandstone/quartzite

UPPER MISSISSIPPIANTO MID-PENSYLVANIAN

Cc Bioclastic crinoidal limestone

EARLY MISSISSIPPIAN

SIMPSON RANGE PLUTONIC SUITE

MSg Granite, quartz monzonite

LOWER MISSISSIPPIAN

Miv Chlorite-muscovite-quartz phyllite (intermediate composition)

Footwall of Money Creek Thrust

EARLY MISSISSIPPIAN

WOLVERINE SUCCESSION

MWb Chloritic phyllite

MWt Thinly interbedded siliceous rock and phyllite (metatuff and exhalites)

MWf Muscovite-quartz phyllite, exhalite

MWfi intrusion

MWfb iron formation

MWcp Carbonaceous phyllite and quartz sandstone

MWcl Feldspathic meta-sandstone, grit and carbonaceous phyllite

EARLY MISSISSIPPIAN

GRASS LAKES PLUTONIC SUITE

MGg/MGag Granitic to monzonitic equigranular meta-plutonic rocks/Augen-textured granitic to monzonitic meta-plutonic rocks

LATE DEVONIAN

NORTH LAKES META-DIORITE

DNd Foliated hornblende-biotite meta-diorite

UPPER DEVONIAN (TO LOWER MISSISSIPPIAN?)

GRASS LAKES SUCCESSION

DMq Quartzite

DMm Chloritic phyllite

DMcp Carbonaceous phyllite and quartzite

DMcg Meta-conglomerate

Kudz Ze Kayah felsic metavolcanic unit

DK Undifferentiated feldspar-muscovite-quartz schist/ phyllite, siliceous muscovite-quartz schist/phyllite, augen schist/phyllite (meta-porphyry)

DKcp Carbonaceous phyllite and quartzite

DKcs Calcareous meta-sandstone and grit

Fire Lake metavolcanic unit

DF Plagioclase-chlorite phyllite/schist, carbonaceous phyllite, muscovite-quartz phyllite

UPPER DEVONIAN AND OLDER?

Dq Psammitic and meta-pelitic schist

Dqm Marble, calcareous schist and lesser carbonaceous phyllite

Dm Biotite-plagioclase-actinolite-chlorite schist

Dfv Feldspar-muscovite-quartz schist (felsic metavolcanic rock)

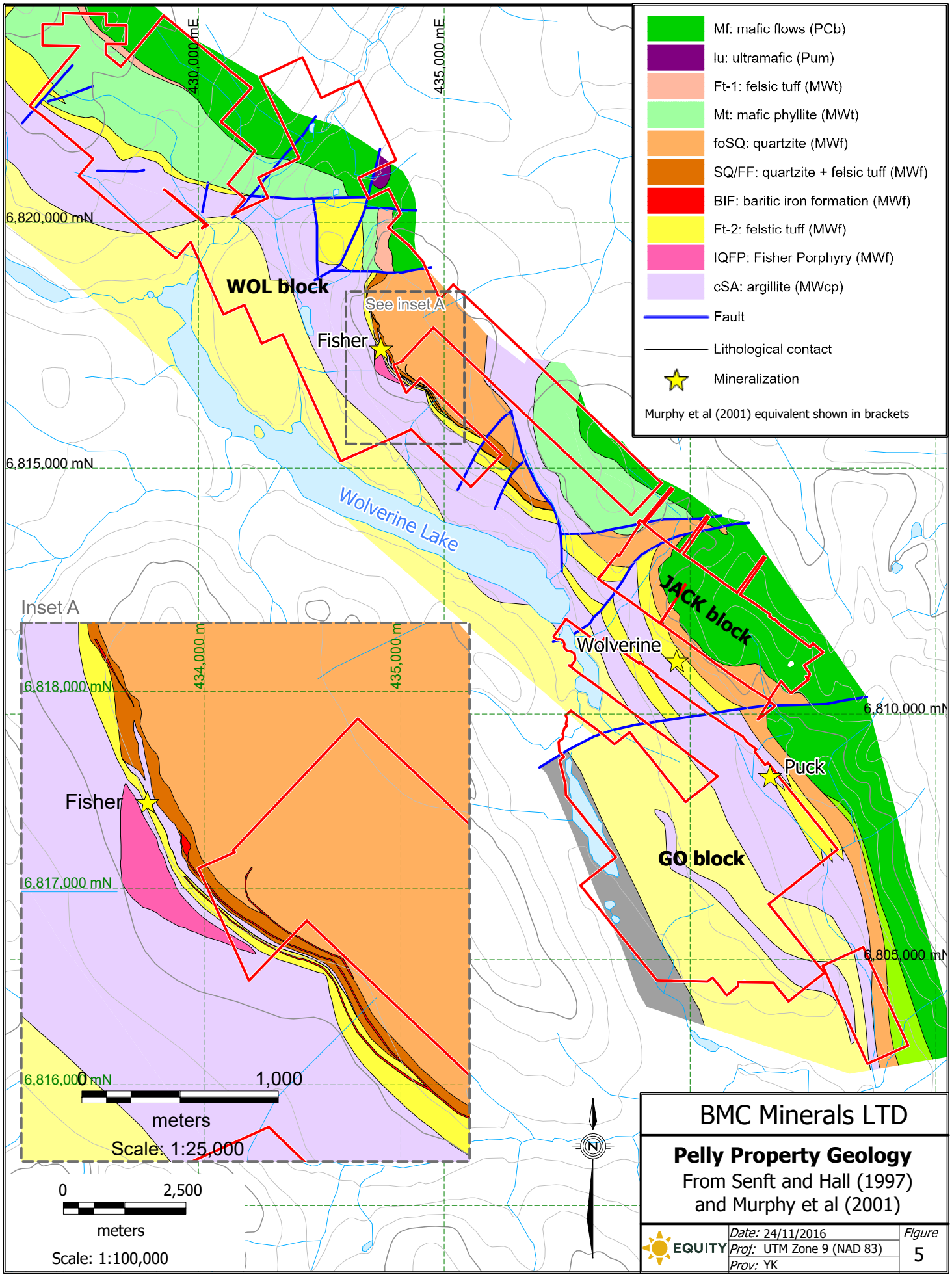
Reference: Murphy et al (2001)

BMC Minerals LTD

Pelly Project

Local Geology Legend

EQUITY | *Date:* 06/01/2016 | *Proj:* | *Prov:* YK | *Figure* 4b


Mf: mafic flows (PCb)
Iu: ultramafic (Pum)
Ft-1: felsic tuff (MWt)
Mt: mafic phyllite (MWt)
foSQ: quartzite (MWf)
SQ/FF: quartzite + felsic tuff (MWf)
BIF: baritic iron formation (MWf)
Ft-2: felstic tuff (MWf)
IQFP: Fisher Porphyry (MWf)
cSA: argillite (MWcp)
Fault
Lithological contact
Mineralization
Murphy et al (2001) equivalent shown in brackets
430,000 mE
435,000 mE
6,820,000 mN
6,815,000 mN
6,810,000 mN
6,805,000 mN
WOL block
JACK block
GO block
See inset A
Fisher
Wolverine
Puck
Wolverine Lake
Inset A
434,000 mE
435,000 mE
6,818,000 mN
6,817,000 mN
6,816,000 mN
0
1,000
meters
Scale: 1:25,000
0
2,500
meters
Scale: 1:100,000
N
BMC Minerals LTD
Pelly Property Geology
From Senft and Hall (1997)
and Murphy et al (2001)
EQUITY
Date: 24/11/2016
Proj: UTM Zone 9 (NAD 83)
Prov: YK
Figure
5

The most detailed property-scale geological mapping was done by Senft and Hall (1997), who identified four rock packages on what was then referred to as the "WOL property". Most of this historical WOL property now falls within the WOL block of the Pelly Property.

Mapping by Senft and Hall (1997) describes an uppermost package of generally well-exposed intermediate to mafic volcanic with minor grey limestone fragments and intra-pillow fillings (**Mf** in Figure 5), which occurs in only the eastern-most part of the WOL block. The mafic volcanic rocks are described as intermediate to mafic pillowed flows, tuffs, lapilli-tuffs and minor flow breccias that are generally well foliated, chloritic and locally epidote-altered and hematitic (Senft and Hall, 1997), and likely correlate with the Campbell Range Formation (**PCb**, **PCl**) of Murphy et al (2001). Flows and flow fragments are in places vesicular, amygdaloidal and/or spherulitic. Minor chloritic phyllite, chert, cherty tuff and siltstone interbeds, as well as massive serpentinized ultramafic bodies (**Iu**), are locally present, the latter likely correlating with the ultramafic intrusion unit (**Pum**) of Murphy et al (2001).

Structurally below the Campbell Range Formation at the northern end of the Property, Senft and Hall (1997) mapped fine-grained, massive, variably calcareous chloritic phyllite and schist containing minor intercalated carbonaceous mudstone and siltstone (**Mt**, **Ft-1**). The lower contact of this unit matches the lower contact of the Wolverine meta-tuff and exhalite unit (**MWt)** of Murphy et al (2001), which is described as thinly interbedded phyllite and siliceous rock. These units are therefore likely correlative.

The Mt and Ft-1 units of Senft and Hall (1997) are underlain by a thick sequence of strongly foliated, laminated to thinly bedded, quartzite that is interbedded with phyllitic, chloritic, mudstone/argillite layers that are locally rusty due to weathered pyrite (**foSQ, SQ/FF**). The location of this unit correlates with the Wolverine Group muscovite-quartz phyllite and exhalite unit (**MWf**) of Murphy et al (2001) although the mapping by Senft and Hall (1997) shows significantly thicker intervals, especially within the structurally complex central part of the 2015 survey area. The **MWf** unit hosts the Wolverine deposit and is therefore also referred to as the "**Wolverine horizon**".

In the southeastern part of the area mapped by Senft and Hall (1997), the **foSQ** and **SQ/FF** units are spatially associated with a 200-300 m thick sequence of felsic volcanic (**Ft-2**), argillite/mudstone and banded iron formation (**BIF**) that hosts the Fisher zone (see Figure 5 inset), which is an even more obvious correlative for the **Wolverine horizon** (or **MWf**). Senft and Hall (1997) describe this sequence as comprising a 10-20 m thick basal unit of porphyritic quartz-feldspar-chlorite felsic tuff, with minor galena-pyrite-sphalerite mineralization, that is overlain by intercalated felsic volcanic and carbonaceous argillite, and cut by subordinate mafic sills. This intercalated interval is overlain by quartz-sericite ± ankerite-barite schist that is interpreted as the along-strike equivalent of the magnetite-rich exhalite (**MWfb**) overlying the Wolverine deposit. The Fisher exhalite is overlain by fragmental-textured quartz-chlorite-sericite schist that forms the top of the unit as mapped by Senft and Hall (1997).

The lowermost unit mapped by Senft and Hall (1997) comprises a thick package of poorly exposed, recessive, silvery grey weathering, carbonaceous phyllitic mudstone with subordinate amounts of interbedded siltstone and sandstone (**cSA**). The description and contact location of this unit shows a clear correlation with the Wolverine Group carbonaceous phyllite and quartz sandstone unit (**MWcp**) of Murphy et al (2001) and is host to many gossans and soil anomalies in the region. This unit is underlain by muscovite-quartz phyllite with minor exhalite (**MWf**) and feldspathic meta-sandstone, grit and carbonaceous phyllite (**MWcl**) forming the base of the Wolverine Group. Neither of these lower two units were mapped by Senft and Hall (1997).

The basal contact of the Wolverine Group, where it is underlain by Grass Lakes Group, occurs mostly west of the Pelly Property although it does appear to lie right on the southwestern corner of the GO block. At this locality, the top of the Grass Lakes Group consists Kudz ze Kayah (KZK) felsic volcanic (**DK**), which is the same unit that hosts the ABM and GP4F deposits on BMC's KZK Property.

7.4 Mineralization

Mineralization on the Pelly Property includes the downdip extension of the Wolverine VMS deposit, as well as the Fisher zone (or Jay occurrence) and Puck prospect. Each of these is summarized below.

7.4.1 Wolverine deposit

The Wolverine deposit (Figures 4a, 5) is formed by two lenses of massive sulphide, referred to as the Lynx and Wolverine zones, connected to each other and fringed by relatively thin massive sulphide, stringer veins and/or sulphide replacement zones (Bradshaw. et al., 2008). Collectively, this contiguous unit of massive to semi-massive sulphide comprises 6.2 Mt at 12.7% Zn, 1.3% Cu, 1.6% Pb, 371 g/t Ag and 1.8 g/t Au (Bradshaw. et al., 2008; Yukon Zinc, 2006). The geology, tectonic setting, sulphur isotopic signature, age and metal grades of the deposit exemplify it as a volcanic sediment-hosted massive sulphide deposit (Bradshaw. et al., 2008).

Host rocks to the deposit consist of deformed meta-volcanic, -volcaniclastic and -sedimentary rocks of the Wolverine Lake Group (Murphy et al., 2006). From bottom to top, these rocks consist of carbonaceous argillite (MWcp) that grade upwards into volcaniclastic rhyolite and are cut by porphyritic sills with a U-Pb zircon age of 347.8 ± 1.3 Ma, interpreted as the maximum age of mineralization (Piercey et al., 2008). Rhyolite is overlain by a interbedded argillite, rhyolite and magnetite-carbonate-sulphide exhalite (MWf). The transition from MWcp to MWf marks a change in the nature of volcanism, from quartz- and feldspar-phyric rhyolite of the footwall to aphyric rhyolite and exhalite in the hanging wall (Bradshaw. et al., 2008). Graphitic argillite in the hanging wall is generally carbonate-rich immediately above massive sulphide and magnetite-rich higher up in the stratigraphy. Exhalite is overlain by a fragmental rhyolite unit that also forms part of the Wolverine Horizon, followed by interbedded carbonaceous argillite, greywacke, basalt and rhyolite (MWt).

The Wolverine deposit is 700 m long, at least 475 m wide and generally 1-10 m thick, with the deposit still open at depth and extending off the Wolverine mining property and onto the JACK block of the Pelly Property. The thickest sulphide accumulations occur in the Wolverine and Lynx zones, which comprise a series of stacked lenses totalling 5-15 m of massive sulphide separated by layers of argillite up to 8 m thick. Both zones are tabular and 250 m long, and are separated from each other by 200 m of semi-massive sulphide referred to as the Hump zone (Bradshaw. et al., 2008). Semi-massive sulphide consists of replacement-style sulphide zones that typically occur around, above or outboard of the stinger veins. The semi-massive parts of the deposit are generally Cu-rich whereas the more massive parts of the deposit are more enriched in Pb and Zn.

Massive and banded sulphide consists mostly of fine-grained pyrite and sphalerite with subordinate amounts of pyrrhotite, chalcopyrite, galena, arsenopyrite and sulphosalts. Barite is generally absent, in contrast to the nearby ABM and GP4F deposits. Galena occurring near the base of the Lynx zone is notably enriched in selenium, averaging 4.04 wt% Se and containing up to 5.13 wt%. Silver is mostly contained within tetrahedrite. Semi-massive sulphide, defined as comprising 10-50 vol% of the rock (Bradshaw. et al., 2008), consists of chalcopyrite, sphalerite, pyrite and minor pyrrhotite. Chalcopyrite is significantly more abundant than in the more massive sulphide and is typically associated with strong chlorite and/or iron carbonate alteration (Bradshaw. et al., 2008). Another type of replacement-style mineralization is sphalerite-rich, comprising massive lenses and/or blebs of sphalerite with subordinate pyrite and in association with sericite and ankerite alteration. Stringer vein sulphide zones are formed by quartz-sulphide veins that have sulphide assemblages of pyrite-sphalerite ± chalcopyrite-pyrrhotite-arsenopyrite and common gangue minerals that include quartz, calcite, dolomite, ankerite, siderite, chlorite, biotite and muscovite (Bradshaw. et al., 2008).

The hydrothermal overprint associated with the Wolverine deposit is mostly restricted to the permeable felsic volcaniclastic rocks in the footwall and is manifested in four alteration styles (Bradshaw. et al., 2008); (1) silica alteration immediately adjacent to quartz-sulphide stringer veins, (2) carbonate alteration in association with replacement-style mineralization, (3) chlorite alteration, which is most abundant in the deposit footwall, and (4) sericite alteration, which typically occurs below and lateral to chlorite alteration. Alteration is generally stratabound and conformable as opposed to occurring within a pipe-like structure.

7.4.2 Fisher zone (or Jay occurrence)

The below description of the Fisher zone is adapted from the Yukon Geological Survey MINFILE description (occurrence number 105G 040) and from Senft and Hall (1997).

The Fisher zone, which is referred to as the Jay occurrence in MINFLE, was discovered at surface as comprising felsic lapilli tuff with vein-hosted and disseminated sphalerite with minor chalcopyrite. Subsequent drilling shows that this zone consists of numerous narrow sulphide bands hosted within strongly altered felsic volcanic and/or sedimentary rock that is overlain by thick accumulations of baritic iron formation and massive barite (collectively the MWf unit). These exhalite units are interbedded with carbonaceous argillite, felsic volcanic, fragmental tuff and massive tuff. At a thickness of 350 m, the MWf unit that hosts the Fisher zone is significantly thicker than the 40 m of MWf hosting the Wolverine deposit.

The narrow sulphide bands comprising the Fisher zone consist of sphalerite, pyrite and subordinate galena, and are associated with strong sericite-carbonate ± chlorite alteration. The best intersection of the Fisher zone was in hole 95-06, which intersected 2.4 m of semi-massive sulphides at 2.84% Zn, 1.41% Pb, 0.12% Cu, 66.3 g/t Ag and 0.14 g/t Au (Senft and Hall, 1997).

Magnetite-rich exhalite associated with both the Fisher zone and Wolverine deposit is up to 40 m thick and occurs along a strike length of at least 8 km. Mineralogy typically consists of quartz-magnetite ± barite-hematite-pyrite, with mineralized segments enriched in sphalerite and rare chalcopyrite. Hydrozincite occurs where mineralization is laminated. Rock samples have returned up to 5.3% Zn, 0.56% Pb and 45% Ba.

7.4.3 Puck prospect

The below description of the Puck prospect (Figures 4a, 5) is adapted from the Yukon Geological Survey MINFILE description (occurrence number 105G 134). Note that although the Yukon EMR data shows this prospect lying on the Pelly Property, it's actual location is 700 m further northeast and off the Property (see Section 8.2)

The Puck prospect consists of Fe-rich exhalite, stockwork mineralization and strong alteration within the "Wolverine Horizon" lying 3 km southeast of the Wolverine deposit. The prospect is underlain by subvolcanic porphyry and overlain by interlayered carbonaceous argillite, felsic volcanic, fragmental and tuffaceous units and magnetite-carbonate iron formation.

The area was identified as prospective through a prospecting and grid soil sampling program that defined a 1200 x 1000 m zone of weakly to moderately anomalous Cu values (Wengzynowski, 1996). Subsequent diamond drilling in 1996 and 1997, comprising 4025 m in 16 holes, failed to intersect massive sulphide mineralization, with one of the better composites returning 1.16% Pb and 2.72% Zn over 2.8 m in hole PK96-02 (Turner and Terry, 1996).

8.0 RESULTS OF THE 2016 AIRBORNE SURVEY

Results of the 2016 airborne magnetic and VTEM™ survey on the Pelly Property are described below in terms of their relation to the regional and property geology and mineral showings. Correlations between geology and geophysics are, at this time, somewhat hindered by the discrepancies between regional-scale (Murphy et al., 2001) and property-scale (Senft and Hall, 1997) mapping. Resolving these differences would likely enhance the value of both the 2015 (Voordouw and Jones, 2016) and 2016 airborne data.

Overall, the results confirm the northwestern strike and northeast dip of stratigraphic units, as previously defined by geological mapping (e.g. Murphy et al., 2001; Senft and Hall, 1997). Several of the faults mapped by Murphy et al (2001) are supported with the VTEM data, although not all of them.

8.1 Magnetics

Magnetic data is mapped (Venter et al., 2016) as total intensity (TMI), calculated vertical gradient (CVG), total horizontal gradient (TotHGrad) and tilt-angle derivative (TiltDrv), as well as the measured cross-line (Hgcxline) and in-line gradients (Hginline). In general, each of these map products shows a pattern of elevated

magnetic response in the northern half of the survey area and more subdued response in the south (Figure 6a). The most prominent part of this magnetic high is the “Wolverine horizon” (or MWf unit), which is especially well-defined through the calculated vertical gradient (Figure 6b). This map suggests the Wolverine horizon is actually continuous across a fault mapped by Murphy et al (2001) near the northwestern end of the JACK block (marked by “thick, no offset” on Figure 6b). The Wolverine horizon is also thicker and more continuous on the JACK block than predicted from the mapping of Murphy et al (2001).

In the JACK block, the Wolverine horizon appears to be over- and underlain by units that also show a strong magnetic response (Figure 6a), comprising cherty mafic volcanic (PCb, PCl) and carbonaceous phyllite (MWcp) respectively (Murphy et al., 2001). Comparison of historical mapping with 2015/16 VTEM data shows that both of these units have a patchy magnetic response, with regions that are highly magnetic and others that are non-magnetic. These different responses may correspond to different flow units for the mafic volcanic and different oxidation states for the phyllite (i.e. magnetite- or sulphide-bearing).

There is a 1.7 km-long string of moderate to high magnetic response located in the centre of the GO block and along the contact between carbonaceous phyllite (MWcp) and underlying felsic volcanic (MWf) of the Wolverine Group (just below “Puck prospect” label in Figures 6a, 6b). Satellite imagery indicates there may be exposure on this part of the Property, so that there is potential to ground-truth the source of these anomalies.

A strong magnetic response that occurs along the (south-) western edge of the GO block may be related to the metasedimentary unit forming the base of the Wolverine Group (MWcl). The 2016 VTEM data also suggests the contact between MWcl and overlying muscovite-quartz phyllite (MWf) lies ~500-600 m further east than mapped by Murphy et al (2001) (see “MWcl?” labels on Figure 6a).

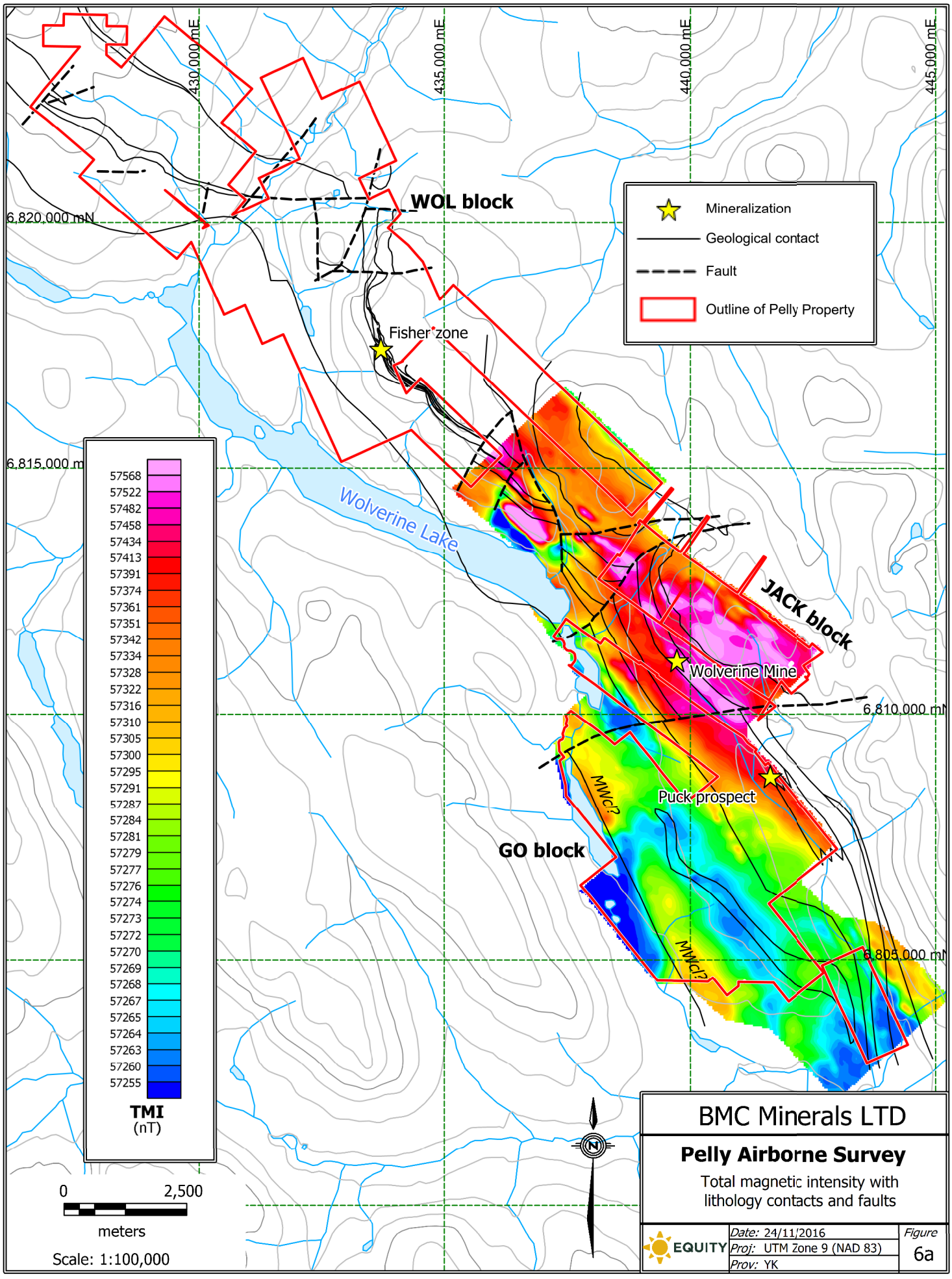
8.2 Conductivity

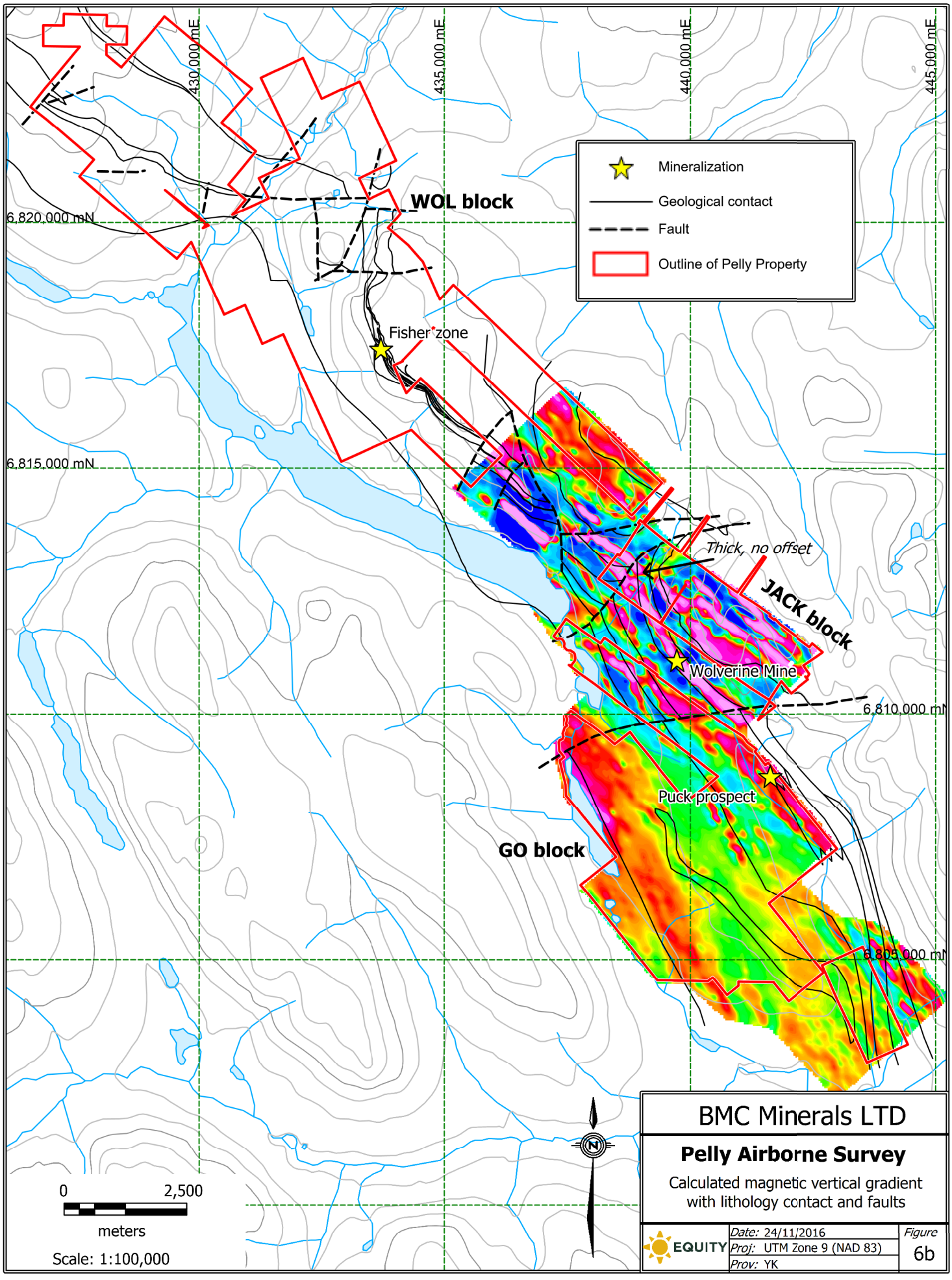
Conductivity data is mapped (Venter et al., 2016) as calculated time constant with vertical derivative contours (TauSF) and for channels 15 (SFz15), 30 (SFz30) and 45 (SFz45), time constant with B-field Z component (TauBF) and component channel 36 (BFz36) and Fraser filtered B-field X component for channel 20 (SFxFF20). Each of these maps shows a similar pattern comprising two bands of conductive material (e.g. Figure 6c); a larger one associated with the MWcp unit lying immediately below the Wolverine horizon and a much smaller one lying stratigraphically below this in felsic schist (MWf).

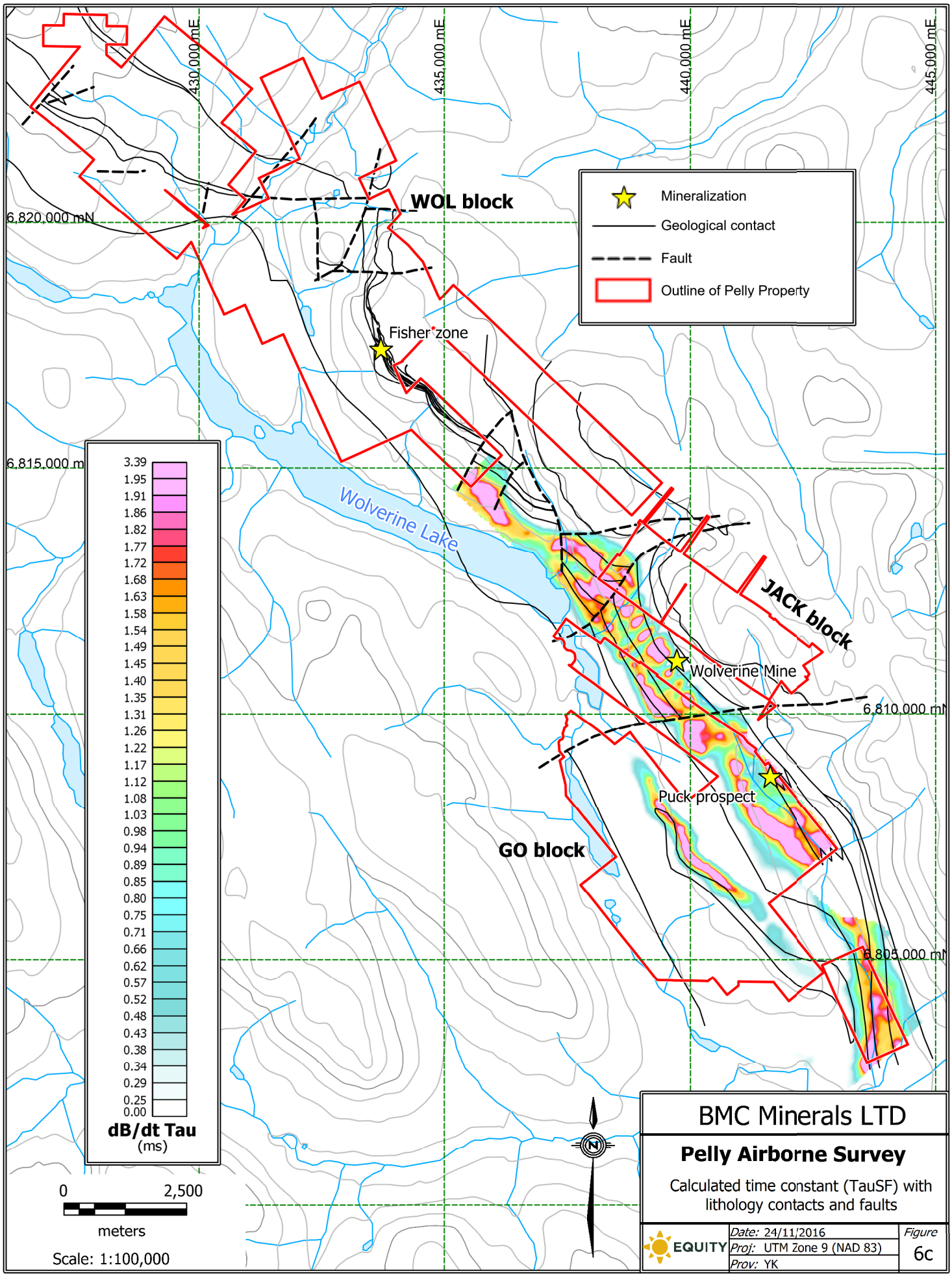
The larger band of high conductivity is continuous along at least 27 km of strike length, across both the 2015 and 2016 VTEM survey areas, and shows a strong spatial correlation with carbonaceous phyllite (MWcp or cSA unit) mapped by both Murphy et al (2001) and Senft and Hall (1997). The northeastern margin of this conductivity high is seen to track northeast in the later EM channels, suggesting a northeast-directed dip that is consistent with geological mapping. The well-defined signature of the MWcp conductor in the VTEM data is significant as this unit occurs immediately below the highly prospective Wolverine horizon.

Integration of the Yukon Government MINFILE coordinate for the Puck prospect (441569 mE, 6808761 mN) with regional-scale mapping suggests that it lies within the top half of the MWcp unit and, therefore, underneath the Wolverine horizon. This is inconsistent with the stratigraphy described in historical diamond drilling logs (Turner and Terry, 1996), which clearly places this prospect within the overlying Wolverine horizon. Geological mapping of this prospect by Turner and Terry (1996) strongly suggests that its actual location is at least 700 m northeast of the location shown in MINFILE, thereby lying off the Pelly Property and on the adjacent Wolverine mining lease.

The smaller conductivity high shows a close spatial association with a lens of carbonaceous phyllite (MWcp) mapped within felsic schist (MWf) of the Wolverine Group. Relative to where it is mapped by Murphy et al (2001), the central axis of the VTEM anomaly lies 250 m east of where it is mapped and extends much less to the southeast (Figure 6c). It is likely that this smaller conductivity high correlates with this MWcp unit, which then implies that this unit is more lens-like in form and located slightly further east than it is currently mapped.


430,000 mE
435,000 mE
440,000 mE
445,000 mE
6,820,000 mN
6,815,000 m
6,810,000 mN
6,805,000 mN
WOL block
JACK block
GO block
Fisher zone
Wolverine Mine
Puck prospect
MWcl?
MWcl?
Wolverine Lake
Mineralization
Geological contact
Fault
Outline of Pelly Property
57568
57522
57482
57458
57434
57413
57391
57374
57361
57351
57342
57334
57328
57322
57316
57310
57305
57300
57295
57291
57287
57284
57281
57279
57277
57276
57274
57273
57272
57270
57269
57268
57267
57265
57264
57263
57260
57255
TMI
(nT)
0
2,500
meters
Scale: 1:100,000
N
BMC Minerals LTD
Pelly Airborne Survey
Total magnetic intensity with lithology contacts and faults
EQUITY
Date: 24/11/2016
Proj: UTM Zone 9 (NAD 83)
Prov: YK
Figure
6a


430,000 mE
435,000 mE
440,000 mE
445,000 mE
6,820,000 mN
6,815,000 mN
6,810,000 mN
6,805,000 mN
Mineralization
Geological contact
Fault
Outline of Pelly Property
WOL block
Fisher zone
Thick, no offset
JACK block
Wolverine Mine
Puck prospect
GO block
0
2,500
meters
Scale: 1:100,000
N
BMC Minerals LTD
Pelly Airborne Survey
Calculated magnetic vertical gradient with lithology contact and faults
EQUITY
Date: 24/11/2016
Proj: UTM Zone 9 (NAD 83)
Prov: YK
Figure
6b


430,000 mE
435,000 mE
440,000 mE
445,000 mE
6,820,000 mN
6,815,000 m
6,810,000 mN
6,805,000 mN
WOL block
JACK block
GO block
Fisher zone
Wolverine Lake
Wolverine Mine
Puck prospect
Mineralization
Geological contact
Fault
Outline of Pelly Property
3.39
1.95
1.91
1.86
1.82
1.77
1.72
1.68
1.63
1.58
1.54
1.49
1.45
1.40
1.35
1.31
1.26
1.22
1.17
1.12
1.08
1.03
0.98
0.94
0.89
0.85
0.80
0.75
0.71
0.66
0.62
0.57
0.52
0.48
0.43
0.38
0.34
0.29
0.25
0.00
dB/dt Tau
(ms)
0
2,500
meters
Scale: 1:100,000
N
BMC Minerals LTD
Pelly Airborne Survey
Calculated time constant (TauSF) with lithology contacts and faults
EQUITY
Date: 24/11/2016
Proj: UTM Zone 9 (NAD 83)
Prov: YK
Figure
6c

9.0 CONCLUSIONS AND RECOMMENDATIONS

Notable findings through a preliminary comparison of 2016 VTEM™ data with historical geological mapping on the Pelly Property suggests:

- Strong formational responses are shown by the Wolverine horizon (magnetics) and the underlying carbonaceous phyllite or MWcp unit (conductivity), which can be used to update the geological map for the Pelly Property;
- Big Campbell mafic volcanic and MWcp show variable magnetic response;
- The Wolverine horizon is thicker and more continuous on the JACK block than shown by regional mapping;
- An unexplained, 1.7 km long, magnetic anomaly occurs along the contact between carbonaceous phyllite (MWcp) and underlying felsic volcanic (MWf);
- The Puck prospect lies at least 700 m northeast of the MINFILE coordinate.

Follow-up work should begin with the careful integration of 2015/16 VTEM data with property- and regional-scale geological mapping for the Pelly Property. Follow-up groundwork is suggested for the thickened Wolverine horizon in the northern part of the JACK block and the 1.7 km long string of small magnetic anomalies located along the MWcp-MWf contact on the GO block. Most importantly the 2016 VTEM data should be processed by a qualified geophysicist to identify possible VMS targets.

Respectfully submitted,

Signed and sealed: "Ron Voordouw"

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Ron Voordouw

EQUITY EXPLORATION CONSULTANTS LTD.

Vancouver, British Columbia

Date: March 21st, 2017

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Appendix B: Statement of Expenditures

STATEMENT OF EXPENDITURES
Pelly Project
February 01, 2016 - December 31, 2016

PROFESSIONAL FEES AND WAGES:			
Murray Jones, P. Geo.			
3.88 days @ $700/day	2,716.00		
Ronald Voordouw, P.Geo.			
7.01 days @ $700/day	4,907.00	$	7,623.00
EXPENSES:			
Plot Charges	195.34		
Postage	20.82		
Bulk Fuel	4,320.00		
Airborne Geophysics: Field Work	86,736.16		
Geophysical Consulting	1,925.00	$	93,197.32
TOTAL:		$	100,820.32

Appendix C: Claim Data

Table C-1: Tenure details for Pelly Property claims

Grant Number	Tenure Type	Claim Name	Claim Label	Staking Date	Recording Date	Expiry Date	Area km²	Block
YB47402	Quartz	GO	GO 1	13-Apr-94	15-Apr-94	2-Apr-23	0.20	GO block
YB47403	Quartz	GO	GO 2	13-Apr-94	15-Apr-94	2-Apr-23	0.20	GO block
YB47404	Quartz	GO	GO 3	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47405	Quartz	GO	GO 4	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47406	Quartz	GO	GO 5	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47407	Quartz	GO	GO 6	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47408	Quartz	GO	GO 7	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47409	Quartz	GO	GO 8	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47410	Quartz	GO	GO 9	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47411	Quartz	GO	GO 10	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47412	Quartz	GO	GO 11	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47413	Quartz	GO	GO 12	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47414	Quartz	GO	GO 13	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47415	Quartz	GO	GO 14	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47416	Quartz	GO	GO 15	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47417	Quartz	GO	GO 16	13-Apr-94	15-Apr-94	2-Apr-23	0.20	GO block
YB47418	Quartz	GO	GO 17	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47419	Quartz	GO	GO 18	13-Apr-94	15-Apr-94	2-Apr-23	0.20	GO block
YB47420	Quartz	GO	GO 19	13-Apr-94	15-Apr-94	2-Apr-23	0.19	GO block
YB47421	Quartz	GO	GO 20	13-Apr-94	15-Apr-94	2-Apr-23	0.19	GO block
YB47422	Quartz	GO	GO 21	13-Apr-94	15-Apr-94	2-Apr-23	0.20	GO block
YB47423	Quartz	GO	GO 22	13-Apr-94	15-Apr-94	2-Apr-23	0.20	GO block
YB47424	Quartz	GO	GO 23	13-Apr-94	15-Apr-94	2-Apr-23	0.20	GO block
YB47425	Quartz	GO	GO 24	13-Apr-94	15-Apr-94	2-Apr-23	0.20	GO block
YB47426	Quartz	GO	GO 25	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47427	Quartz	GO	GO 26	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47428	Quartz	GO	GO 27	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47429	Quartz	GO	GO 28	13-Apr-94	15-Apr-94	2-Apr-23	0.21	GO block
YB47434	Quartz	WOL	WOL 29	13-Apr-94	15-Apr-94	2-Apr-23	0.20	WOL block
YB47435	Quartz	WOL	WOL 30	13-Apr-94	15-Apr-94	2-Apr-23	0.19	WOL block
YB47436	Quartz	WOL	WOL 31	13-Apr-94	15-Apr-94	2-Apr-23	0.19	WOL block
YB47437	Quartz	WOL	WOL 32	13-Apr-94	15-Apr-94	2-Apr-23	0.19	WOL block
YB47438	Quartz	WOL	WOL 33	13-Apr-94	15-Apr-94	2-Apr-23	0.20	WOL block
YB47439	Quartz	WOL	WOL 34	13-Apr-94	15-Apr-94	2-Apr-23	0.20	WOL block
YB47440	Quartz	WOL	WOL 35	13-Apr-94	15-Apr-94	2-Apr-23	0.20	WOL block
YB47441	Quartz	WOL	WOL 36	13-Apr-94	15-Apr-94	2-Apr-23	0.20	WOL block
YB47442	Quartz	WOL	WOL 37	13-Apr-94	15-Apr-94	2-Apr-23	0.20	WOL block
YB47443	Quartz	WOL	WOL 38	13-Apr-94	15-Apr-94	2-Apr-23	0.19	WOL block
YB47444	Quartz	WOL	WOL 39	13-Apr-94	15-Apr-94	2-Apr-23	0.20	WOL block
YB47445	Quartz	WOL	WOL 40	13-Apr-94	15-Apr-94	2-Apr-23	0.20	WOL block
YB47712	Quartz	WOL	WOL 1	13-Apr-94	26-Apr-94	2-Apr-23	0.18	WOL block
YB47713	Quartz	WOL	WOL 2	13-Apr-94	26-Apr-94	2-Apr-23	0.18	WOL block
YB47714	Quartz	WOL	WOL 3	13-Apr-94	26-Apr-94	2-Apr-23	0.18	WOL block
YB47715	Quartz	WOL	WOL 4	13-Apr-94	26-Apr-94	2-Apr-23	0.18	WOL block
YB47716	Quartz	WOL	WOL 5	13-Apr-94	26-Apr-94	2-Apr-23	0.18	WOL block
YB47717	Quartz	WOL	WOL 6	13-Apr-94	26-Apr-94	2-Apr-23	0.18	WOL block
YB47718	Quartz	WOL	WOL 7	13-Apr-94	26-Apr-94	2-Apr-23	0.18	WOL block
YB47719	Quartz	WOL	WOL 8	13-Apr-94	26-Apr-94	2-Apr-23	0.18	WOL block
YB47720	Quartz	WOL	WOL 9	13-Apr-94	26-Apr-94	2-Apr-23	0.18	WOL block
YB47721	Quartz	WOL	WOL 10	13-Apr-94	26-Apr-94	2-Apr-23	0.18	WOL block
YB47722	Quartz	WOL	WOL 11	13-Apr-94	26-Apr-94	2-Apr-23	0.18	WOL block
YB47723	Quartz	WOL	WOL 12	13-Apr-94	26-Apr-94	2-Apr-23	0.18	WOL block
YB47724	Quartz	WOL	WOL 13	13-Apr-94	26-Apr-94	2-Apr-23	0.18	WOL block
YB47725	Quartz	WOL	WOL 14	13-Apr-94	26-Apr-94	2-Apr-23	0.18	WOL block
YB47726	Quartz	WOL	WOL 15	13-Apr-94	26-Apr-94	2-Apr-23	0.19	WOL block

Grant Number	Tenure Type	Claim Name	Claim Label	Staking Date	Recording Date	Expiry Date	Area km²	Block
YB47727	Quartz	WOL	WOL 16	13-Apr-94	26-Apr-94	2-Apr-23	0.19	WOL block
YB47728	Quartz	WOL	WOL 17	13-Apr-94	26-Apr-94	2-Apr-23	0.19	WOL block
YB47729	Quartz	WOL	WOL 18	13-Apr-94	26-Apr-94	2-Apr-23	0.20	WOL block
YB47730	Quartz	WOL	WOL 19	13-Apr-94	26-Apr-94	2-Apr-23	0.21	WOL block
YB47731	Quartz	WOL	WOL 20	13-Apr-94	26-Apr-94	2-Apr-23	0.20	WOL block
YB47732	Quartz	WOL	WOL 21	13-Apr-94	26-Apr-94	2-Apr-23	0.21	WOL block
YB47733	Quartz	WOL	WOL 22	13-Apr-94	26-Apr-94	2-Apr-23	0.20	WOL block
YB47734	Quartz	WOL	WOL 23	13-Apr-94	26-Apr-94	2-Apr-23	0.21	WOL block
YB47735	Quartz	WOL	WOL 24	13-Apr-94	26-Apr-94	2-Apr-23	0.21	WOL block
YB47736	Quartz	WOL	WOL 25	13-Apr-94	26-Apr-94	2-Apr-23	0.19	WOL block
YB47737	Quartz	WOL	WOL 26	13-Apr-94	26-Apr-94	2-Apr-23	0.19	WOL block
YB47738	Quartz	WOL	WOL 27	13-Apr-94	26-Apr-94	2-Apr-23	0.21	WOL block
YB47739	Quartz	WOL	WOL 28	13-Apr-94	26-Apr-94	2-Apr-23	0.20	WOL block
YB47760	Quartz	GO	GO 29	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47761	Quartz	GO	GO 30	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47762	Quartz	GO	GO 31	30-Apr-94	2-May-94	2-Apr-23	0.21	GO block
YB47763	Quartz	GO	GO 32	30-Apr-94	2-May-94	2-Apr-23	0.21	GO block
YB47764	Quartz	GO	GO 33	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47765	Quartz	GO	GO 34	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47766	Quartz	GO	GO 35	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47767	Quartz	GO	GO 36	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47768	Quartz	GO	GO 37	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47769	Quartz	GO	GO 38	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47770	Quartz	GO	GO 39	30-Apr-94	2-May-94	2-Apr-23	0.18	GO block
YB47771	Quartz	GO	GO 40	30-Apr-94	2-May-94	2-Apr-23	0.18	GO block
YB47772	Quartz	GO	GO 41	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47773	Quartz	GO	GO 42	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47774	Quartz	GO	GO 43	30-Apr-94	2-May-94	2-Apr-23	0.21	GO block
YB47775	Quartz	GO	GO 44	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47776	Quartz	GO	GO 45	30-Apr-94	2-May-94	2-Apr-23	0.21	GO block
YB47777	Quartz	GO	GO 46	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47778	Quartz	GO	GO 47	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47779	Quartz	GO	GO 48	30-Apr-94	2-May-94	2-Apr-23	0.19	GO block
YB47780	Quartz	GO	GO 49	30-Apr-94	2-May-94	2-Apr-23	0.21	GO block
YB47781	Quartz	GO	GO 50	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47782	Quartz	GO	GO 51	30-Apr-94	2-May-94	2-Apr-23	0.09	GO block
YB47783	Quartz	GO	GO 52	30-Apr-94	2-May-94	2-Apr-23	0.11	GO block
YB47784	Quartz	GO	GO 53	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47785	Quartz	GO	GO 54	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47786	Quartz	GO	GO 55	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47787	Quartz	GO	GO 56	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47788	Quartz	GO	GO 57	30-Apr-94	2-May-94	2-Apr-23	0.21	GO block
YB47789	Quartz	GO	GO 58	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47790	Quartz	GO	GO 59	30-Apr-94	2-May-94	2-Apr-23	0.21	GO block
YB47791	Quartz	GO	GO 60	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB47792	Quartz	GO	GO 61	30-Apr-94	2-May-94	2-Apr-23	0.17	GO block
YB47793	Quartz	GO	GO 62	30-Apr-94	2-May-94	2-Apr-23	0.18	GO block
YB47794	Quartz	BOOT	BOOT 1	30-Apr-94	2-May-94	2-Apr-23	0.19	GO block
YB47795	Quartz	BOOT	BOOT 2	30-Apr-94	2-May-94	2-Apr-23	0.19	GO block
YB47796	Quartz	BOOT	BOOT 3	30-Apr-94	2-May-94	2-Apr-23	0.19	GO block
YB47797	Quartz	BOOT	BOOT 4	30-Apr-94	2-May-94	2-Apr-23	0.19	GO block
YB47798	Quartz	BOOT	BOOT 5	30-Apr-94	2-May-94	2-Apr-23	0.19	GO block
YB47799	Quartz	BOOT	BOOT 6	30-Apr-94	2-May-94	2-Apr-23	0.19	GO block
YB47800	Quartz	BOOT	BOOT 7	30-Apr-94	2-May-94	2-Apr-23	0.19	GO block
YB48402	Quartz	BOOT	BOOT 8	30-Apr-94	2-May-94	2-Apr-23	0.18	GO block
YB48403	Quartz	BOOT	BOOT 9	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block
YB48404	Quartz	BOOT	BOOT 10	30-Apr-94	2-May-94	2-Apr-23	0.19	GO block
YB48405	Quartz	BOOT	BOOT 11	30-Apr-94	2-May-94	2-Apr-23	0.20	GO block

Grant Number	Tenure Type	Claim Name	Claim Label	Staking Date	Recording Date	Expiry Date	Area km²	Block
YB48406	Quartz	BOOT	BOOT 12	30-Apr-94	2-May-94	2-Apr-23	0.19	GO block
YB48407	Quartz	BOOT	BOOT 13	30-Apr-94	2-May-94	2-Apr-23	0.19	GO block
YB48408	Quartz	BOOT	BOOT 14	30-Apr-94	2-May-94	2-Apr-23	0.19	GO block
YB48409	Quartz	BOOT	BOOT 15	30-Apr-94	2-May-94	2-Apr-23	0.19	GO block
YB48410	Quartz	BOOT	BOOT 16	30-Apr-94	2-May-94	2-Apr-23	0.18	GO block
YB48411	Quartz	BOOT	BOOT 17	30-Apr-94	2-May-94	2-Apr-23	0.19	GO block
YB48412	Quartz	BOOT	BOOT 18	30-Apr-94	2-May-94	2-Apr-23	0.17	GO block
YB48801	Quartz	WOL	WOL 41	30-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48802	Quartz	WOL	WOL 42	30-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48803	Quartz	WOL	WOL 43	30-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48804	Quartz	WOL	WOL 44	30-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48805	Quartz	WOL	WOL 45	30-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48806	Quartz	WOL	WOL 46	30-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48807	Quartz	WOL	WOL 47	30-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48808	Quartz	WOL	WOL 48	30-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48809	Quartz	WOL	WOL 49	30-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48810	Quartz	WOL	WOL 50	30-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48811	Quartz	WOL	WOL 51	30-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48812	Quartz	WOL	WOL 52	30-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48813	Quartz	WOL	WOL 53	30-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48814	Quartz	WOL	WOL 54	30-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48815	Quartz	WOL	WOL 55	30-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48816	Quartz	WOL	WOL 56	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48817	Quartz	WOL	WOL 57	30-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48818	Quartz	WOL	WOL 58	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48819	Quartz	WOL	WOL 59	30-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48820	Quartz	WOL	WOL 60	30-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48821	Quartz	WOL	WOL 61	30-Apr-94	2-May-94	2-Apr-23	0.16	WOL block
YB48822	Quartz	WOL	WOL 62	30-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48823	Quartz	WOL	WOL 63	30-Apr-94	2-May-94	2-Apr-23	0.03	WOL block
YB48824	Quartz	WOL	WOL 64	30-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48825	Quartz	WOL	WOL 65	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48826	Quartz	WOL	WOL 66	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48827	Quartz	WOL	WOL 67	30-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48828	Quartz	WOL	WOL 68	30-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48829	Quartz	WOL	WOL 69	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48830	Quartz	WOL	WOL 70	30-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48831	Quartz	WOL	WOL 71	30-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48832	Quartz	WOL	WOL 72	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48833	Quartz	WOL	WOL 73	30-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48834	Quartz	WOL	WOL 74	30-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48835	Quartz	WOL	WOL 75	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48836	Quartz	WOL	WOL 76	30-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48837	Quartz	WOL	WOL 77	30-Apr-94	2-May-94	2-Apr-23	0.22	WOL block
YB48838	Quartz	WOL	WOL 78	30-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48839	Quartz	WOL	WOL 79	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48840	Quartz	WOL	WOL 80	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48841	Quartz	WOL	WOL 81	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48842	Quartz	WOL	WOL 82	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48843	Quartz	WOL	WOL 83	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48844	Quartz	WOL	WOL 84	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48845	Quartz	WOL	WOL 85	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48846	Quartz	WOL	WOL 86	30-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48847	Quartz	WOL	WOL 87	29-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48848	Quartz	WOL	WOL 88	29-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48849	Quartz	WOL	WOL 89	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48850	Quartz	WOL	WOL 90	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48851	Quartz	WOL	WOL 91	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block

Grant Number	Tenure Type	Claim Name	Claim Label	Staking Date	Recording Date	Expiry Date	Area km²	Block
YB48852	Quartz	WOL	WOL 92	29-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48853	Quartz	WOL	WOL 93	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48854	Quartz	WOL	WOL 94	29-Apr-94	2-May-94	2-Apr-23	0.17	WOL block
YB48855	Quartz	WOL	WOL 95	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48856	Quartz	WOL	WOL 96	29-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48857	Quartz	WOL	WOL 97	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48858	Quartz	WOL	WOL 98	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48859	Quartz	WOL	WOL 99	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48860	Quartz	WOL	WOL 100	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48861	Quartz	WOL	WOL 101	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48862	Quartz	WOL	WOL 102	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48863	Quartz	WOL	WOL 103	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48864	Quartz	WOL	WOL 104	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48865	Quartz	WOL	WOL 105	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48866	Quartz	WOL	WOL 106	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48867	Quartz	WOL	WOL 107	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48868	Quartz	WOL	WOL 108	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48869	Quartz	WOL	WOL 109	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48870	Quartz	WOL	WOL 110	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48871	Quartz	WOL	WOL 111	29-Apr-94	2-May-94	2-Apr-23	0.15	WOL block
YB48872	Quartz	WOL	WOL 112	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48873	Quartz	WOL	WOL 113	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48874	Quartz	WOL	WOL 114	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48875	Quartz	WOL	WOL 115	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48876	Quartz	WOL	WOL 116	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48877	Quartz	WOL	WOL 117	29-Apr-94	2-May-94	2-Apr-23	0.18	WOL block
YB48878	Quartz	WOL	WOL 118	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48879	Quartz	WOL	WOL 119	29-Apr-94	2-May-94	2-Apr-23	0.22	WOL block
YB48880	Quartz	WOL	WOL 120	29-Apr-94	2-May-94	2-Apr-23	0.22	WOL block
YB48881	Quartz	WOL	WOL 121	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48882	Quartz	WOL	WOL 122	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48883	Quartz	WOL	WOL 123	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48884	Quartz	WOL	WOL 124	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48885	Quartz	WOL	WOL 125	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48886	Quartz	WOL	WOL 126	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48887	Quartz	WOL	WOL 127	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48888	Quartz	WOL	WOL 128	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48889	Quartz	WOL	WOL 129	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48890	Quartz	WOL	WOL 130	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48891	Quartz	WOL	WOL 131	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48892	Quartz	WOL	WOL 132	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48893	Quartz	WOL	WOL 133	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48894	Quartz	WOL	WOL 134	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48895	Quartz	WOL	WOL 135	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48896	Quartz	WOL	WOL 136	29-Apr-94	2-May-94	2-Apr-23	0.19	WOL block
YB48897	Quartz	WOL	WOL 137	29-Apr-94	2-May-94	2-Apr-23	0.22	WOL block
YB48898	Quartz	WOL	WOL 138	29-Apr-94	2-May-94	2-Apr-23	0.22	WOL block
YB48899	Quartz	WOL	WOL 139	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48900	Quartz	WOL	WOL 140	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48901	Quartz	WOL	WOL 141	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48902	Quartz	WOL	WOL 142	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48903	Quartz	WOL	WOL 143	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48904	Quartz	WOL	WOL 144	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48905	Quartz	WOL	WOL 145	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48906	Quartz	WOL	WOL 146	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48907	Quartz	WOL	WOL 147	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48908	Quartz	WOL	WOL 148	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48909	Quartz	WOL	WOL 149	29-Apr-94	2-May-94	2-Apr-23	0.22	WOL block

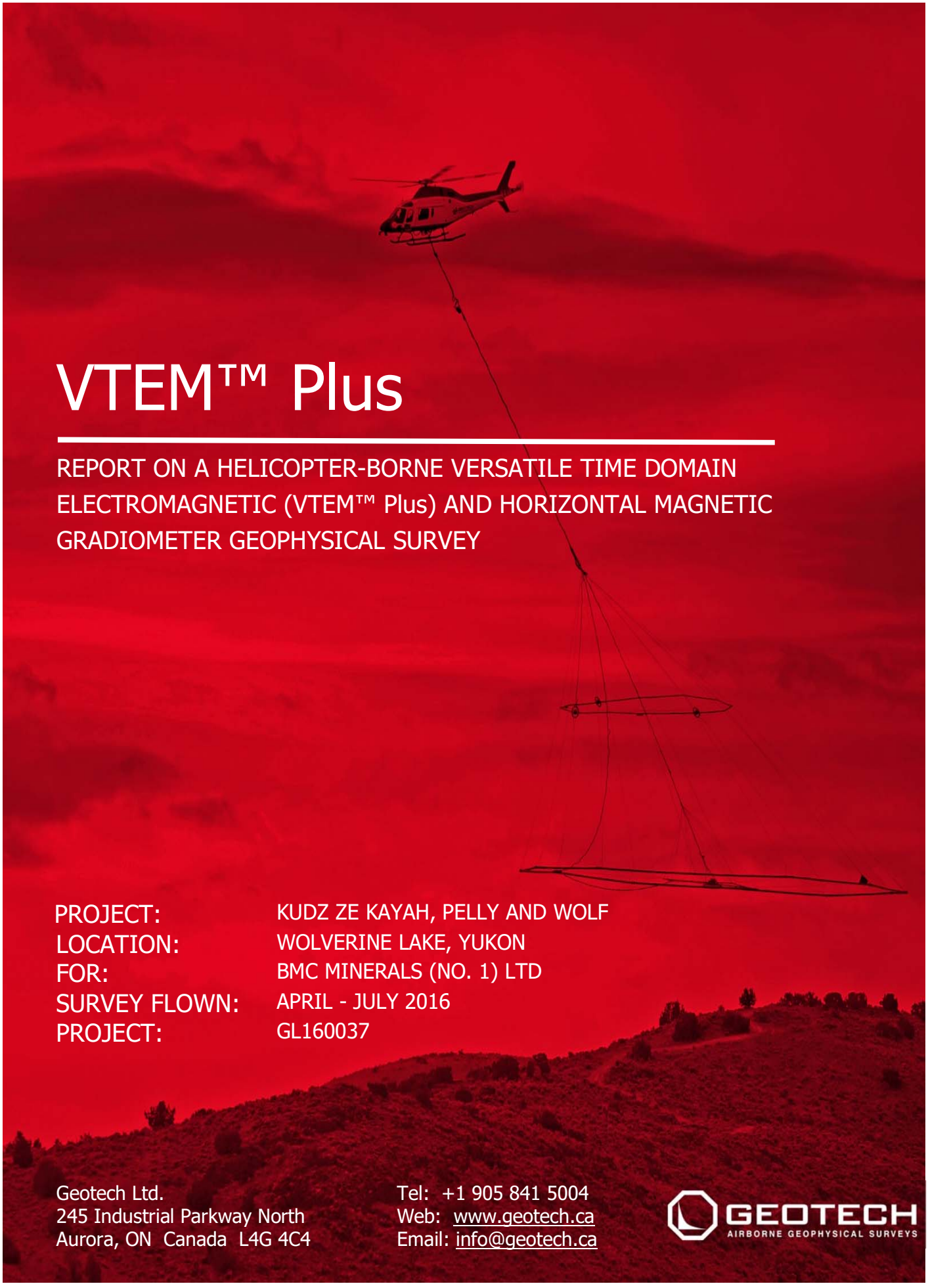
Grant Number	Tenure Type	Claim Name	Claim Label	Staking Date	Recording Date	Expiry Date	Area km²	Block
YB48910	Quartz	WOL	WOL 150	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48911	Quartz	WOL	WOL 151	29-Apr-94	2-May-94	2-Apr-23	0.20	WOL block
YB48912	Quartz	WOL	WOL 152	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48913	Quartz	WOL	WOL 153	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48914	Quartz	WOL	WOL 154	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48915	Quartz	WOL	WOL 155	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB48916	Quartz	WOL	WOL 156	29-Apr-94	2-May-94	2-Apr-23	0.21	WOL block
YB52227	Quartz	GO	GO 82	14-Aug-94	31-Aug-94	2-Apr-23	0.09	GO block
YB52228	Quartz	GO	GO 83	14-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52229	Quartz	GO	GO 84	14-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52230	Quartz	GO	GO 85	14-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52231	Quartz	GO	GO 86	14-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52232	Quartz	GO	GO 87	14-Aug-94	31-Aug-94	2-Apr-23	0.21	GO block
YB52233	Quartz	GO	GO 88	14-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52234	Quartz	GO	GO 89	14-Aug-94	31-Aug-94	2-Apr-23	0.21	GO block
YB52235	Quartz	GO	GO 90	14-Aug-94	31-Aug-94	2-Apr-23	0.21	GO block
YB52236	Quartz	GO	GO 91	15-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52237	Quartz	GO	GO 92	15-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52238	Quartz	GO	GO 93	15-Aug-94	31-Aug-94	2-Apr-23	0.21	GO block
YB52239	Quartz	GO	GO 94	15-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52240	Quartz	GO	GO 95	15-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52241	Quartz	GO	GO 96	15-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52242	Quartz	GO	GO 97	15-Aug-94	31-Aug-94	2-Apr-23	0.19	GO block
YB52243	Quartz	GO	GO 98	15-Aug-94	31-Aug-94	2-Apr-23	0.19	GO block
YB52244	Quartz	GO	GO 99	15-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52245	Quartz	GO	GO 100	15-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52246	Quartz	GO	GO 101	15-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52247	Quartz	GO	GO 102	15-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52248	Quartz	GO	GO 103	15-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52249	Quartz	GO	GO 104	15-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52250	Quartz	GO	GO 105	15-Aug-94	31-Aug-94	2-Apr-23	0.19	GO block
YB52251	Quartz	GO	GO 106	15-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52252	Quartz	GO	GO 110	14-Aug-94	31-Aug-94	2-Apr-23	0.10	GO block
YB52253	Quartz	GO	GO 111	14-Aug-94	31-Aug-94	2-Apr-23	0.02	GO block
YB52254	Quartz	GO	GO 112	14-Aug-94	31-Aug-94	2-Apr-23	0.16	GO block
YB52255	Quartz	GO	GO 113	14-Aug-94	31-Aug-94	2-Apr-23	0.18	GO block
YB52256	Quartz	GO	GO 114	14-Aug-94	31-Aug-94	2-Apr-23	0.21	GO block
YB52257	Quartz	GO	GO 115	14-Aug-94	31-Aug-94	2-Apr-23	0.21	GO block
YB52258	Quartz	GO	GO 116	14-Aug-94	31-Aug-94	2-Apr-23	0.21	GO block
YB52259	Quartz	GO	GO 117	14-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52260	Quartz	GO	GO 118	14-Aug-94	31-Aug-94	2-Apr-23	0.20	GO block
YB52261	Quartz	GO	GO 119	14-Aug-94	31-Aug-94	2-Apr-23	0.21	GO block
YB52262	Quartz	GO	GO 120	14-Aug-94	31-Aug-94	2-Apr-23	0.21	GO block
YB52263	Quartz	GO	GO 121	14-Aug-94	31-Aug-94	2-Apr-23	0.21	GO block
YB52264	Quartz	GO	GO 122	14-Aug-94	31-Aug-94	2-Apr-23	0.21	GO block
YB52265	Quartz	GO	GO 123	15-Aug-94	31-Aug-94	2-Apr-23	0.19	GO block
YB52266	Quartz	GO	GO 124	15-Aug-94	31-Aug-94	2-Apr-23	0.19	GO block
YB55308	Quartz	TAG	TAG 1388	18-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55378	Quartz	WOL	WOL 181	21-Aug-94	31-Aug-94	2-Apr-23	0.13	WOL block
YB55379	Quartz	WOL	WOL 182	21-Aug-94	31-Aug-94	2-Apr-23	0.13	WOL block
YB55380	Quartz	WOL	WOL 183	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55381	Quartz	WOL	WOL 184	21-Aug-94	31-Aug-94	2-Apr-23	0.17	WOL block
YB55382	Quartz	WOL	WOL 185	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55383	Quartz	WOL	WOL 186	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55384	Quartz	WOL	WOL 187	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55385	Quartz	WOL	WOL 188	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55386	Quartz	WOL	WOL 189	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55387	Quartz	WOL	WOL 190	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block

Grant Number	Tenure Type	Claim Name	Claim Label	Staking Date	Recording Date	Expiry Date	Area km²	Block
YB55388	Quartz	WOL	WOL 191	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55389	Quartz	WOL	WOL 192	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55390	Quartz	WOL	WOL 193	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55391	Quartz	WOL	WOL 194	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55392	Quartz	WOL	WOL 195	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55393	Quartz	WOL	WOL 196	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55394	Quartz	WOL	WOL 197	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55395	Quartz	WOL	WOL 198	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55396	Quartz	WOL	WOL 199	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55397	Quartz	WOL	WOL 200	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55398	Quartz	WOL	WOL 201	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55399	Quartz	WOL	WOL 202	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55400	Quartz	WOL	WOL 203	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55401	Quartz	WOL	WOL 204	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55402	Quartz	WOL	WOL 205	21-Aug-94	31-Aug-94	2-Apr-23	0.14	WOL block
YB55403	Quartz	WOL	WOL 206	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55404	Quartz	WOL	WOL 207	21-Aug-94	31-Aug-94	2-Apr-23	0.08	WOL block
YB55405	Quartz	WOL	WOL 208	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55406	Quartz	WOL	WOL 209	21-Aug-94	31-Aug-94	2-Apr-23	0.18	WOL block
YB55407	Quartz	WOL	WOL 210	21-Aug-94	31-Aug-94	2-Apr-23	0.21	JACK block
YB55408	Quartz	WOL	WOL 211	21-Aug-94	31-Aug-94	2-Apr-23	0.17	JACK block
YB55409	Quartz	WOL	WOL 212	21-Aug-94	31-Aug-94	2-Apr-23	0.19	JACK block
YB55410	Quartz	WOL	WOL 213	21-Aug-94	31-Aug-94	2-Apr-23	0.19	JACK block
YB55411	Quartz	WOL	WOL 214	21-Aug-94	31-Aug-94	2-Apr-23	0.24	JACK block
YB55412	Quartz	WOL	WOL 215	21-Aug-94	31-Aug-94	2-Apr-23	0.16	JACK block
YB55413	Quartz	WOL	WOL 216	21-Aug-94	31-Aug-94	2-Apr-23	0.16	JACK block
YB55414	Quartz	WOL	WOL 217	21-Aug-94	31-Aug-94	2-Apr-23	0.18	JACK block
YB55415	Quartz	WOL	WOL 218	21-Aug-94	31-Aug-94	2-Apr-23	0.21	JACK block
YB55416	Quartz	WOL	WOL 219	21-Aug-94	31-Aug-94	2-Apr-23	0.19	JACK block
YB55417	Quartz	WOL	WOL 220	21-Aug-94	31-Aug-94	2-Apr-23	0.16	JACK block
YB55418	Quartz	WOL	WOL 221	21-Aug-94	31-Aug-94	2-Apr-23	0.16	JACK block
YB55419	Quartz	WOL	WOL 222	21-Aug-94	31-Aug-94	2-Apr-23	0.18	JACK block
YB55420	Quartz	WOL	WOL 223	21-Aug-94	31-Aug-94	2-Apr-23	0.17	JACK block
YB55421	Quartz	WOL	WOL 224	21-Aug-94	31-Aug-94	2-Apr-23	0.18	JACK block
YB55422	Quartz	WOL	WOL 225	21-Aug-94	31-Aug-94	2-Apr-23	0.18	JACK block
YB55423	Quartz	WOL	WOL 226	21-Aug-94	31-Aug-94	2-Apr-23	0.17	JACK block
YB55424	Quartz	WOL	WOL 227	21-Aug-94	31-Aug-94	2-Apr-23	0.16	JACK block
YB55425	Quartz	WOL	WOL 228	21-Aug-94	31-Aug-94	2-Apr-23	0.15	JACK block
YB55426	Quartz	WOL	WOL 229	21-Aug-94	31-Aug-94	2-Apr-23	0.16	JACK block
YB55427	Quartz	WOL	WOL 230	22-Aug-94	31-Aug-94	2-Apr-23	0.20	JACK block
YB55428	Quartz	WOL	WOL 231	22-Aug-94	31-Aug-94	2-Apr-23	0.19	JACK block
YB55429	Quartz	WOL	WOL 232	22-Aug-94	31-Aug-94	2-Apr-23	0.19	JACK block
YB55430	Quartz	WOL	WOL 233	22-Aug-94	31-Aug-94	2-Apr-23	0.19	JACK block
YB55431	Quartz	WOL	WOL 234	22-Aug-94	31-Aug-94	2-Apr-23	0.20	JACK block
YB55432	Quartz	WOL	WOL 235	22-Aug-94	31-Aug-94	2-Apr-23	0.19	JACK block
YB55433	Quartz	WOL	WOL 236	22-Aug-94	31-Aug-94	2-Apr-23	0.17	JACK block
YB55434	Quartz	WOL	WOL 237	22-Aug-94	31-Aug-94	2-Apr-23	0.15	JACK block
YB55435	Quartz	WOL	WOL 238	22-Aug-94	31-Aug-94	2-Apr-23	0.15	JACK block
YB55436	Quartz	WOL	WOL 239	22-Aug-94	31-Aug-94	2-Apr-23	0.14	JACK block
YB55779	Quartz	GO	GO 108	21-Aug-94	6-Sep-94	2-Apr-23	0.20	GO block
YB55780	Quartz	GO	GO 109	21-Aug-94	6-Sep-94	2-Apr-23	0.15	GO block
YB55781	Quartz	GO	GO 77	21-Aug-94	6-Sep-94	2-Apr-23	0.16	GO block
YB55782	Quartz	GO	GO 79	21-Aug-94	6-Sep-94	2-Apr-23	0.16	GO block
YB55783	Quartz	GO	GO 81	21-Aug-94	6-Sep-94	2-Apr-23	0.04	GO block
YB55784	Quartz	WOL	WOL 164	16-Aug-94	6-Sep-94	2-Apr-23	0.04	WOL block
YB55785	Quartz	WOL	WOL 165	16-Aug-94	6-Sep-94	2-Apr-23	0.07	WOL block
YB55786	Quartz	WOL	WOL 166	16-Aug-94	6-Sep-94	2-Apr-23	0.12	WOL block
YB55787	Quartz	WOL	WOL 167	16-Aug-94	6-Sep-94	2-Apr-23	0.20	WOL block

Grant Number	Tenure Type	Claim Name	Claim Label	Staking Date	Recording Date	Expiry Date	Area km²	Block
YB55788	Quartz	WOL	WOL 168	16-Aug-94	6-Sep-94	2-Apr-23	0.20	WOL block
YB55789	Quartz	WOL	WOL 169	16-Aug-94	6-Sep-94	2-Apr-23	0.20	WOL block
YB55790	Quartz	WOL	WOL 170	16-Aug-94	6-Sep-94	2-Apr-23	0.19	WOL block
YB55791	Quartz	WOL	WOL 171	16-Aug-94	6-Sep-94	2-Apr-23	0.20	WOL block
YB55792	Quartz	WOL	WOL 172	16-Aug-94	6-Sep-94	2-Apr-23	0.19	WOL block
YB55793	Quartz	WOL	WOL 173	16-Aug-94	6-Sep-94	2-Apr-23	0.20	WOL block
YB55794	Quartz	WOL	WOL 174	16-Aug-94	6-Sep-94	2-Apr-23	0.16	WOL block
YB55795	Quartz	WOL	WOL 175	16-Aug-94	6-Sep-94	2-Apr-23	0.26	WOL block
YB55796	Quartz	WOL	WOL 176	16-Aug-94	6-Sep-94	2-Apr-23	0.12	WOL block
YB55797	Quartz	WOL	WOL 177	16-Aug-94	6-Sep-94	2-Apr-23	0.28	WOL block
YB55798	Quartz	WOL	WOL 178	16-Aug-94	6-Sep-94	2-Apr-23	0.27	WOL block
YB55799	Quartz	WOL	WOL 179	16-Aug-94	6-Sep-94	2-Apr-23	0.23	WOL block
YB55800	Quartz	WOL	WOL 180	16-Aug-94	6-Sep-94	2-Apr-23	0.21	WOL block
YB55862	Quartz	TAG	TAG 1412	18-Aug-94	6-Sep-94	2-Apr-23	0.10	WOL block
YB55863	Quartz	TAG	TAG 1413	18-Aug-94	6-Sep-94	2-Apr-23	0.10	WOL block
YB55864	Quartz	TAG	TAG 1414	18-Aug-94	6-Sep-94	2-Apr-23	0.18	WOL block
YB55865	Quartz	TAG	TAG 1415	18-Aug-94	6-Sep-94	2-Apr-23	0.18	WOL block
YB55880	Quartz	TAG	TAG 1430	24-Aug-94	6-Sep-94	2-Apr-23	0.16	WOL block
YB70142	Quartz	WOL	WOL 240	22-Sep-95	13-Oct-95	2-Apr-23	0.03	JACK block
YB70143	Quartz	WOL	WOL 241	22-Sep-95	13-Oct-95	2-Apr-23	0.03	JACK block
YB70144	Quartz	WOL	WOL 242	22-Sep-95	13-Oct-95	2-Apr-23	0.04	JACK block
YB70145	Quartz	WOL	WOL 243	22-Sep-95	13-Oct-95	2-Apr-23	0.06	JACK block
YB70146	Quartz	WOL	WOL 244	22-Sep-95	13-Oct-95	2-Apr-23	0.04	JACK block
YB70148	Quartz	WOL	WOL 246	22-Sep-95	13-Oct-95	2-Apr-23	0.02	JACK block
YB70151	Quartz	WOL	WOL 249	22-Sep-95	13-Oct-95	2-Apr-23	0.18	JACK block
YB84457	Quartz	BOOT	BOOT 19	28-May-96	17-Jun-96	2-Apr-23	0.15	GO block
YB84458	Quartz	BOOT	BOOT 20	28-May-96	17-Jun-96	2-Apr-23	0.12	GO block
YB84459	Quartz	BOOT	BOOT 21	28-May-96	17-Jun-96	2-Apr-23	0.07	GO block
YB84460	Quartz	BOOT	BOOT 22	28-May-96	17-Jun-96	2-Apr-23	0.11	GO block
YB84461	Quartz	JACK	JACK 1	27-May-96	17-Jun-96	2-Apr-23	0.00	JACK block
YB84462	Quartz	JACK	JACK 2	27-May-96	17-Jun-96	2-Apr-23	0.01	JACK block
YB84463	Quartz	JACK	JACK 3	27-May-96	17-Jun-96	2-Apr-23	0.01	JACK block
YB84464	Quartz	JACK	JACK 4	27-May-96	17-Jun-96	2-Apr-23	0.00	GO block
YB84465	Quartz	JACK	JACK 5	27-May-96	17-Jun-96	2-Apr-23	0.01	GO block
YB84466	Quartz	JACK	JACK 6	26-May-96	17-Jun-96	2-Apr-23	0.05	JACK block
YB84467	Quartz	JACK	JACK 7	26-May-96	17-Jun-96	2-Apr-23	0.04	JACK block
YB84468	Quartz	JACK	JACK 8	26-May-96	17-Jun-96	2-Apr-23	0.04	JACK block
YB84469	Quartz	JACK	JACK 9	26-May-96	17-Jun-96	2-Apr-23	0.03	JACK block
YB84470	Quartz	JACK	JACK 10	26-May-96	17-Jun-96	2-Apr-23	0.02	JACK block
YB84471	Quartz	JACK	JACK 11	26-May-96	17-Jun-96	2-Apr-23	0.01	JACK block
YB84472	Quartz	JACK	JACK 12	26-May-96	17-Jun-96	2-Apr-23	0.03	JACK block
YB84473	Quartz	JACK	JACK 13	26-May-96	17-Jun-96	2-Apr-23	0.02	JACK block
YB84474	Quartz	JACK	JACK 14	26-May-96	17-Jun-96	2-Apr-23	0.03	JACK block
YB84475	Quartz	JACK	JACK 15	26-May-96	17-Jun-96	2-Apr-23	0.03	JACK block
YB84476	Quartz	JACK	JACK 16	26-May-96	17-Jun-96	2-Apr-23	0.02	JACK block
YB84477	Quartz	JACK	JACK 17	26-May-96	17-Jun-96	2-Apr-23	0.02	JACK block
YB84478	Quartz	JACK	JACK 18	28-May-96	17-Jun-96	2-Apr-23	0.04	JACK block
YB85305	Quartz	JACK	JACK 19	4-Jul-96	12-Jul-96	2-Apr-23	0.01	JACK block
YB85328	Quartz	JACK	JACK 20	4-Jul-96	12-Jul-96	2-Apr-23	0.00	JACK block
YB85329	Quartz	JACK	JACK 21	4-Jul-96	12-Jul-96	2-Apr-23	0.03	JACK block
YB85330	Quartz	JACK	JACK 22	4-Jul-96	12-Jul-96	2-Apr-23	0.00	JACK block
YB85331	Quartz	JACK	JACK 23	4-Jul-96	12-Jul-96	2-Apr-23	0.00	JACK block
YB85332	Quartz	JACK	JACK 24	4-Jul-96	12-Jul-96	2-Apr-23	0.03	JACK block
YB85333	Quartz	JACK	JACK 25	4-Jul-96	12-Jul-96	2-Apr-23	0.01	JACK block
YB85334	Quartz	JACK	JACK 26	4-Jul-96	12-Jul-96	2-Apr-23	0.01	JACK block
YB85336	Quartz	JACK	JACK 28	4-Jul-96	12-Jul-96	2-Apr-23	0.03	JACK block
YB85382	Quartz	LOW	LOW 1	28-Jun-96	16-Jul-96	2-Apr-23	0.13	WOL block
YB85383	Quartz	LOW	LOW 2	28-Jun-96	16-Jul-96	2-Apr-23	0.12	WOL block

Grant Number	Tenure Type	Claim Name	Claim Label	Staking Date	Recording Date	Expiry Date	Area km²	Block
YB85384	Quartz	LOW	LOW 3	28-Jun-96	16-Jul-96	2-Apr-23	0.13	WOL block
YB85385	Quartz	LOW	LOW 4	28-Jun-96	16-Jul-96	2-Apr-23	0.13	WOL block
YB85386	Quartz	LOW	LOW 5	28-Jun-96	16-Jul-96	2-Apr-23	0.11	WOL block
YB85387	Quartz	LOW	LOW 6	28-Jun-96	16-Jul-96	2-Apr-23	0.11	WOL block
YB85388	Quartz	LOW	LOW 7	28-Jun-96	16-Jul-96	2-Apr-23	0.11	WOL block
YB85389	Quartz	LOW	LOW 8	28-Jun-96	16-Jul-96	2-Apr-23	0.11	WOL block
YB85390	Quartz	LOW	LOW 9	28-Jun-96	16-Jul-96	2-Apr-23	0.11	WOL block
YB85391	Quartz	LOW	LOW 10	28-Jun-96	16-Jul-96	2-Apr-23	0.11	WOL block
YB85392	Quartz	LOW	LOW 11	28-Jun-96	16-Jul-96	2-Apr-23	0.11	WOL block
YB85393	Quartz	LOW	LOW 12	28-Jun-96	16-Jul-96	2-Apr-23	0.11	WOL block
YB85394	Quartz	LOW	LOW 13	28-Jun-96	16-Jul-96	2-Apr-23	0.09	WOL block
YB85395	Quartz	LOW	LOW 14	28-Jun-96	16-Jul-96	2-Apr-23	0.11	WOL block
YB87487	Quartz	JACK	JACK 30	11-Sep-96	23-Sep-96	2-Apr-23	0.06	JACK block
YB88805	Quartz	JACK	JACK 31	12-Oct-96	6-Nov-96	2-Apr-23	0.00	JACK block
YB88806	Quartz	JACK	JACK 32	12-Oct-96	6-Nov-96	2-Apr-23	0.13	JACK block
YB88807	Quartz	JACK	JACK 33	12-Oct-96	6-Nov-96	2-Apr-23	0.02	JACK block
YB89634	Quartz	GO	GO 125	14-Jul-97	28-Jul-97	2-Apr-23	0.02	GO block
YB89635	Quartz	GO	GO 126	14-Jul-97	28-Jul-97	2-Apr-23	0.01	GO block
YB89636	Quartz	GO	GO 127	14-Jul-97	28-Jul-97	2-Apr-23	0.02	GO block
Total			**422 claims**				**72.21**	

Appendix D: Airborne Survey Report



VTEM™ Plus

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

PROJECT:	KUDZ ZE KAYAH, PELLY AND WOLF
LOCATION:	WOLVERINE LAKE, YUKON
FOR:	BMC MINERALS (NO. 1) LTD
SURVEY FLOWN:	APRIL - JULY 2016
PROJECT:	GL160037

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GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

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EXECUTIVE SUMMARY

KUDZ ZE KAYAH, PELLY AND WOLF - WOLVERINE LAKE, YUKON

During April 23rd to July 31st 2016 Geotech Ltd. carried out a helicopter-borne geophysical survey over Kudz Ze Kayah, Pelly and Wolf situated near Wolverine Lake, Yukon.

Principal geophysical sensors included a versatile time domain electromagnetic (VTEMplus) system and horizontal magnetic gradiometer with two caesium sensors. Ancillary equipment included a GPS navigation system and a radar altimeter. A total of 1589 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 and final data processing, including generation of final digital data and map products were undertaken from the office of Geotech Ltd. in Aurora, Ontario.

The 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 grids,
- dB/dt X Component Fraser Filtered Channel grid,
- Total Magnetic Intensity (TMI),
- Magnetic Total Horizontal Gradient,
- Magnetic Tilt-Angle Derivative of TMI,
- Calculated Time Constant (Tau) with Calculated Vertical Derivative contours and
- Resistivity Depth Images (RDI) sections are presented.

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

The survey report describes the procedures for data acquisition, processing, final 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 Kudz Ze Kayah, Pelly and Wolf situated near Wolverine Lake, Yukon (Figure 1 & Figure 2).

Robin Black represented BMC Minerals (No. 1) Ltd 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 (VTEMplus) system with Full-Waveform processing. Measurements consisted of Vertical (Z), In-line Horizontal (X) and Cross-line Horizontal (Y) components of the EM fields using induction coils and the aeromagnetic total field using a magnetic gradiometer. A total of 1589 line-km of geophysical data were acquired during the survey.

The crew was based out of Watson Lake (Figure 2) in Yukon for the acquisition phase of the survey. Survey flying started on April 23rd and was completed on July 31st, 2016.

Data quality control and quality assurance, and preliminary data processing were carried out on a daily basis during the acquisition phase of the project. Final data processing followed immediately after the end of the survey. Final reporting, data presentation and archiving were completed from the Aurora office of Geotech Ltd. in October, 2016.

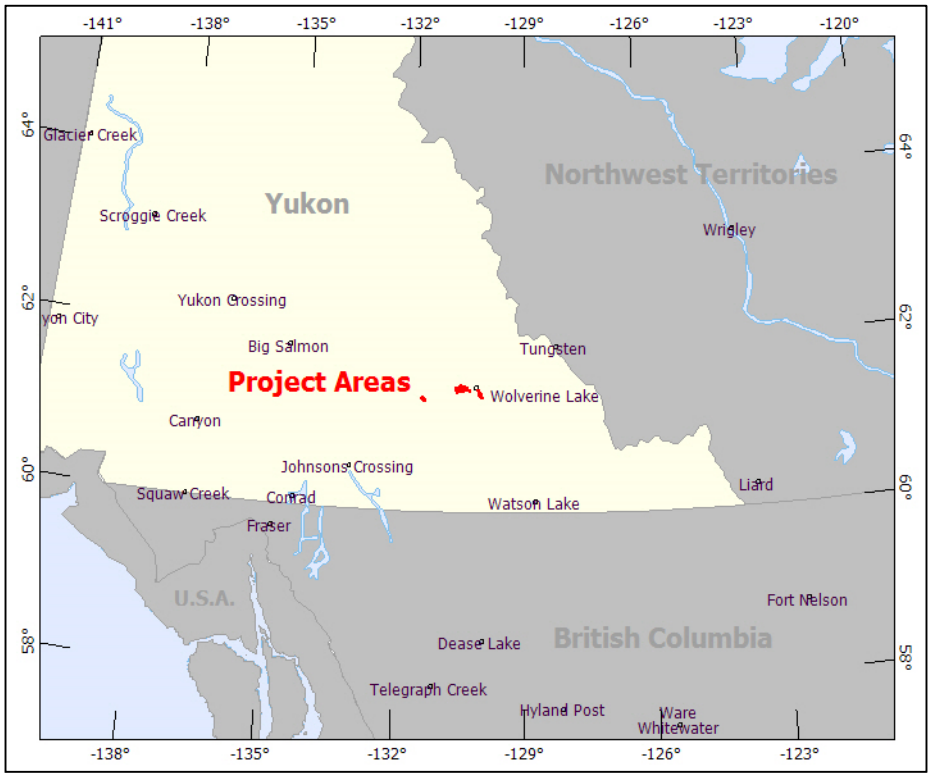


Figure 1: Survey location

1.2 SURVEY AND SYSTEM SPECIFICATIONS

The survey areas, Kudz Ze Kayah, Pelly and Wolf are located approximately 8 kilometres west, 2 kilometres east and 71 kilometres southwest of Wolverine Lake, Yukon respectively (Figure 2).

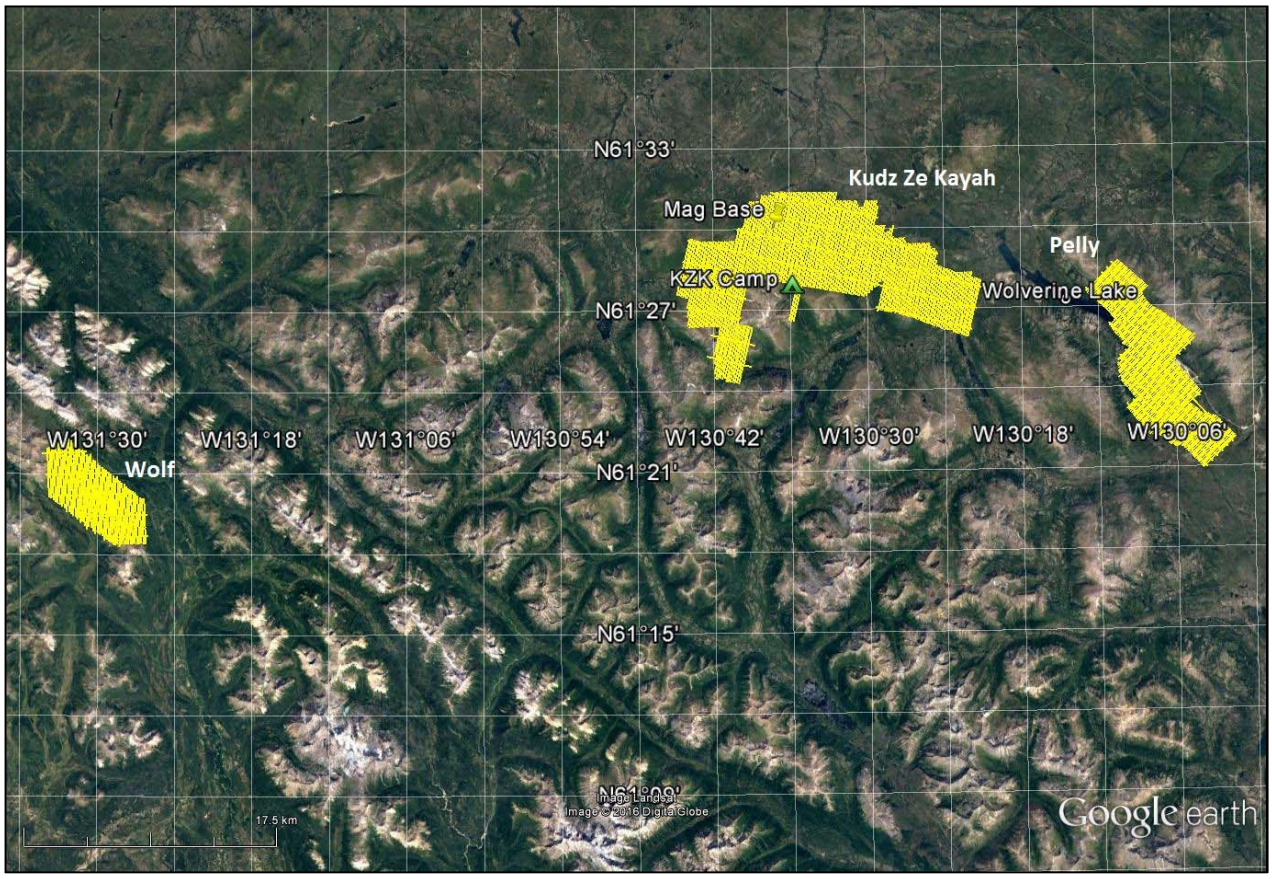


Figure 2: Survey area location on Google Earth.

The block, Kudz Ze Kayah was flown in a northeast to southwest (N 15° E azimuth) direction; Pelly was flown in a southwest to northeast (N48° E azimuth) direction and Wolf was flown in a north to south (N0° E azimuth) direction with traverse line spacing of 150 metres as depicted in Figure 3 to 4. Tie lines were flown perpendicular to the traverse lines at a spacing of 1500 metres respectively. For more detailed information on the flight spacing and direction see Table 1.

1.3 TOPOGRAPHIC RELIEF AND CULTURAL FEATURES

Topographically, the survey areas exhibits an extremely rugged relief with an elevation ranging from 1104 to 2079 metres above mean sea level over an area of 241 square kilometres (Figure 3 to 5).

There are various rivers and streams running through the survey areas which connect various lakes. There are no visible signs of culture such as roads, transmission lines, mining areas and settlements located in the survey areas (Figure 3 to 5).

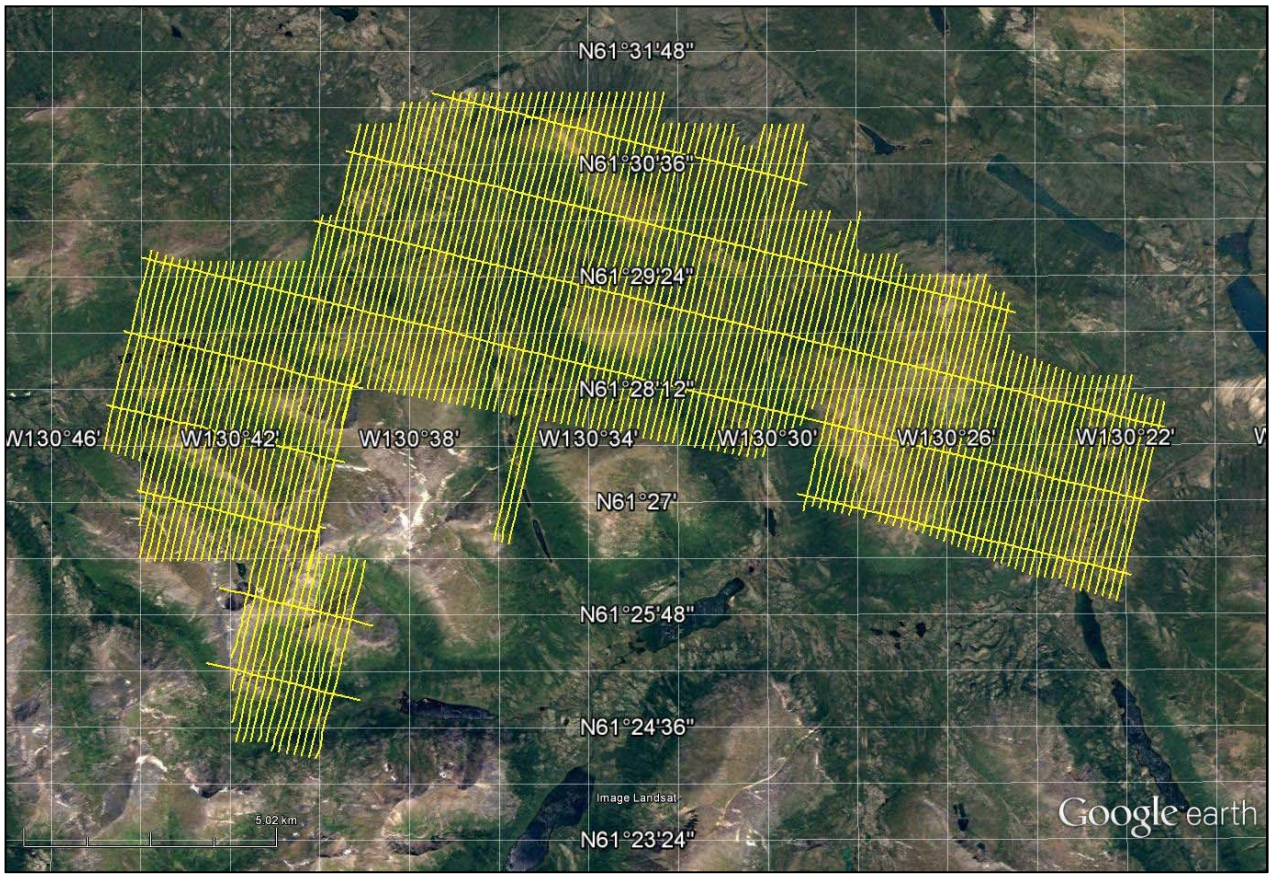


Figure 3: Flight path of Kudz Ze Kayah over a Google Earth Image.

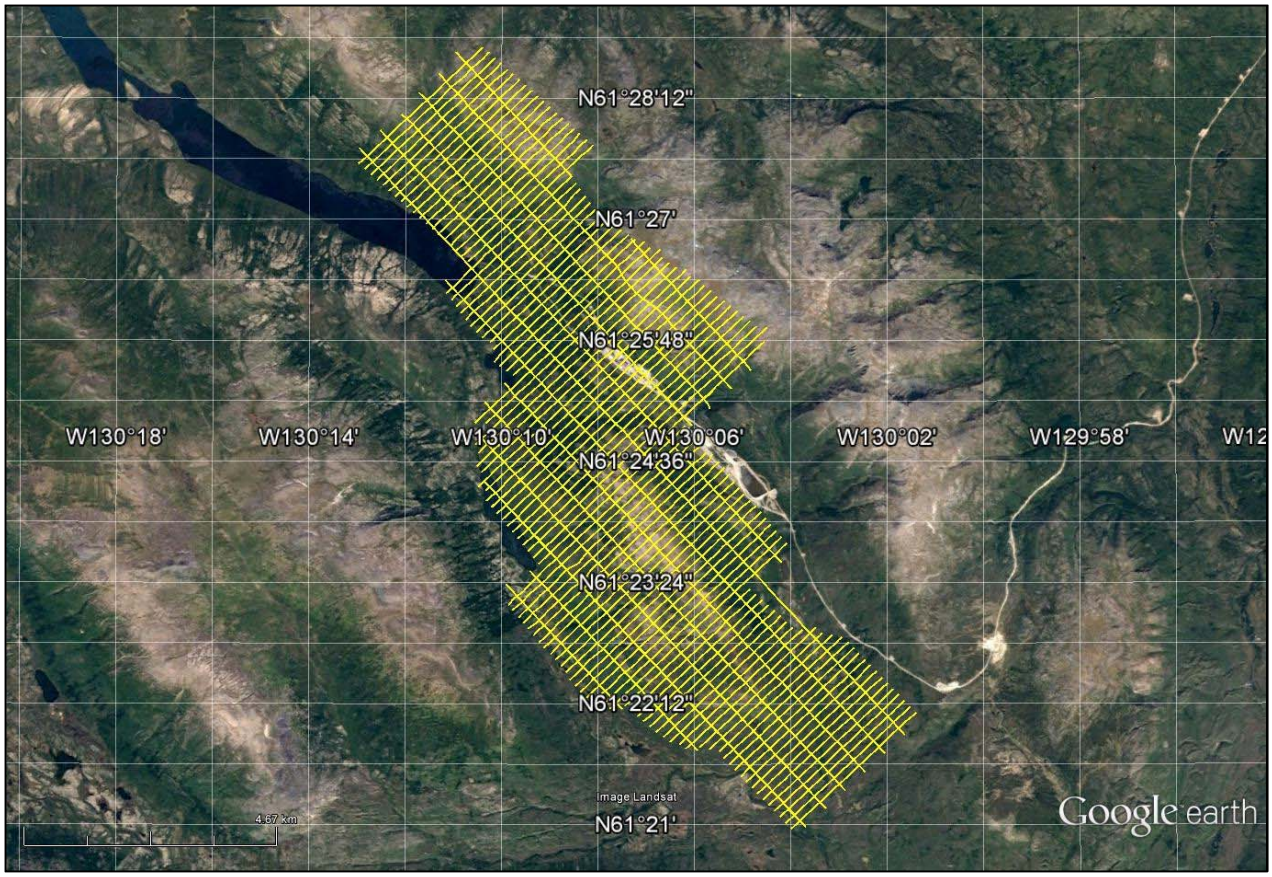


Figure 4: Flight path of Pelly over a Google Earth Image.

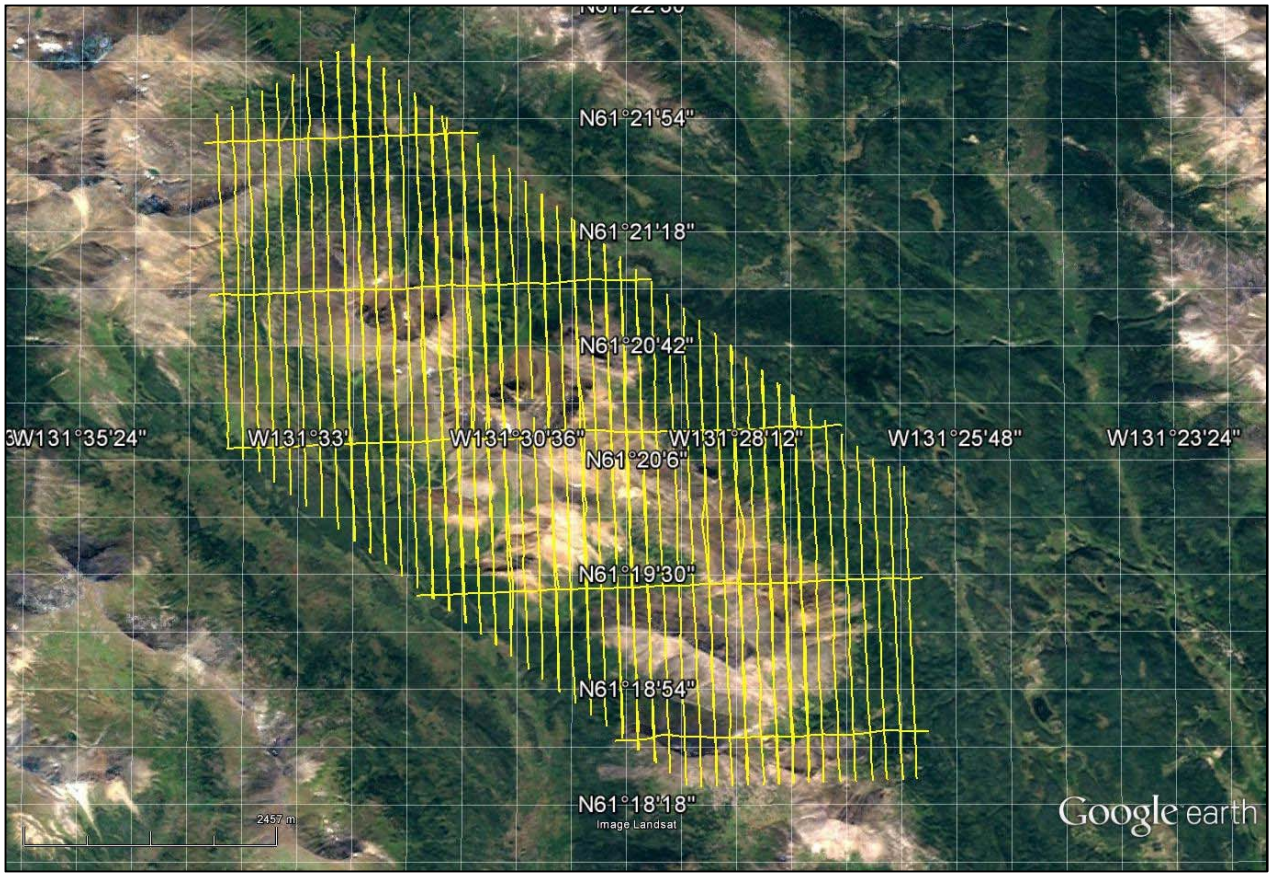


Figure 5: Flight path of Wolf over a Google Earth Image.

2. DATA ACQUISITION

2.1 SURVEY AREA

The survey areas (see Figure 3, Figure 4, Figure 5 and Appendix A) and general flight specifications are as follows:

Table 1: Survey Specifications

Survey block	Line spacing (m)	Area (Km^2)	Planned[1] Line-km	Actual Line-km	Flight direction	Line numbers
Kudz Ze Kayah	Traverse: 150	121	902	851.8	N 15° E / N 195° E	L3000 - L4350 L1305 - L1555
	Tie: 1500			86.5	N 105° E / N 285° E	T5000 - T5080
Pelly	Traverse: 150	91	473	370.1	N 48° E / N 228° E	L4000 - L4960
	Tie: 1500			111.5	N 138° E / N 318° E	T5000 - T5040
Wolf	Traverse: 150	29	214	295.5	N 0° E / N 180° E	L6000 - L6440
	Tie: 1500			21.1	N 90° E / N 270° E	T7000 - T7040
TOTAL		241	1589	1736.5		

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

2.2 SURVEY OPERATIONS

Survey operations were based out of Watson Lake and Kudz Ze Kayah Camp in Yukon from April 11th until July 31st 2016. The following table shows the timing of the flying.

Table 2: Survey schedule

Date	Flight #	Flown km	Block	Crew location	Comments
11-Apr-2016				Watson Lake, Yukon	Crew arrived
12-Apr-2016				Watson Lake, Yukon	System assembly limited due to weather
13-Apr-2016				Watson Lake, Yukon	System assembly
14-Apr-2016				Watson Lake, Yukon	Testing
15-Apr-2016				Watson Lake, Yukon	No production due to technical issues
16-Apr-2016				Watson Lake, Yukon	No production due to technical issues
17-Apr-2016				Watson Lake, Yukon	No production due to technical issues & recon flight
18-Apr-2016				Watson Lake, Yukon	No production due to technical issues
19-Apr-2016				Watson Lake, Yukon	No production due to technical issues
20-Apr-2016				Watson Lake, Yukon	No production due to technical issues & test flight
21-Apr-2016				Watson Lake, Yukon	Mobilized to camp
22-Apr-2016				KZK CAMP, Yukon	Set up & testing – no production

[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. However, flying was stopped early as requested by the client.

Date	Flight #	Flown km	Block	Crew location	Comments
					due to weather
23-Apr-2016	1,2,3	280	KZK	KZK CAMP, Yukon	280km flown
24-Apr-2016	4,5	188	KZK	KZK CAMP, Yukon	188km flown
25-Apr-2016	6	25	KZK	KZK CAMP, Yukon	25km flown limited due to weather
26-Apr-2016	7,8,9	247	KZK	KZK CAMP, Yukon	247km flown
27-Apr-2016				KZK CAMP, Yukon	No production due to weather
28-Apr-2016	10,11	149	KZK	KZK CAMP, Yukon	149km flown
29-Apr-2016				KZK CAMP, Yukon	No production due to weather
30-Apr-2016				KZK CAMP, Yukon	No production due to weather
1-May-2016	12	6	Pelly	KZK CAMP, Yukon	6km flown limited due to weather
2-May-2016				KZK CAMP, Yukon	No production due to weather
3-May-2016	13,14	155	KZK	KZK CAMP, Yukon	155km flown – Stopped until July
5-Jul-2016				KZK CAMP, Yukon	Crew arrived
6-Jul-2016				KZK CAMP, Yukon	System set & recon flight
7-Jul-2016	15	56	wolf	KZK CAMP, Yukon	56km flown limited due to technical issues
8-Jul-2016	16,17	106	wolf	KZK CAMP, Yukon	160km flown
9-Jul-2016	18,19,20	52	wolf	KZK CAMP, Yukon	52km flown
10-Jul-2016	21	49	Pelly	KZK CAMP, Yukon	49km flown limited due to weather
11-Jul-2016	22,23,24	123	Pelly	KZK CAMP, Yukon	123km flown
12-Jul-2016	25,26	106	Pelly	KZK CAMP, Yukon	106km flown
13-Jul-2016	27,28,29	110	Pelly	KZK CAMP, Yukon	110km flown
14-Jul-2016	30	35	Pelly	KZK CAMP, Yukon	30km flown & waiting for reflight confirmation
15-Jul-2016			Pelly	KZK CAMP, Yukon	Waiting for reflight confirmation
16-Jul-2016	31,32	77	Pelly	KZK CAMP, Yukon	77km flown
17-Jul-2016	33	50	Pelly	KZK CAMP, Yukon	Remaining kms were flown – flying completed
18-Jul-2016				KZK CAMP, Yukon	Waiting on re-flights
19-Jul-2016				KZK CAMP, Yukon	Waiting on re-flights
20-Jul-2016			wolf	KZK CAMP, Yukon	No production due to weather
21-Jul-2016	34	24	wolf	KZK CAMP, Yukon	24km flown limited due to technical issues
22-Jul-2016				KZK CAMP, Yukon	No production due to weather
23-Jul-2016				KZK CAMP, Yukon	No production due to weather
24-Jul-2016				KZK CAMP, Yukon	No production due to weather
25-Jul-2016				KZK CAMP, Yukon	Flight aborted due to weather
26-Jul-2016				KZK CAMP, Yukon	Flight aborted due to weather
27-Jul-2016				KZK CAMP, Yukon	No production due to weather
28-Jul-2016				KZK CAMP, Yukon	No production due to weather
29-Jul-2016				KZK CAMP, Yukon	No production due to weather
30-Jul-2016		20	wolf	KZK CAMP, Yukon	20km flown
31-Jul-2016		103	wolf	KZK CAMP, Yukon	Remaining kms were flown – flying complete

2.3 FLIGHT SPECIFICATIONS

During the survey the helicopter was maintained at a mean altitude of 101 metres above the ground with an average survey speed of 80 km/hour. This allowed for an actual average Transmitter-receiver loop terrain clearance of 70 metres and a magnetic sensor clearance of 80 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.

2.4 AIRCRAFT AND EQUIPMENT

2.4.1 SURVEY AIRCRAFT

The survey was flown using a Eurocopter Aerospatiale (Astar) 350 B3 helicopter, registration C-GTNI and C-FVTM. The helicopter is owned and operated by Trans North Helicopters. 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. The VTEM™ transmitter current waveform is shown diagrammatically in Figure 6. VTEM with the Serial number 17 and 31 had been used for the survey.

The VTEM™ Receiver and transmitter coils were in concentric-coplanar and Z-direction oriented configuration. The receiver system for the project also included a 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 31 metres below the aircraft as shown in Figure 7.

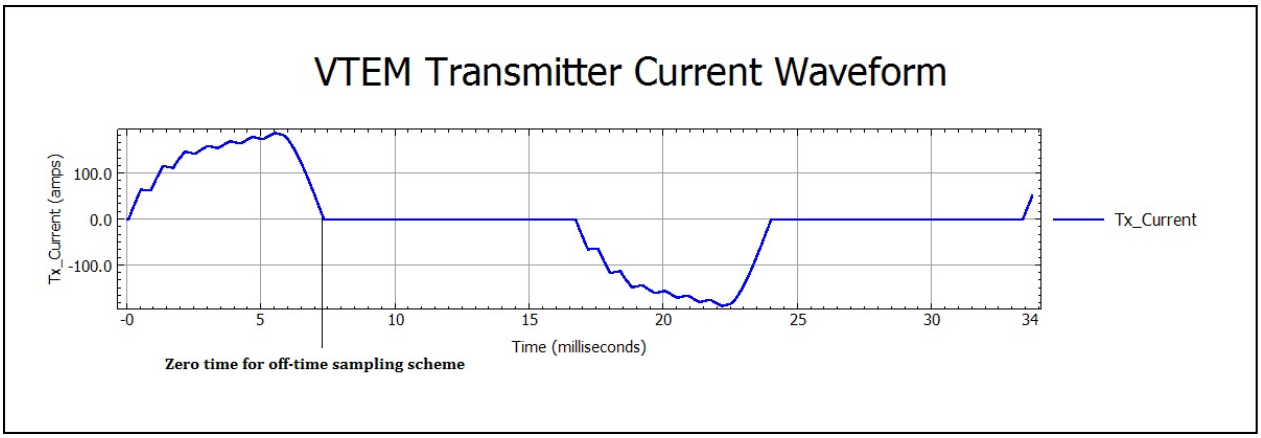


Figure 6: VTEM™ Transmitter Current Waveform

The VTEM™ decay sampling scheme is shown in Table 3 below. Forty-three time measurement gates were used for the final 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 3: 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

VTEM™ Decay Sampling Scheme				
Index	Start	End	Middle	Width
Milliseconds				
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
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
Y Component: 20 - 46 time gates

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: 189 A • Pulse width: 7.34 ms • Waveform shape: Bi-polar trapezoid • Peak dipole moment: 401,382 nIA • Actual average Transmitter-receiver loop terrain clearance: 70 metres above the ground	• X Coil diameter: 0.32 m • Number of turns: 245 • Effective coil area: 19.69 m^2 • Z-Coil and Y-coil diameter: 1.2 m • Number of turns: 100 • Effective coil area: 113.04 m^2

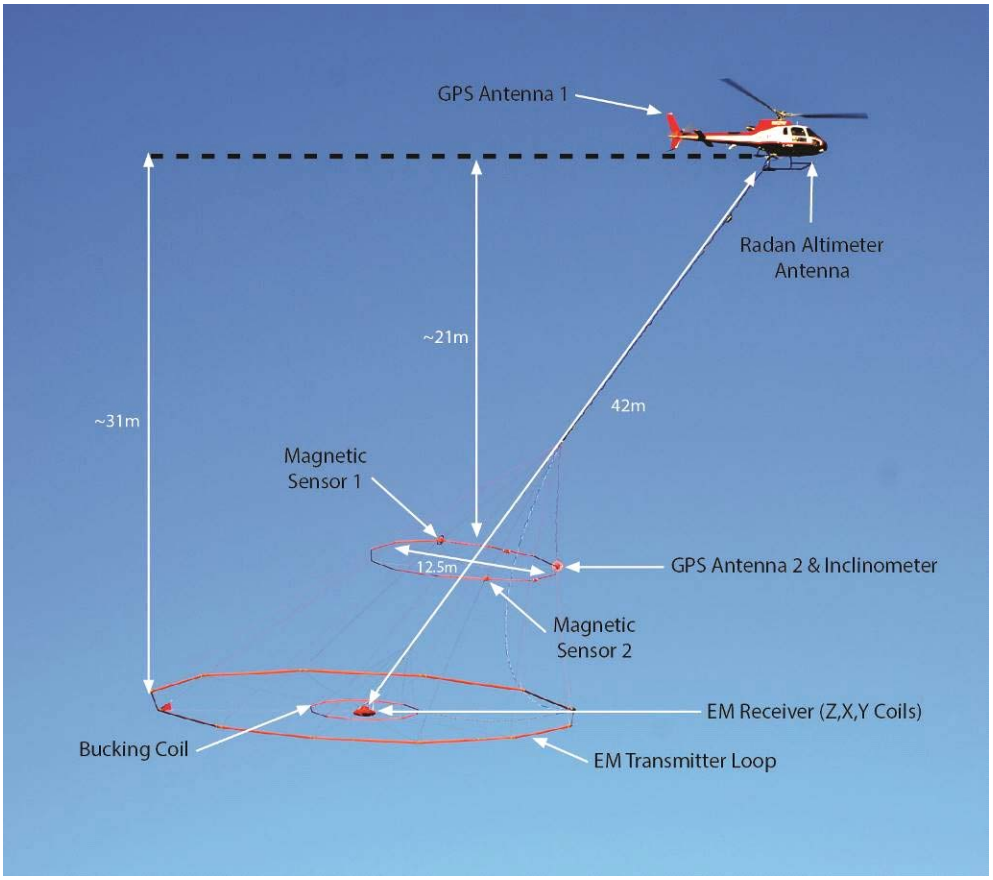


Figure 7: VTEM™Plus System Configuration.

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.

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.

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 gradiomag bird.

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 7).

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 7). 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 co-ordinates 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 at the tree line; back of the camp (61°30.0666'N, 130°37.3108'W); 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:	Darren Tuck (Office)
Data QC:	Nick Venter (Office)
Crew chief:	Jan Dabrowski
Operator:	Jan Dabrowski
	Roger Leblanc

The survey pilot and the mechanical engineer were employed directly by the helicopter operator – Trans North Helicopters

Pilot:	Doug Hladun
	Pierre Forand
Mechanical Engineer:	Clayton Whitney

OFFICE:

Preliminary Data Processing:	Nick Venter
Final Data Processing:	Gaurav Nailwal
Final Data QA/QC:	Geoffrey Plastow
Reporting/Mapping:	Liz Mathew

Data acquisition phase was carried out under the supervision of Andrei Bagrianski, P. Geo, and Chief Operating Officer. Processing phase was carried out under the supervision of Geoffrey Plastow, P. Geo, Data Processing Manager. 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 NAD83 Datum, UTM Zone 9 North 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 by deconvolution.

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 channel recorded at 2.021 milliseconds after the termination of the impulse is also presented as a colour image. Calculated Time Constant (TAU) with Calculated Vertical Derivative contours is presented in Appendix C and E. Resistivity Depth Image (RDI) is also presented in Appendix F and G.

VTEM has three receiver coil orientations. Z-axis coil is oriented parallel to the transmitter coil axis and both are horizontal to the ground. The X-axis and Y-axis coil is oriented parallel to the ground and along the line-of-flight. This combined three coil configuration provides information on the position, depth, dip and thickness of a conductor. Generalized modeling results of VTEM max 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 8) 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.

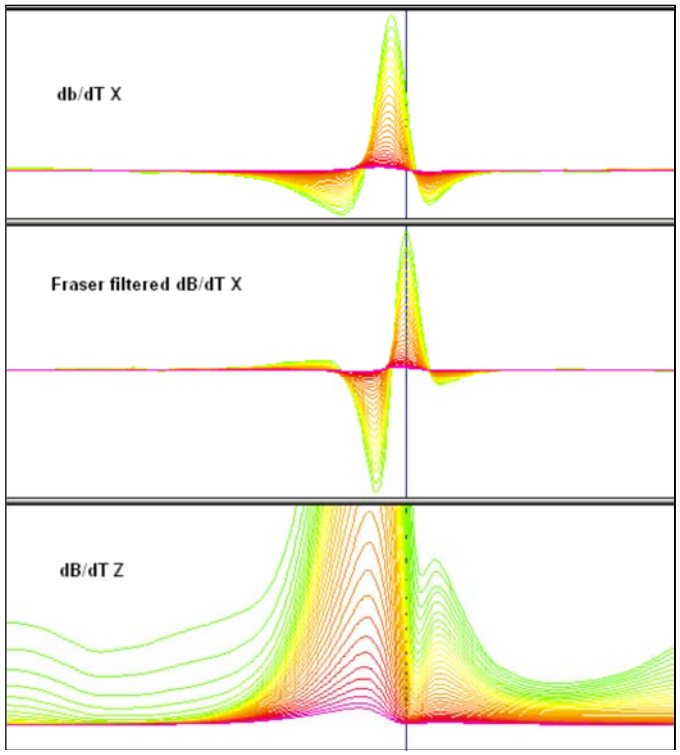


Figure 8: Z, X and Fraser filtered X (FFx) components for "thin" target.

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 mounted10m 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 form 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 cross-line (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 cross-line (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 cross-line 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 cross-line gradients can help to enhance cross-line linear features during gridding.

5. DELIVERABLES

5.1 SURVEY REPORT

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

5.2 MAPS

Final maps were produced at scale of 1:20,000 (Kudz Ze Kayah and Pelly) and 1:10,000 (Wolf) for best representation of the survey size and line spacing. The coordinate/projection system used was NAD83 Datum, UTM Zone 9 North. All maps show the flight path trace and topographic data; latitude and longitude are also noted on maps.

The preliminary and final 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 1:20,000 (Kudz Ze Kayah and Pelly) and 1:10,000 (Wolf) in Geosoft MAP format, as follows:

GL160037_*scale*k _*bb*_dBdtz: dB/dt profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
GL160037_ *scale*k _*bb*_Bfieldz: B-field profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
GL160037_ *scale*k _*bb*_BFz36: B-field Z Component Channel 36, Time Gate 2.021 ms colour image.
GL160037_ *scale*k _*bb*_SFxFF20: dBdt X Component Fraser Filtered Channel 20, Time Gate 0.220 ms colour image.
GL160037_ *scale*k _*bb*_TMI: Total magnetic intensity (TMI) colour image and contours.
GL160037_ *scale*k _*bb* _TauSF: dB/dt Calculated Time Constant (Tau) with Calculated Vertical Derivative contours
GL160037_ *scale*k _*bb*_TotHGrad: Magnetic Total Horizontal Gradient colour image.
GL160037_ *scale*k _*b*b_TiltDrv: Magnetic Tilt-Angle Derivative colour image.

where *scale* represents the scale of the map
bb represents the block name

- Maps are also presented in PDF format.
- The topographic data base was derived from 1:50,000 NRC (Natural Resources Canada) NTDB data, www.geogratis.ca.
- A Google Earth file *GL16*0037_*FP.kml* 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	UTM Easting NAD83 Zone 9 North
Y:	metres	UTM Northing NAD83 Zone 9 North
Longitude:	Decimal Degrees	WGS 84 Longitude data
Latitude:	Decimal Degrees	WGS 84 Latitude data
Z:	metres	GPS antenna elevation (above Geoid)
Zb:	metres	EM bird elevation (above Geoid)
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
Mag2LZ:	nT	Z corrected (w.r.t. loop center) and diurnal corrected magnetic field left mag
Mag2RZ:	nT	Z corrected (w.r.t. loop center) and diurnal corrected magnetic field right mag
TMI2:	nT	Calculated from diurnal corrected total magnetic field intensity of the centre of the loop
TMI3:	nT	Microleveled total magnetic field intensity of the centre of the loop
Hginline:		Calculated in-line gradient
Hgcxline:		measured cross-line gradient
CVG:	nT/m	Calculated Magnetic Vertical Gradient
SFz[4]:	$pV/(A*m^4)$	Z dB/dt 0.021 millisecond time channel
SFz[5]:	$pV/(A*m^4)$	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

Channel name	Units	Description
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 0.145 millisecond 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
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

Channel name	Units	Description
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
SFy[20]:	pV/(A*m^4)	Y dB/dt 0.220 millisecond time channel
SFy[21]:	pV/(A*m^4)	Y dB/dt 0.253 millisecond time channel
SFy[22]:	pV/(A*m^4)	Y dB/dt 0.290 millisecond time channel
SFy[23]:	pV/(A*m^4)	Y dB/dt 0.333 millisecond time channel
SFy[24]:	pV/(A*m^4)	Y dB/dt 0.383 millisecond time channel
SFy[25]:	pV/(A*m^4)	Y dB/dt 0.440 millisecond time channel
SFy[26]:	pV/(A*m^4)	Y dB/dt 0.505 millisecond time channel
SFy[27]:	pV/(A*m^4)	Y dB/dt 0.580 millisecond time channel
SFy[28]:	pV/(A*m^4)	Y dB/dt 0.667 millisecond time channel
SFy[29]:	pV/(A*m^4)	Y dB/dt 0.766 millisecond time channel
SFy[30]:	pV/(A*m^4)	Y dB/dt 0.880 millisecond time channel
SFy[31]:	pV/(A*m^4)	Y dB/dt 1.010 millisecond time channel
SFy[32]:	pV/(A*m^4)	Y dB/dt 1.161 millisecond time channel
SFy[33]:	pV/(A*m^4)	Y dB/dt 1.333 millisecond time channel
SFy[34]:	pV/(A*m^4)	Y dB/dt 1.531 millisecond time channel
SFy[35]:	pV/(A*m^4)	Y dB/dt 1.760 millisecond time channel
SFy[36]:	pV/(A*m^4)	Y dB/dt 2.021 millisecond time channel
SFy[37]:	pV/(A*m^4)	Y dB/dt 2.323 millisecond time channel
SFy[38]:	pV/(A*m^4)	Y dB/dt 2.667 millisecond time channel
SFy[39]:	pV/(A*m^4)	Y dB/dt 3.063 millisecond time channel
SFy[40]:	pV/(A*m^4)	Y dB/dt 3.521 millisecond time channel
SFy[41]:	pV/(A*m^4)	Y dB/dt 4.042 millisecond time channel
SFy[42]:	pV/(A*m^4)	Y dB/dt 4.641 millisecond time channel
SFy[43]:	pV/(A*m^4)	Y dB/dt 5.333 millisecond time channel
SFy[44]:	pV/(A*m^4)	Y dB/dt 6.125 millisecond time channel
SFy[45]:	pV/(A*m^4)	Y dB/dt 7.036 millisecond time channel
SFy[46]:	pV/(A*m^4)	Y dB/dt 8.083 millisecond time channel
BFz	(pV*ms)/(A*m^4)	Z B-Field data for time channels 4 to 46
BFx	(pV*ms)/(A*m^4)	X B-Field data for time channels 20 to 46
BFy:	(pV*ms)/(A*m^4)	Y B-Field data for time channels 20 to 46
SFxFF:	pV/(A*m^4)	Fraser Filtered X dB/dt
NchanBF:		Latest time channels of TAU calculation
TauBF:	ms	Time constant B-Field
NchanSF:		Latest time channels of TAU calculation
TauSF:	ms	Time constant 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 and Y component data from 20 – 46, as described above.

- Database of the Resistivity Depth Images in Geosoft GDB format, containing the following channels:

Table 6: Geosoft Resistivity Depth Image GDB Data Format

Channel name	Units	Description
Xg:	metres	UTM Easting NAD83 Zone 9 North
Yg:	metres	UTM Northing NAD83 Zone 9 North
Dist:	meters	Distance from the beginning of the line
Depth:	meters	array channel, depth from the surface
Z:	meters	array channel, depth from sea level
AppRes:	Ohm-m	array channel, Apparent Resistivity
TR:	meters	EM system height from sea level
Topo:	meters	digital elevation model
Radarb:	metres	Calculated EM transmitter-receiver loop terrain clearance from radar altimeter
SF:	pV/(A*m^4)	array channel, dB/dT
MAG:	nT	TMI data
CVG:	nT/m	CVG data
DOI:	metres	Depth of Investigation: a measure of VTEM depth effectiveness
PLM:		60Hz Power Line Monitor

- Database of the VTEM Waveform "GL160037_waveform_final.gdb" in Geosoft GDB format, containing the following channels:

Table 7: 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:

*bb*_BFz36: B-Field Z Component Channel 36 (Time Gate 2.021 ms)
*bb*_CVG: Calculated Vertical Derivative (nT/m)
*bb*_DEM: Digital Elevation Model (metres)
*bb*_Hgcxline: Measured Cross-Line Gradient (nT/m)
*bb*_Hginline: Measured In-Line Gradient (nT/m)
*bb*_PLM: Power Line Monitor (60Hz)
*bb*_SFxFF20: Fraser Filtered dB/dt X Component Channel 20 (Time Gate 0.220ms)
*bb*_SFz15: dB/dt Z Component Channel 15 (Time Gate 0.110 ms)
*bb*_SFz30: dB/dt Z Component Channel 30 (Time Gate 0.880 ms)
*bb*_SFz45: dB/dt Z Component Channel 45 (Time Gate 7.036 ms)
*bb*_TauBF: B-Field Z Component, Calculated Time Constant (ms)
*bb*_TauSF: dB/dt Z Component, Calculated Time Constant (ms)
*bb*_TiltDerivative: Magnetic Tilt derivative (radians)
*bb*_TMI: Total Magnetic Intensity (nT)
*bb*_TotalHorgrad: Magnetic Total Horizontal Gradient (nT/m)

where *bb* represents the block name

A Geosoft .GRD file has a .GI metadata file associated with it, containing grid projection information. A grid cell size of 37.5 metres was used.

6. CONCLUSIONS AND RECOMMENDATIONS

A helicopter-borne versatile time domain electromagnetic (VTEMplus) and horizontal magnetic gradiometer geophysical survey has been completed over Kudz Ze Kayah, Pelly and Wolf situated near Wolverine Lake, Yukon.

The total area coverage is 241 km^2. Total survey line coverage 1589 line kilometres. The principal sensors included a Time Domain EM system and a horizontal magnetic gradiometer using two caesium magnetometers. Results have been presented as stacked profiles, and contour colour images at a scale of 1:20,000 (Kudz Ze Kayah and Pelly) and 1:10,000 (Wolf). A formal Interpretation has not been included or requested.

Based on the geophysical results obtained, a number of TEM anomalous zones are identified across the blocks. All of these anomalies are considered to be induced by low to moderate conductive targets. They can be seen overlapping the TAU decay parameter image presented with the calculated vertical magnetic gradient (CVG) contours in the Appendix C.

The main conductive zones in the Kudz Ze Kayah blocks are oriented NE-SW in the western part to NW-SE in the centre part having strong association with the magnetic anomalies. The conductive zone in the southern part of L3252-L3370 oriented NE-SW exhibits AIIP phenomenon and follows the magnetic trend. Most of the conductors can be approximated as “thick” subvertical plates and some as “thin” plates with the inherent double-peak response. Some of the zones being on the edge of the survey boundary are not well defined. Detailed resistivity depth sections were created for all the survey lines. According to the detailed resistivity depth imaging, the top of the EM response sources varies in depth from about 50-80m deep).

The main conductive zones in the Pelly and Wolf blocks are oriented NE-SW and are associated with the magnetic anomalies. Most of the conductors can be approximated as “thick” subvertical plates and some as “thin” plates with the inherent double-peak response. Some of the zones being on the edge of the survey boundary are not well defined. Detailed resistivity depth sections were created for all the survey lines. According to the detailed resistivity depth imaging, the top of the EM response sources varies in depth from about 50-80m deep).

If the conductors correspond to an exploration model, it is recommended picking anomalies with conductance grading and center localization of the targets, detail resistivity depth imaging and Maxwell plate modelling prior to ground follow up and drill testing. Since the EM conductors have close associations with the magnetic anomalies, 3D inversions and detailed structural interpretation for magnetic data are also suggested.

Respectfully submitted[2],

Nick Venter
Geotech Ltd.

Gaurav Nailwal
Geotech Ltd.

Geoffrey Plastow, P. Geo.
Data Processing Manager
Geotech Ltd.

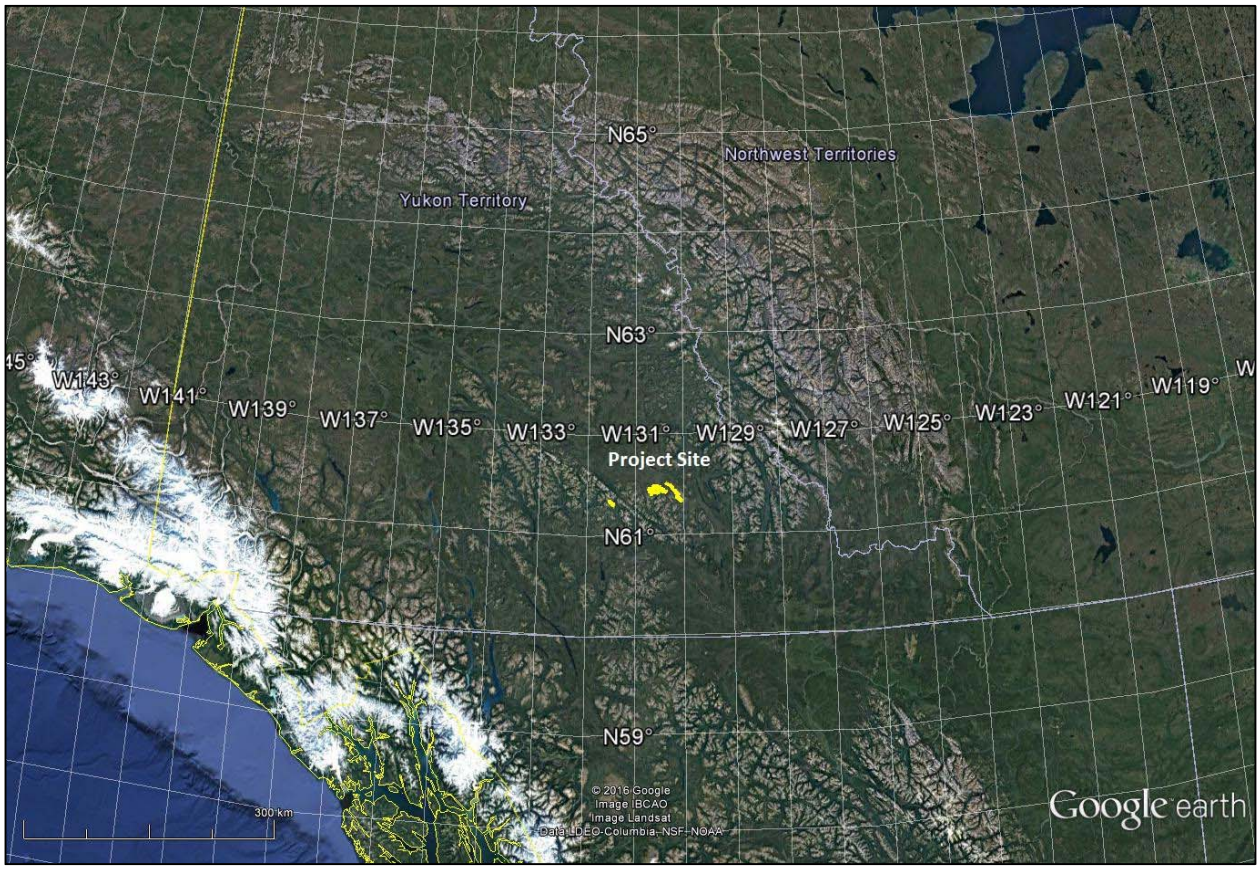
PROFESSIONAL GEOSCIENTIST
GEOFFREY C. PLASTOW
PRACTISING MEMBER
2171
10/14/16
ONTARIO

October, 2016

[2] Final data processing of the EM and magnetic data were carried out by Gaurav Nailwal, from the office of Geotech Ltd. in Aurora, Ontario, under the supervision of Geoffrey Plastow, P.Geo. Data Processing Manager.

APPENDIX A

SURVEY AREA LOCATION MAP



Overview of the Survey Area

APPENDIX B

SURVEY AREA COORDINATES

(WGS 84, UTM Zone 9 North)

Kudz Ze Kayah

X	Y
412005	6816377
411085	6813001
412018	6812815
411005	6809041
410084	6809227
410135	6809405
409300	6809419
409351	6811643
409717	6813012
407553	6813037
407608	6815024
406881	6815278
407894	6819052
408586	6818811
411027	6818759
411277	6819654
411542	6819646
412042	6821440
412810	6821429
412954	6821854
413832	6821826
413873	6822014
418263	6821917
418108	6821307
419619	6821248
419610	6820829
419959	6820821
420088	6821230
420984	6821215
420967	6820356
420720	6819511
421420	6819495
421411	6818924
422192	6819644
421920	6818615
422803	6818606
422796	6818201
424555	6818157
424540	6817946

X	Y
424595	6817942
424592	6817798
424908	6817791
424888	6816652
426229	6816114
427312	6816090
427314	6815756
427981	6815528
426968	6811754
426301	6811982
426225	6811981
425854	6812109
425857	6812241
425392	6812268
425202	6812337
423875	6812878
422249	6813577
422250	6813676
421994	6813681
421820	6813755
421818	6813673
421361	6813681
420907	6813830
420568	6813519
421195	6815893
419970	6814803
419805	6814773
412005	6816377

Wolf

X	Y
364237	6806799
362839	6806136
362839	6802966
362839	6802966
367270	6799467
369510	6799467
369522	6802462
369247	6802459
369187	6802527
364237	6806799

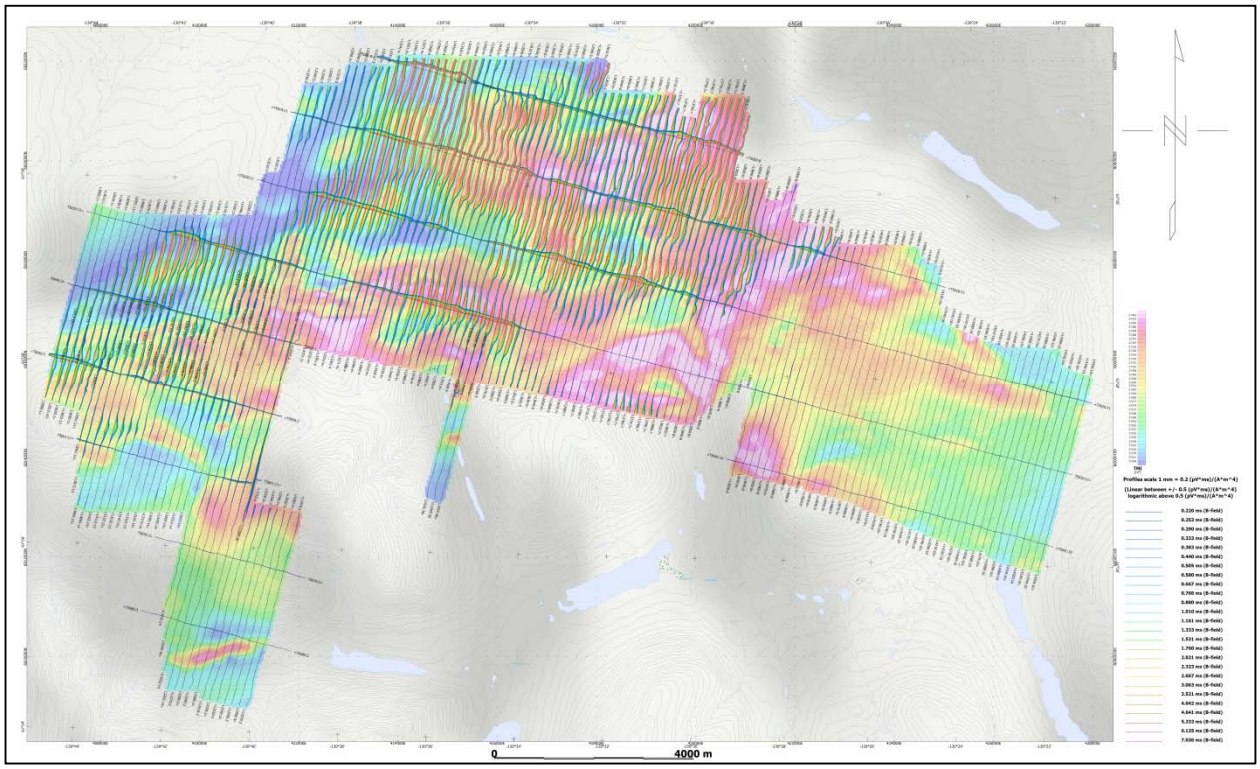
Pelly

X	Y
435126	6814679
437356	6816687
439476	6814734
438973	6814291
439488	6813548
439798	6813298
441018	6812431
441631	6812018
441611	6811991
441705	6811918
441722	6811933
442175	6811564
442440	6811361
442497	6811434
442712	6811256
442320	6810986
442440	6810812
442386	6810743
441065	6809551
441171	6809418
441339	6809288
441315	6809236
441525	6808965
441587	6809012
442719	6807596
443001	6807246
442159	6806577
443015	6805829
443895	6805661
445285	6804164
443055	6802156
441666	6803654
440786	6803821
439926	6804567
439329	6804578
438315	6805839
438033	6806190
437785	6806498
438466	6807113

X	Y
437929	6807783
437474	6808348
437468	6808564
437348	6809053
437438	6809123
437339	6809247
437326	6809424
437402	6809489
437424	6809541
437407	6809597
437427	6809658
437445	6809717
437499	6809764
437474	6809798
437501	6809904
437468	6809978
438112	6810557
438078	6810592
437739	6810834
437548	6810985
437660	6811098
437652	6811217
437567	6811281
437497	6811293
437480	6811331
437258	6811541
437225	6811581
436743	6812284
437246	6812727

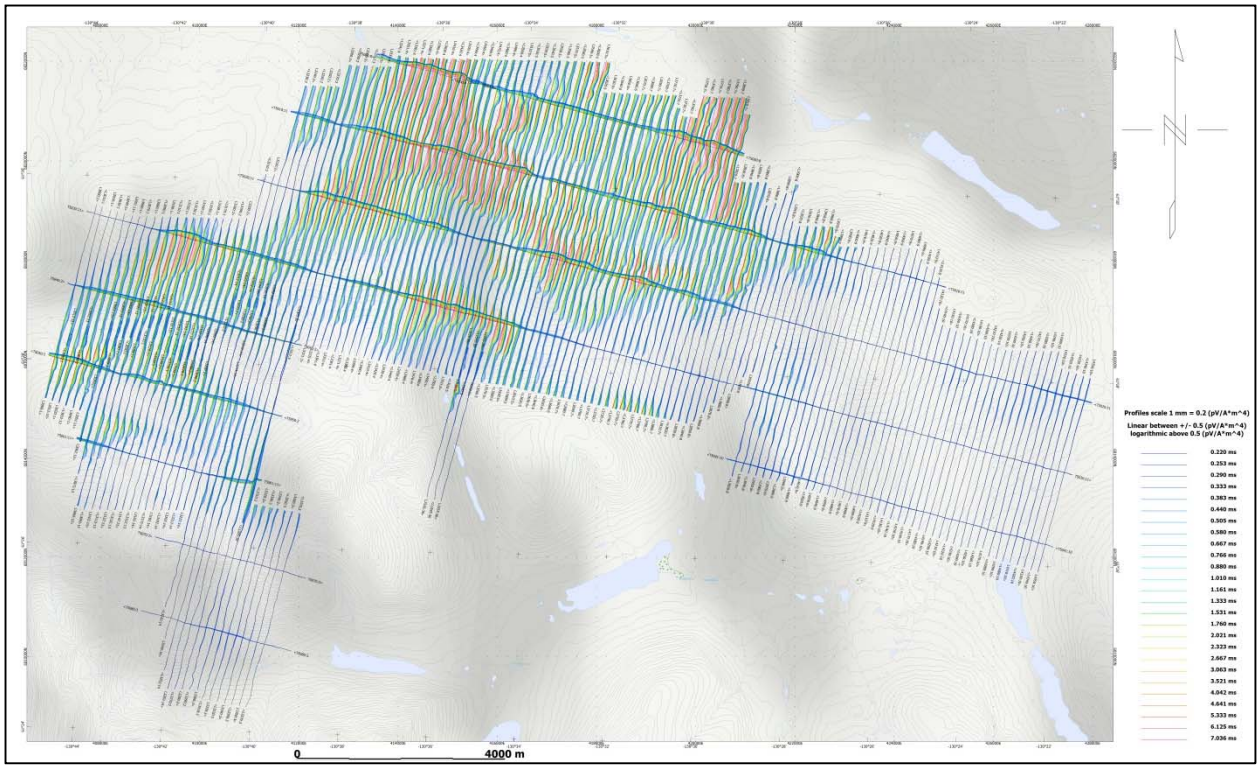
APPENDIX C

GEOPHYSICAL MAPS[1]

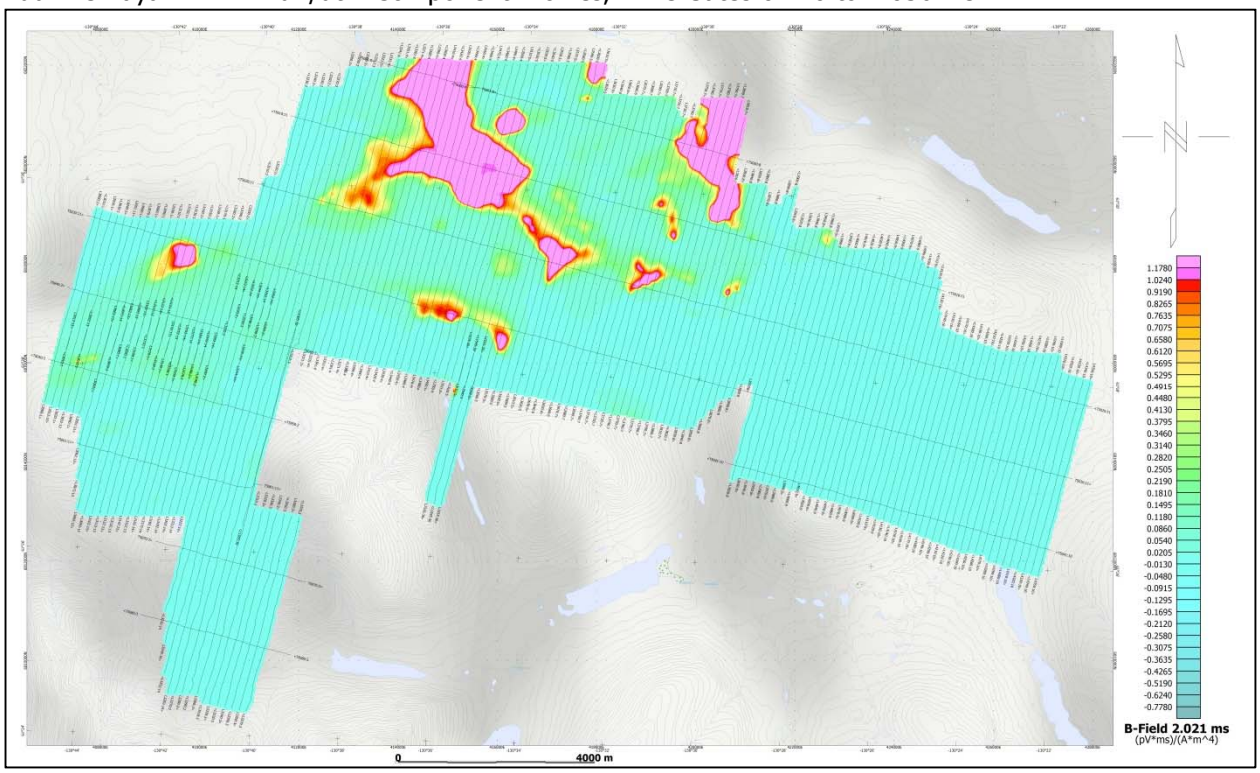


Kudz Ze Kayah - VTEM B-Field Z Component Profiles, Time Gates 0.220 to 7.036 ms

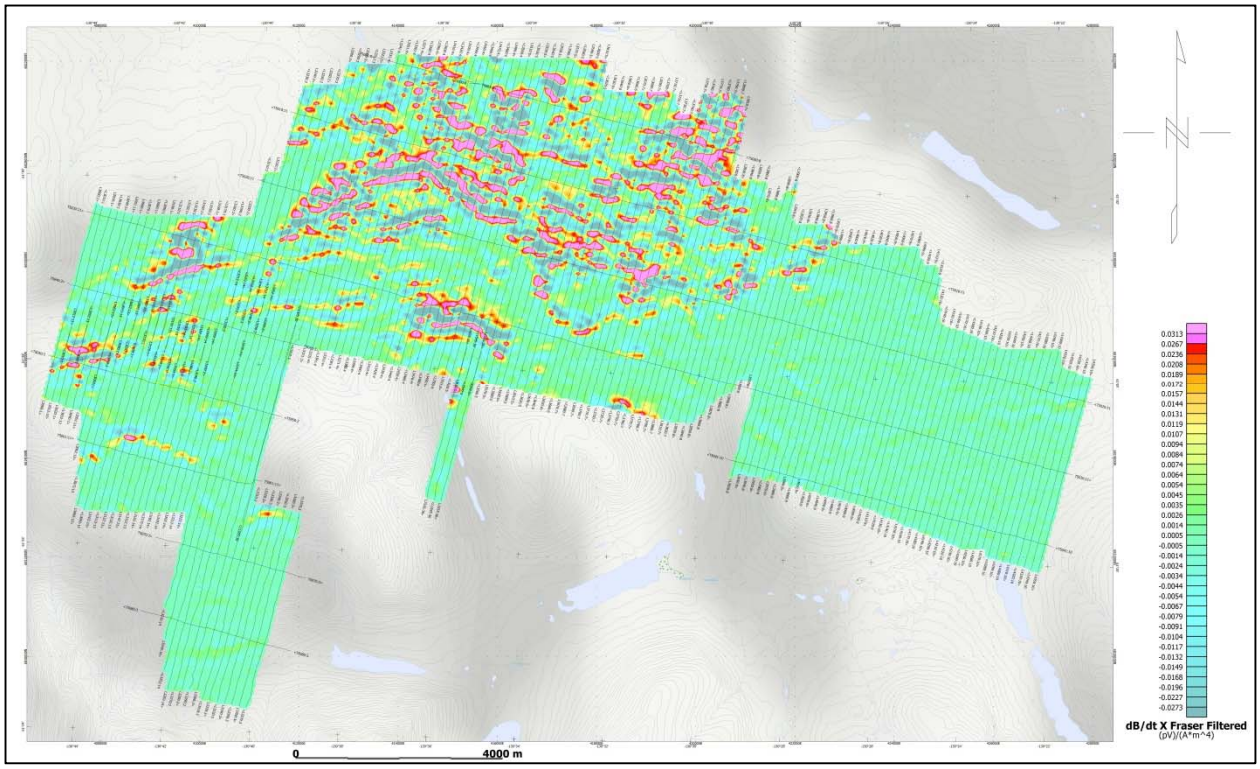
[1] Full size geophysical maps are also available in PDF format on the final DVD



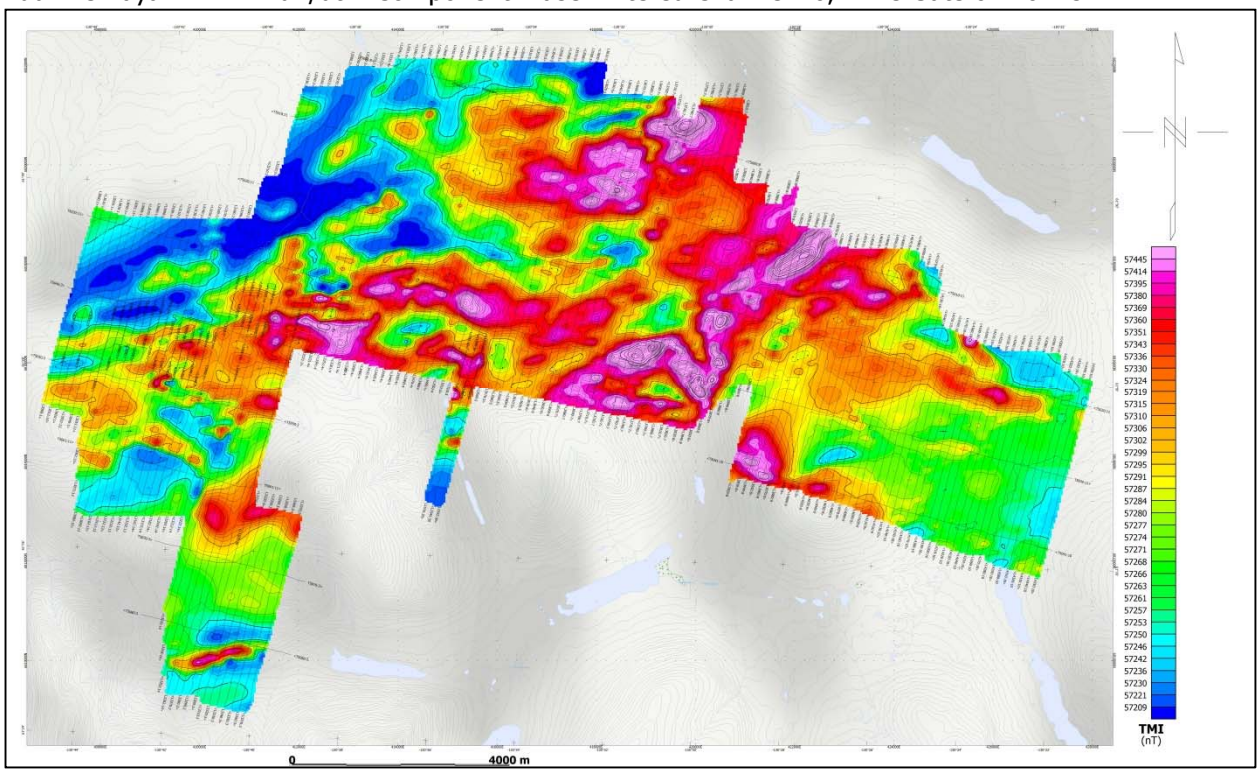
Kudz Ze Kayah - VTEM dB/dt Z Component Profiles, Time Gates 0.220 to 7.036 ms



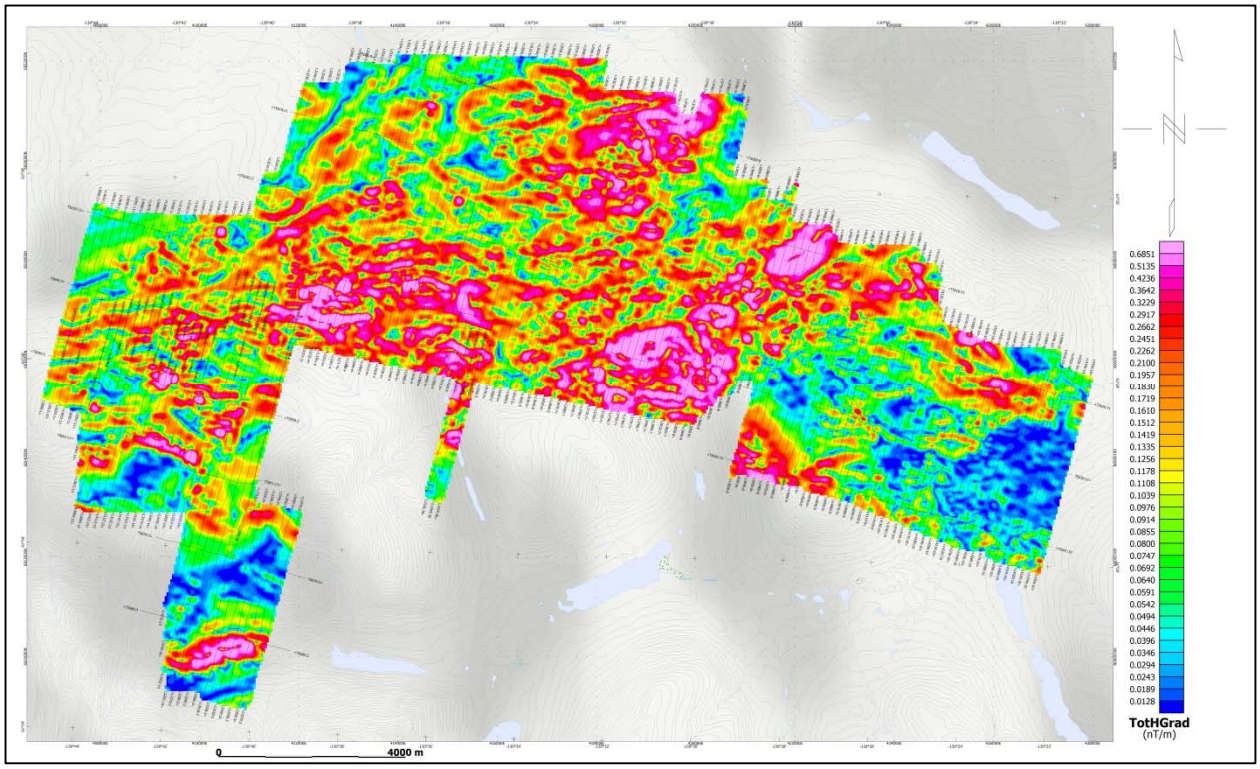
Kudz Ze Kayah - VTEM B-Field Z Component Channel 36, Time Gate 2.021 ms



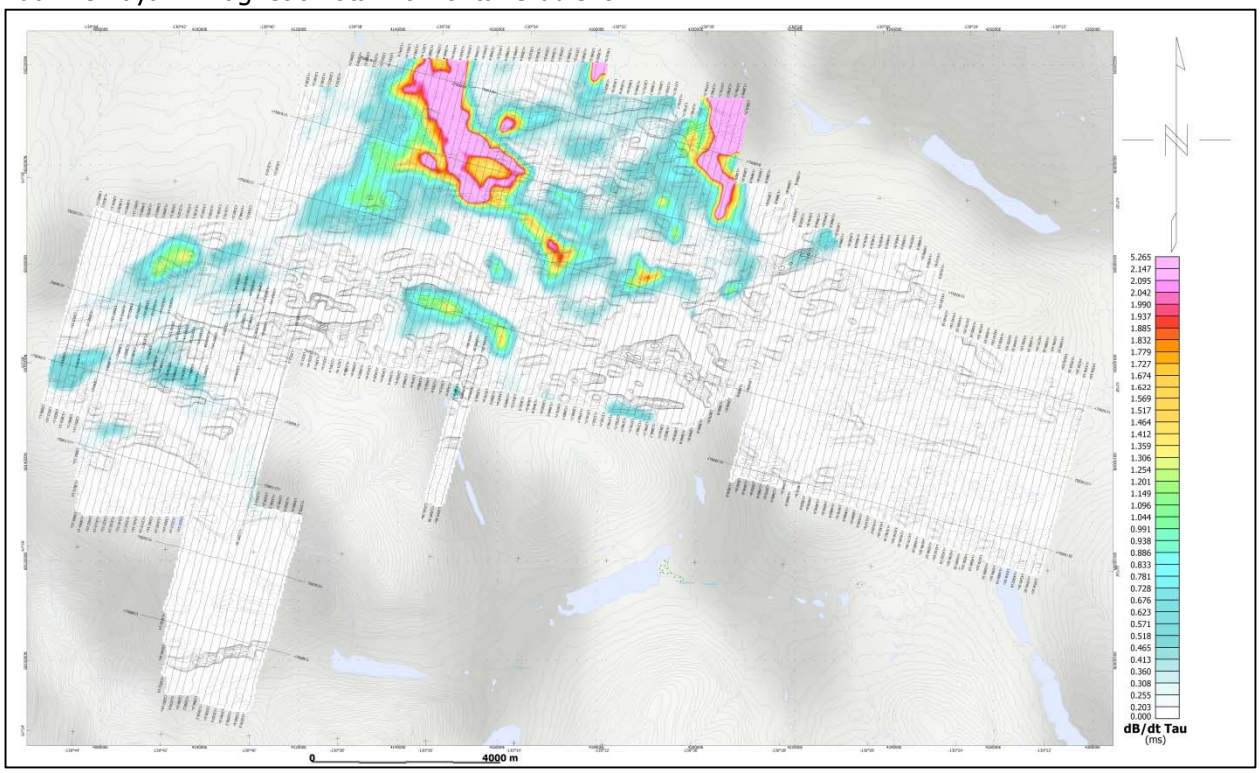
Kudz Ze Kayah - VTEM dB/dt X Component Fraser Filtered Channel 20, Time Gate 0.220 ms



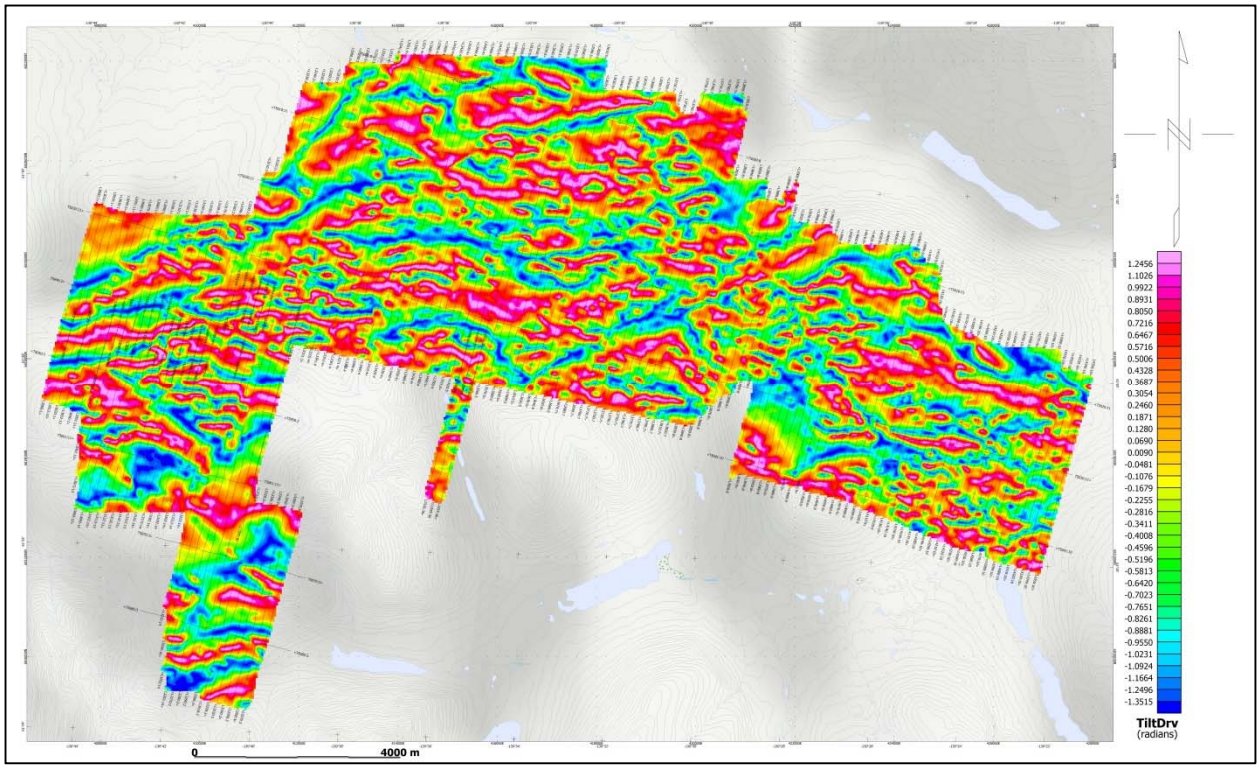
Kudz Ze Kayah - Total Magnetic Intensity (TMI)



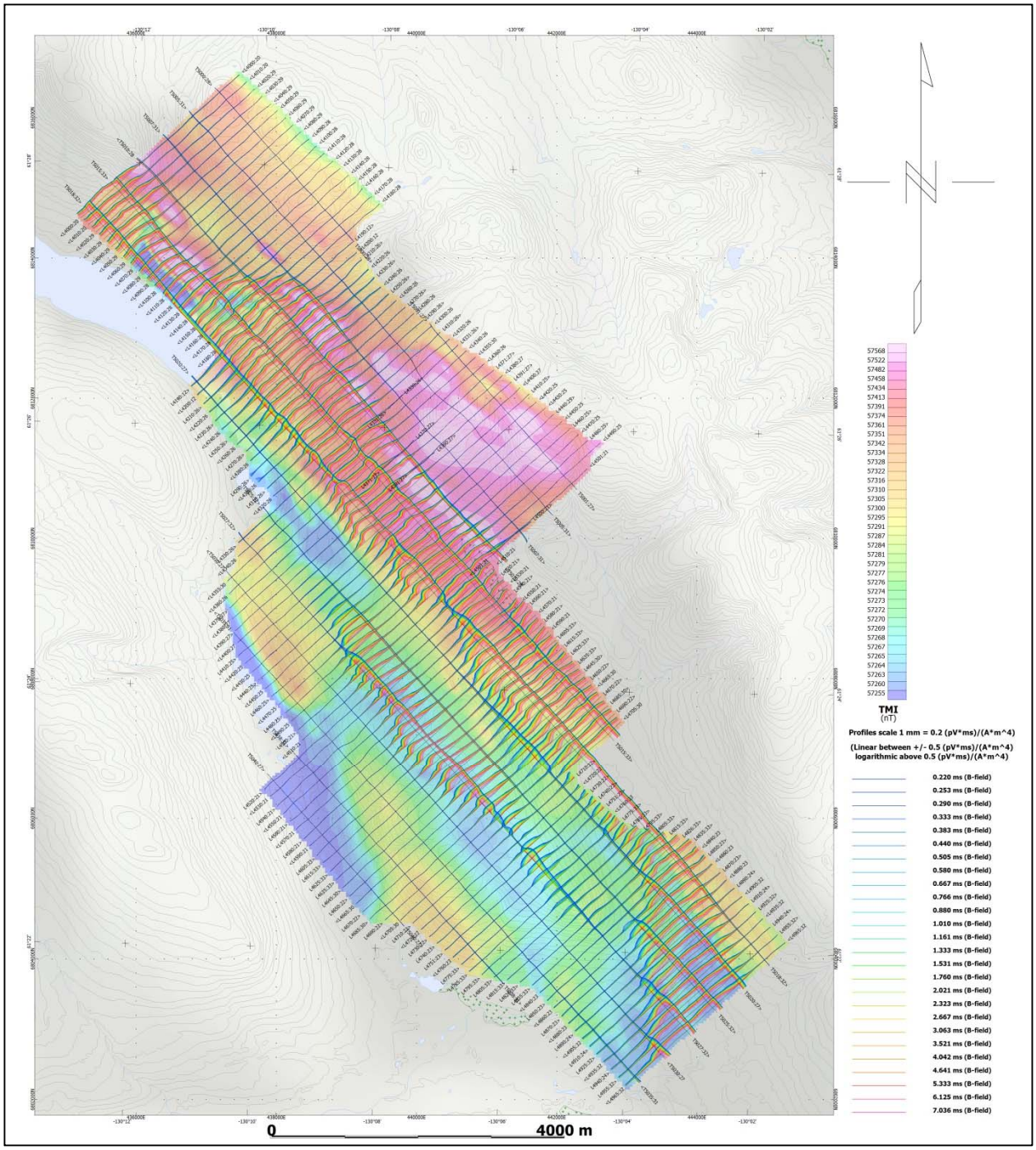
Kudz Ze Kayah - Magnetic Total Horizontal Gradient



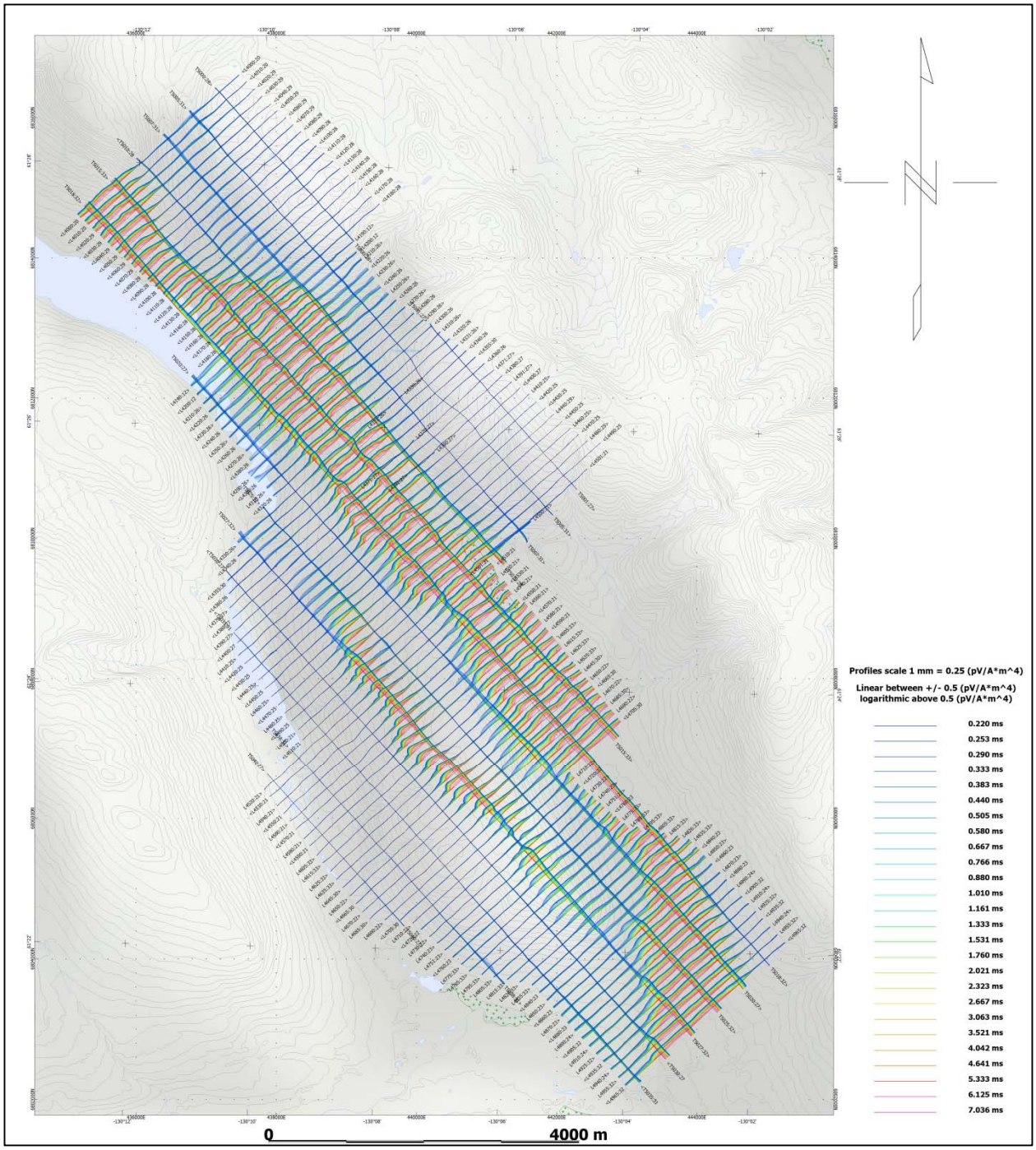
Kudz Ze Kayah - dB/dt Calculated Time Constant (Tau) with Calculated Vertical Derivative contours



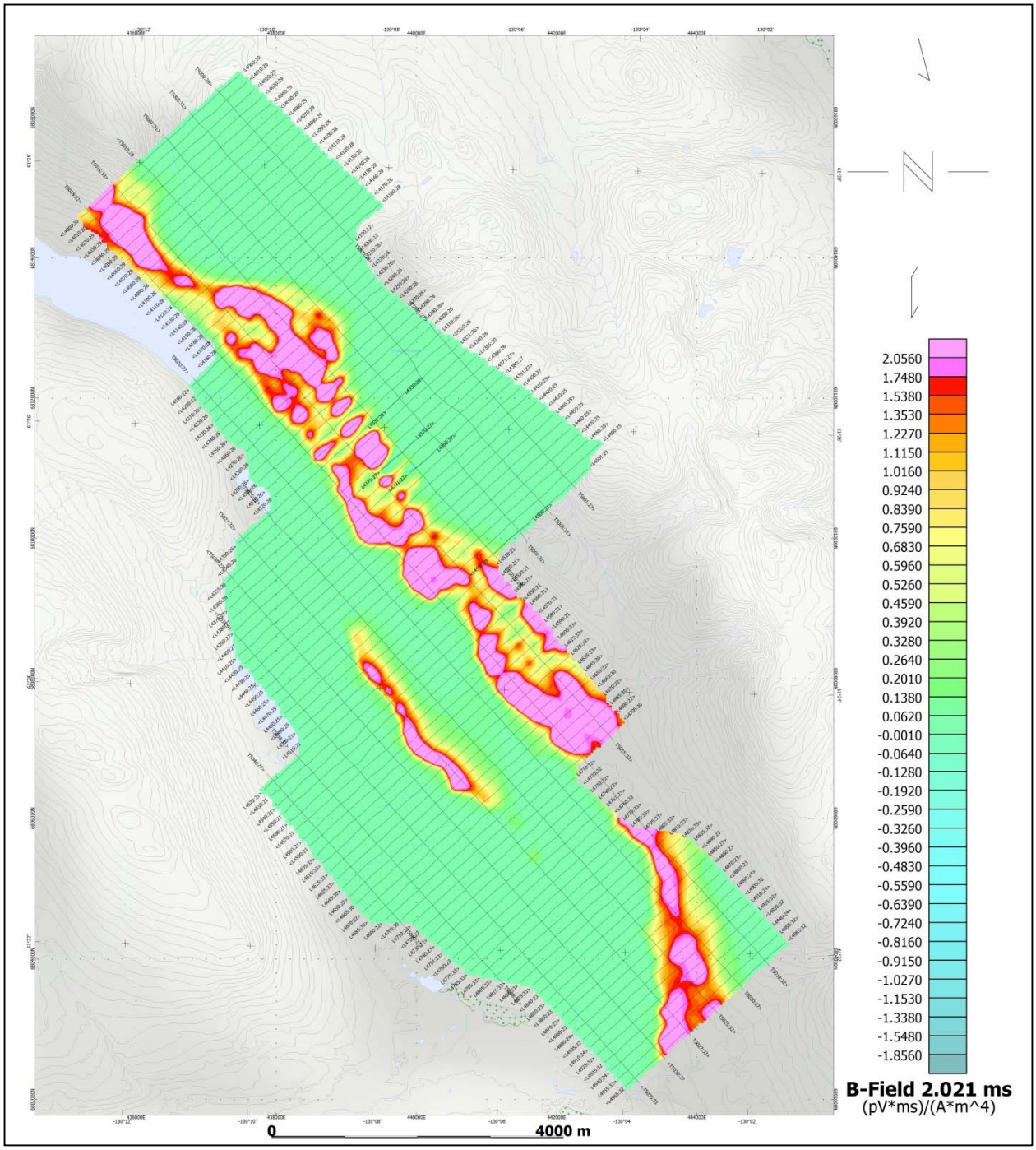
Kudz Ze Kayah - Magnetic Tilt - Angle Derivative



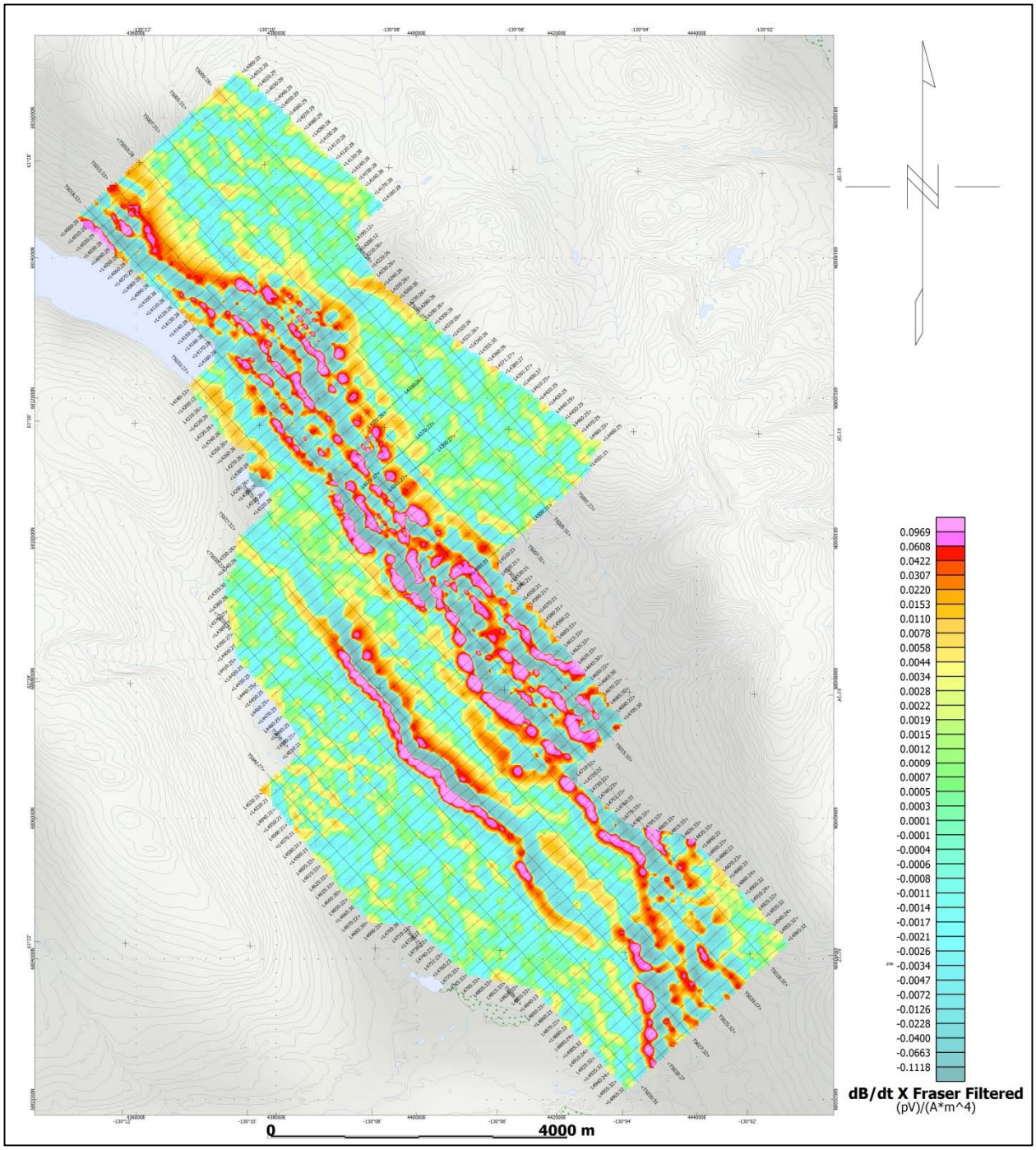
Pelly - VTEM B-Field Z Component Profiles, Time Gates 0.220 to 7.036 ms



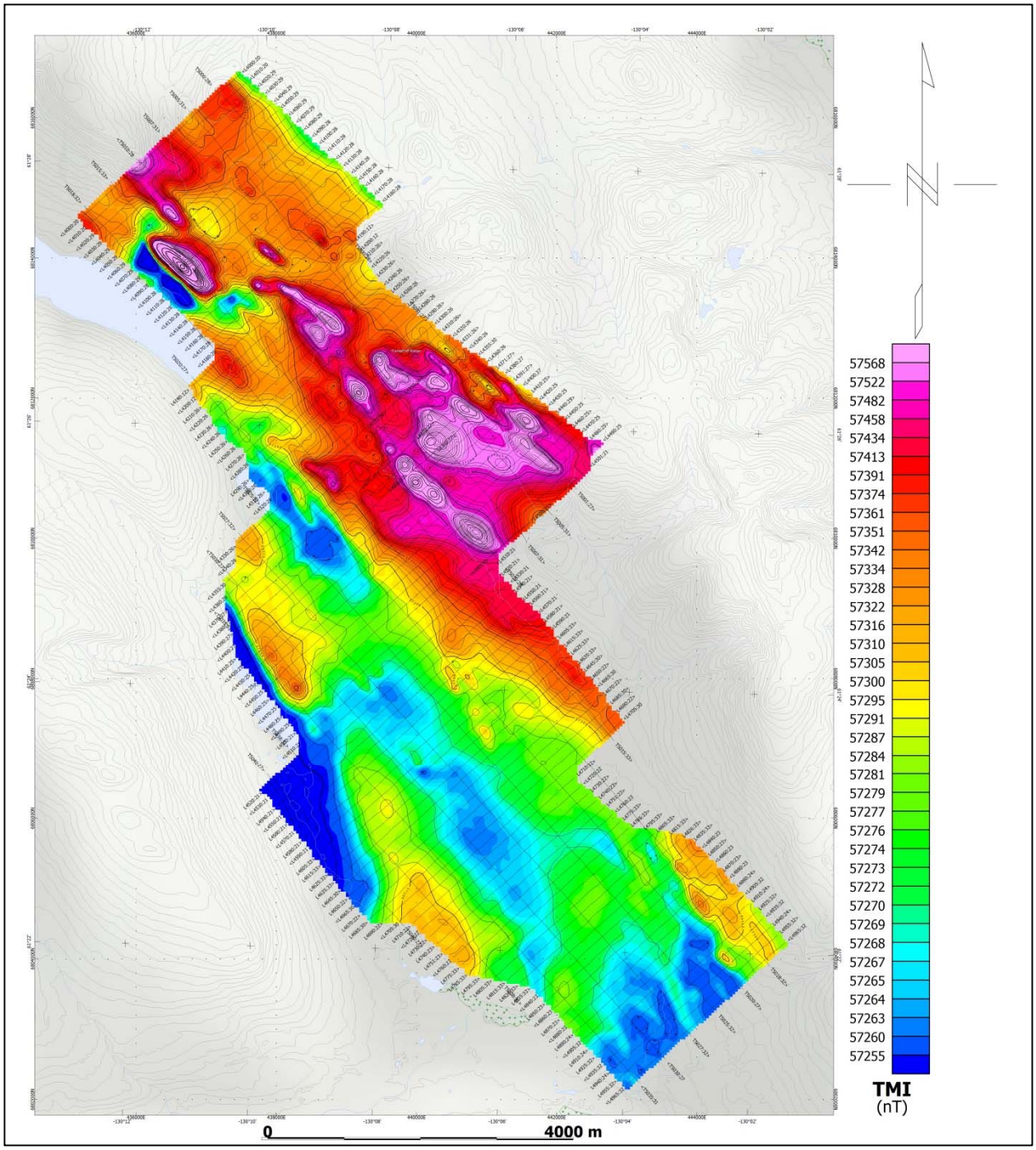
Pelly - VTEM dB/dt Z Component Profiles, Time Gates 0.220 to 7.036 ms



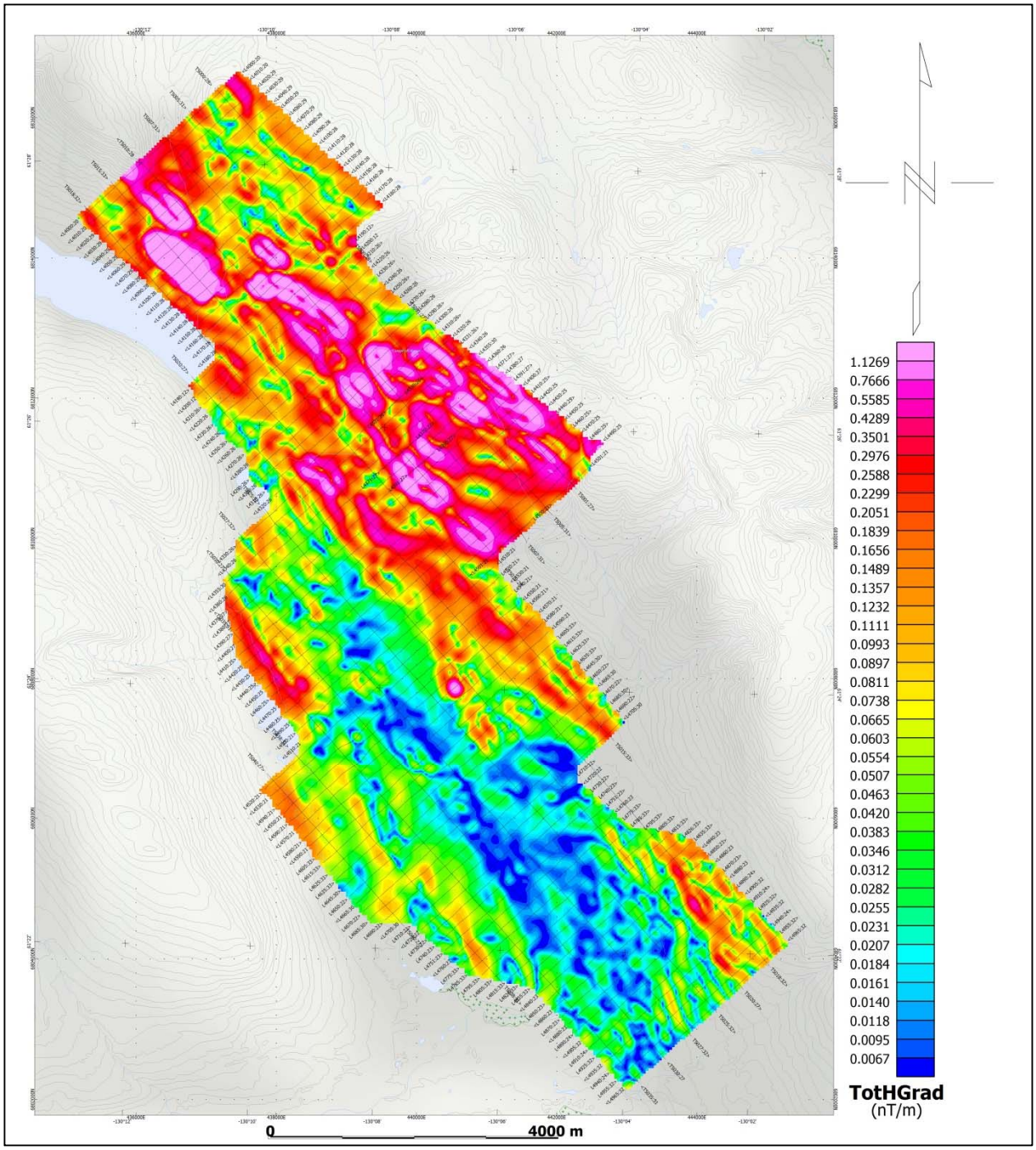
Pelly - VTEM B-Field Z Component Channel 36, Time Gate 2.021 ms



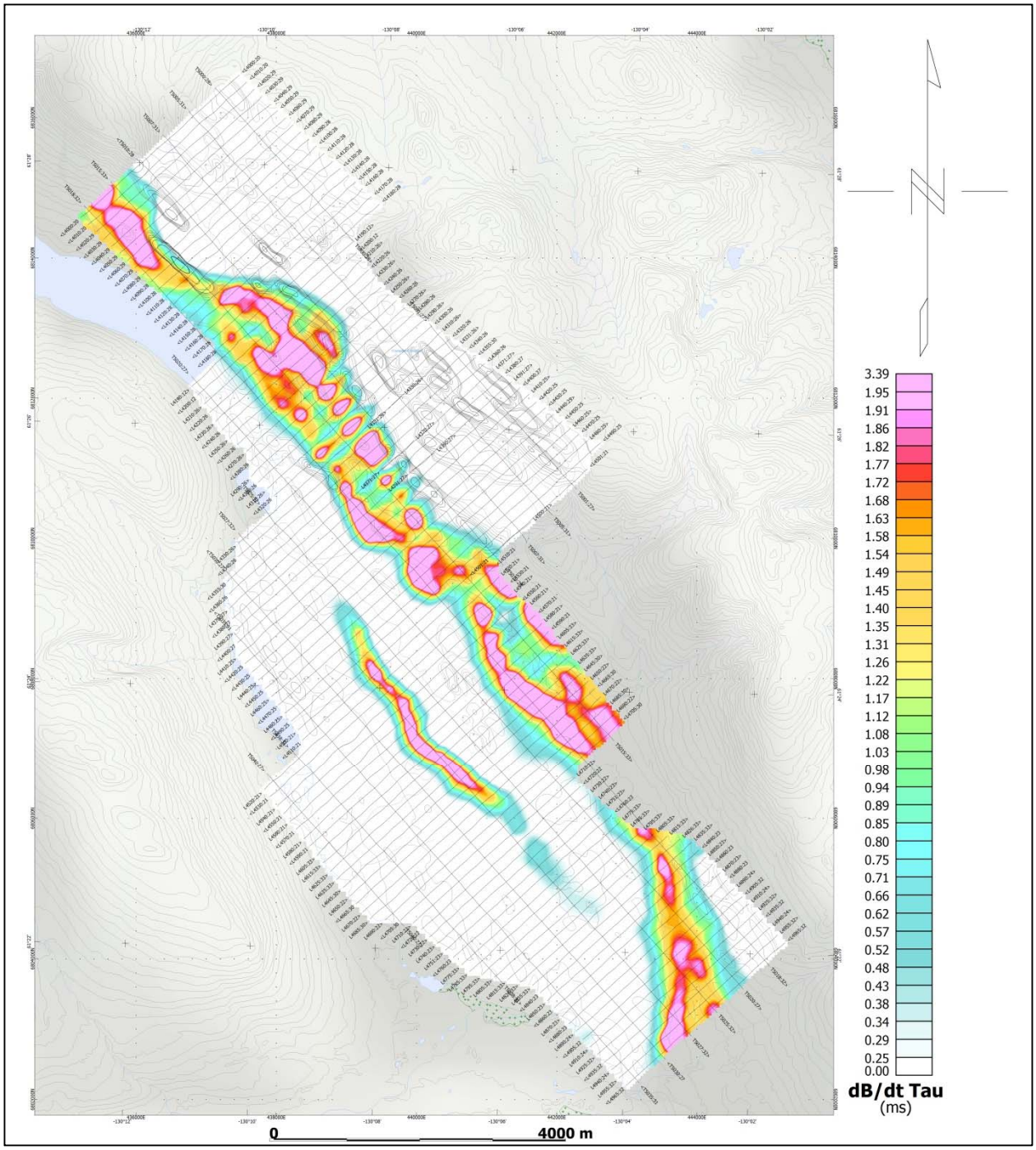
Pelly - VTEM dB/dt X Component Fraser Filtered Channel 20, Time Gate 0.220 ms



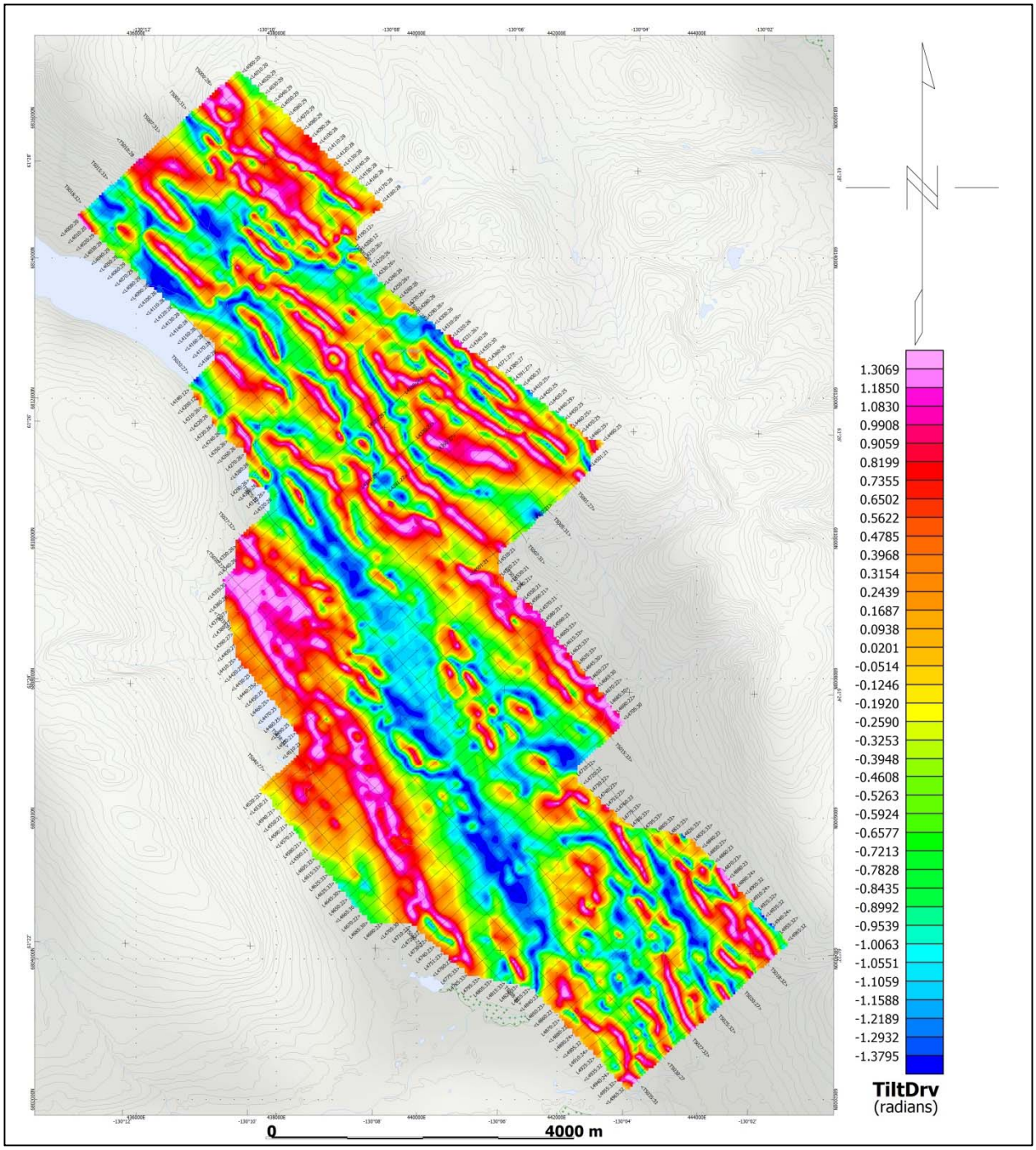
Pelly - Total Magnetic Intensity (TMI)



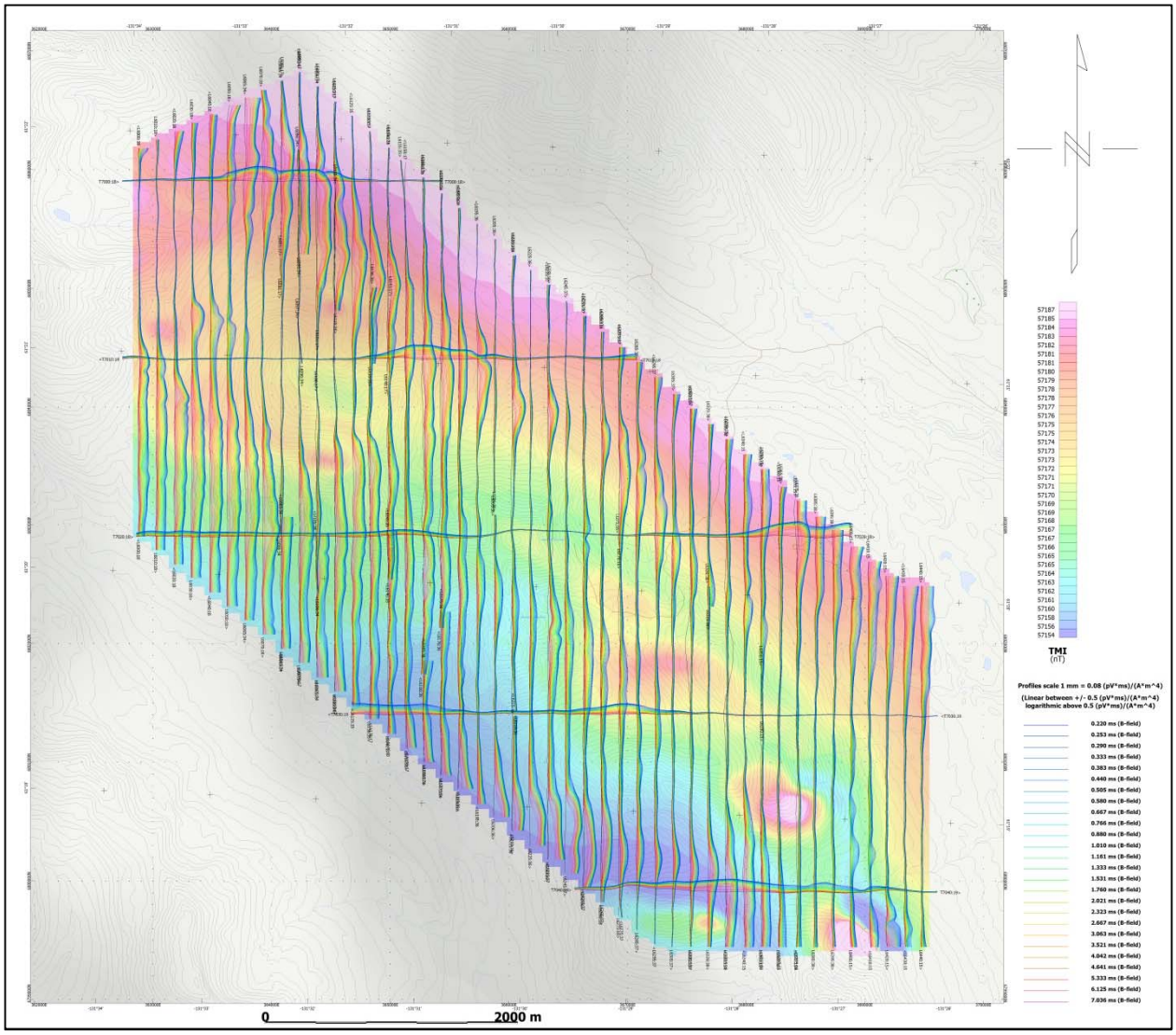
Pelly - Magnetic Total Horizontal Gradient



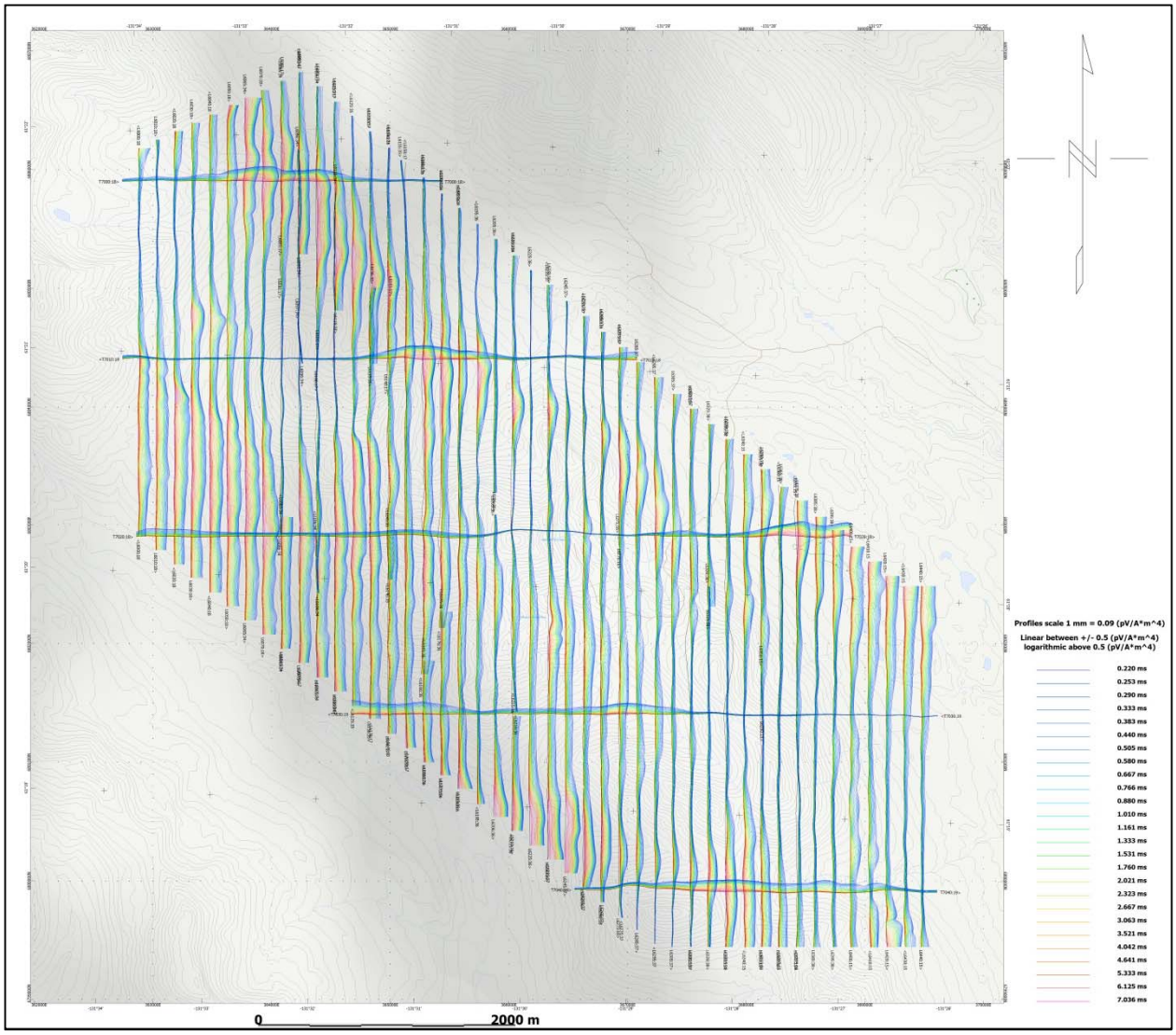
Pelly - dB/dt Calculated Time Constant (Tau) with Calculated Vertical Derivative contours



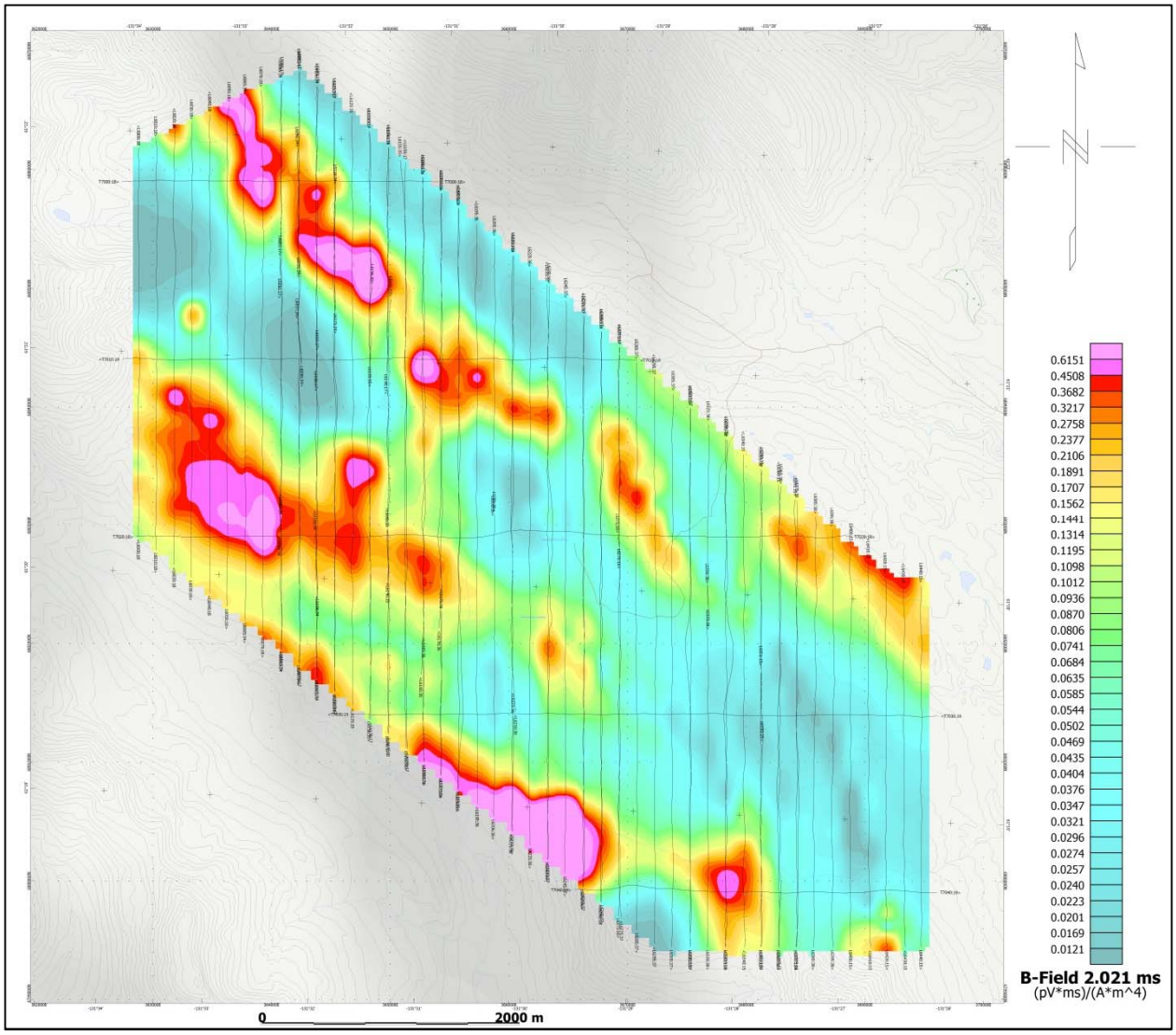
Pelly - Magnetic Tilt - Angle Derivative



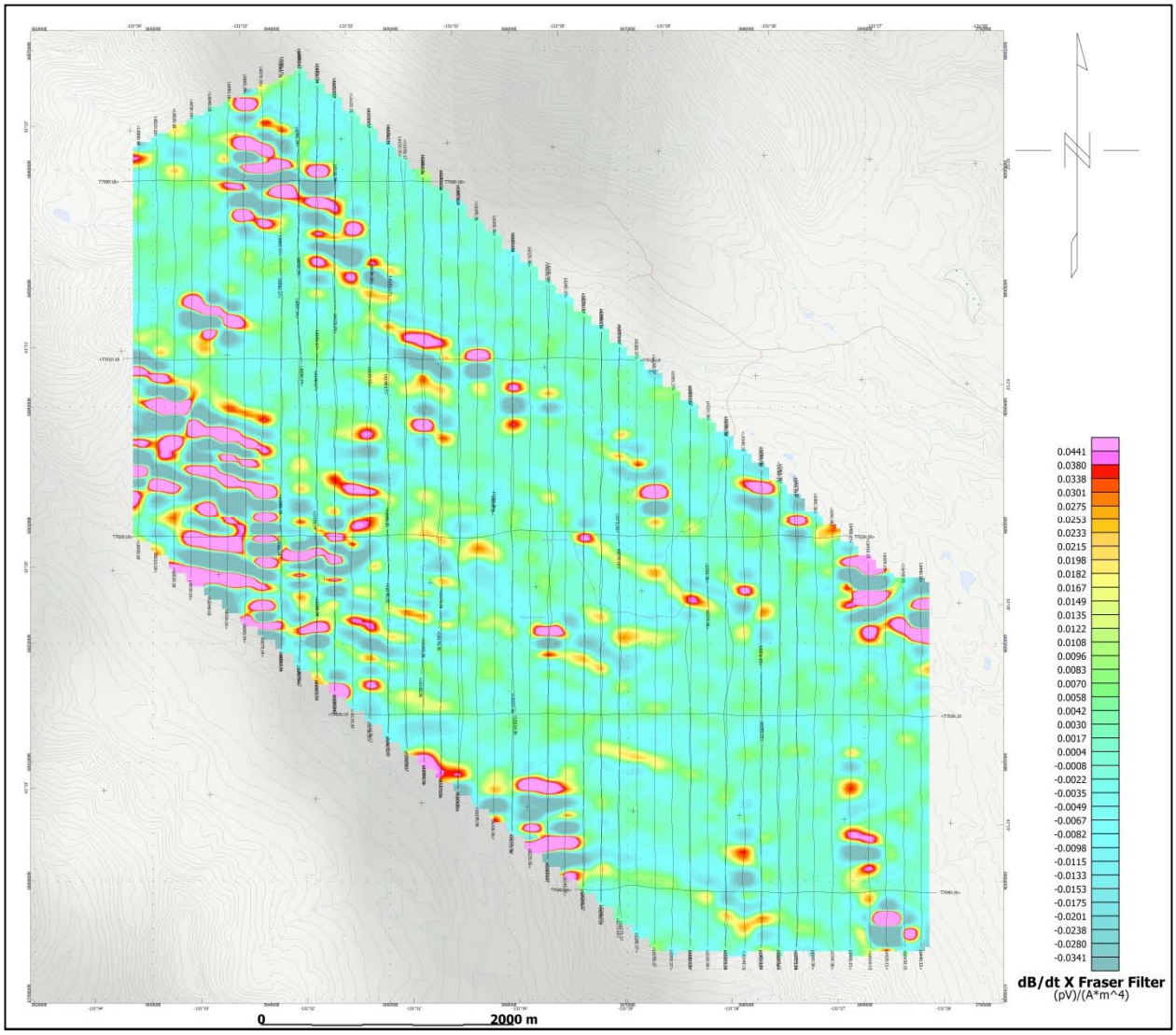
Wolf - VTEM B-Field Z Component Profiles, Time Gates 0.220 to 7.036 ms



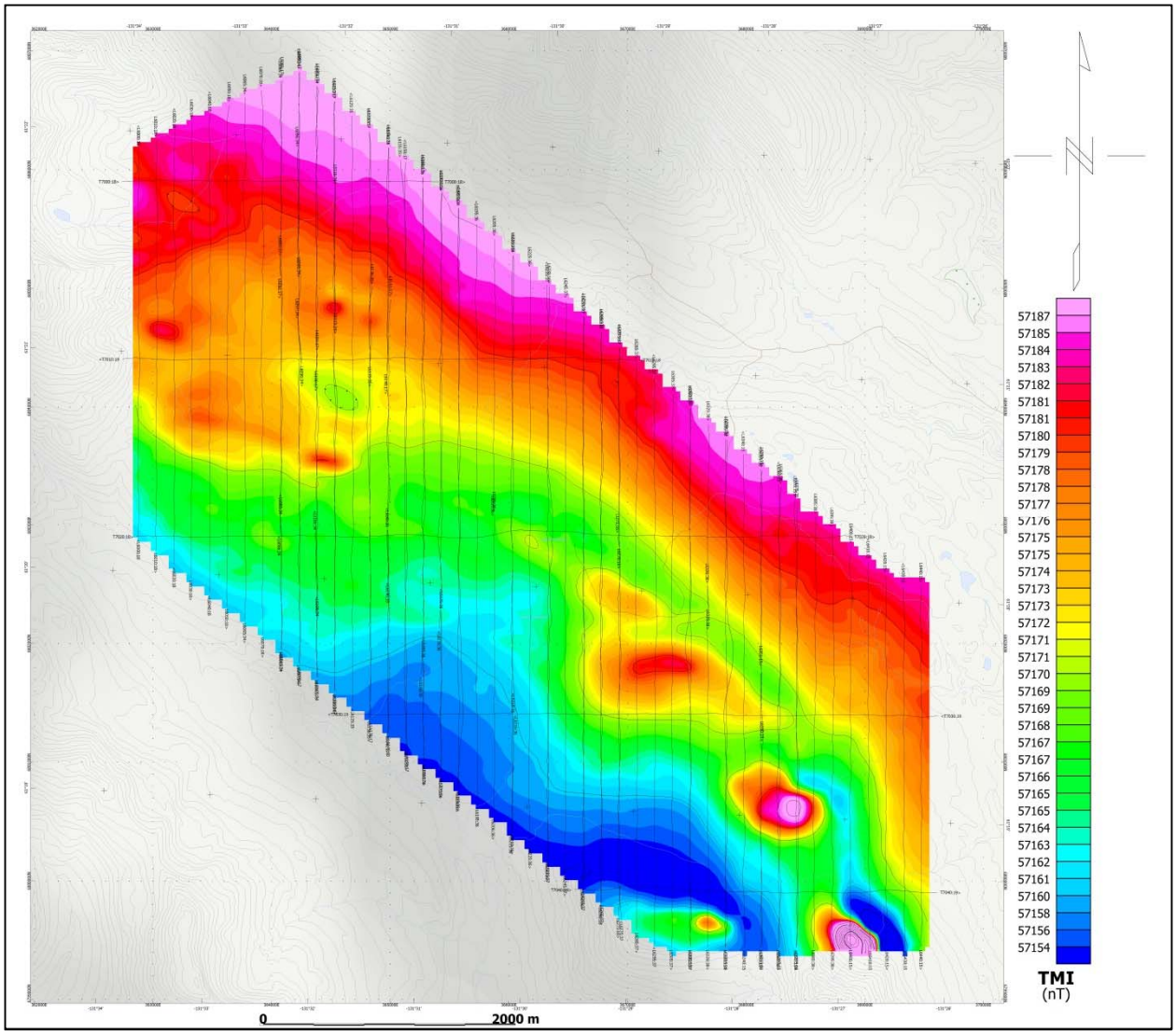
Wolf - VTEM dB/dt Z Component Profiles, Time Gates 0.220 to 7.036 ms



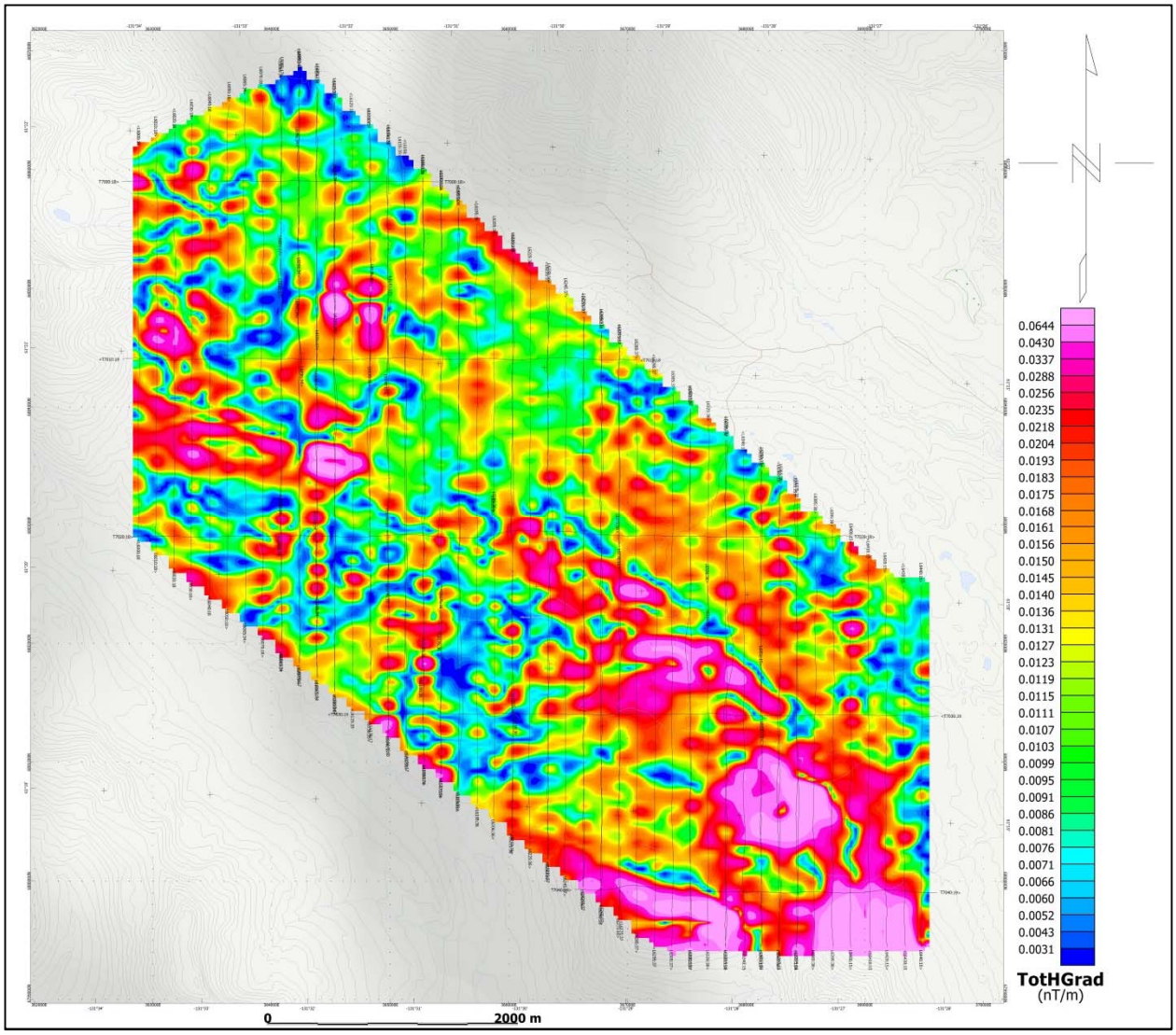
Wolf - VTEM B-Field Z Component Channel 36, Time Gate 2.021 ms



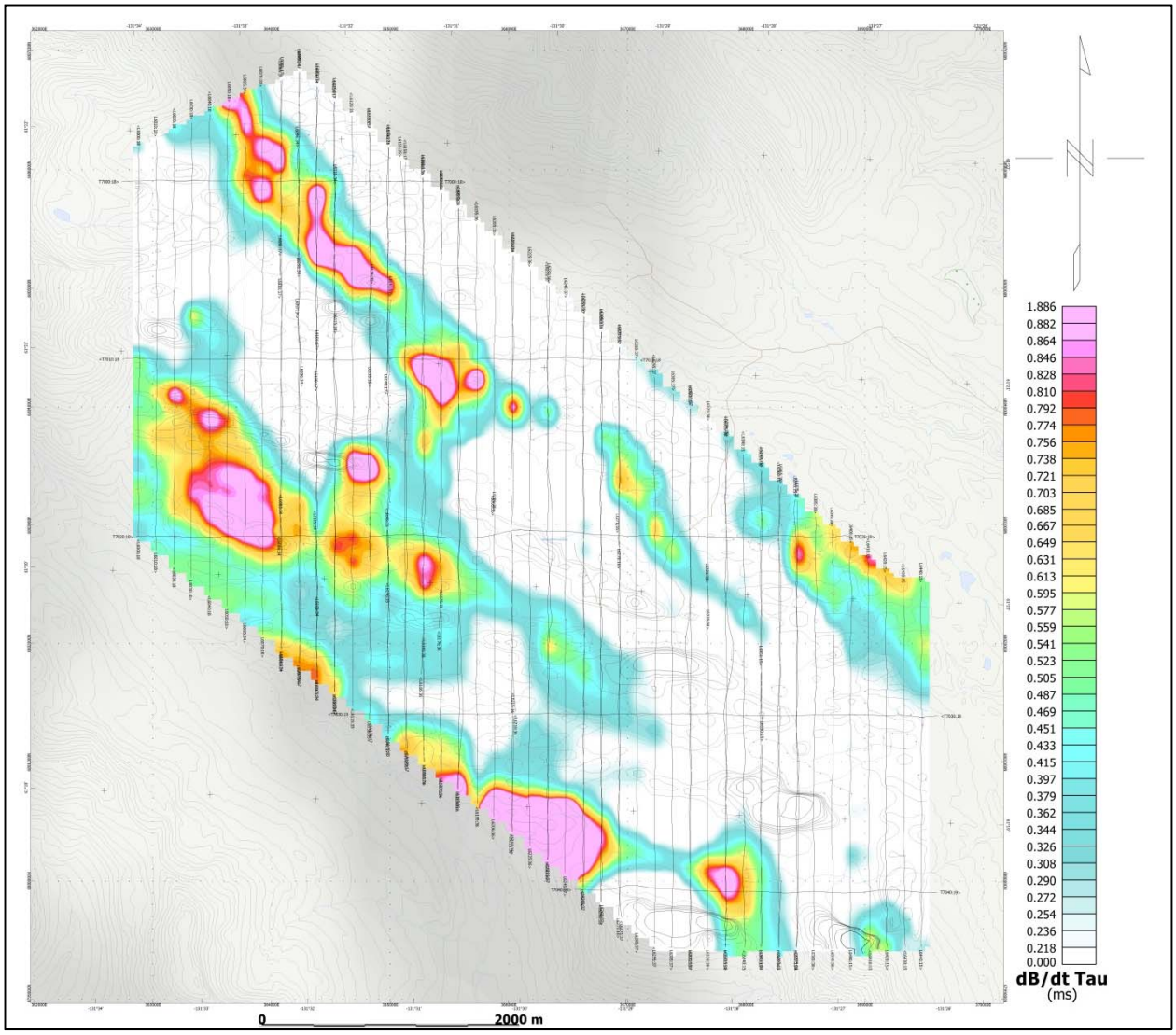
Wolf - VTEM dB/dt X Component Fraser Filtered Channel 20, Time Gate 0.220 ms



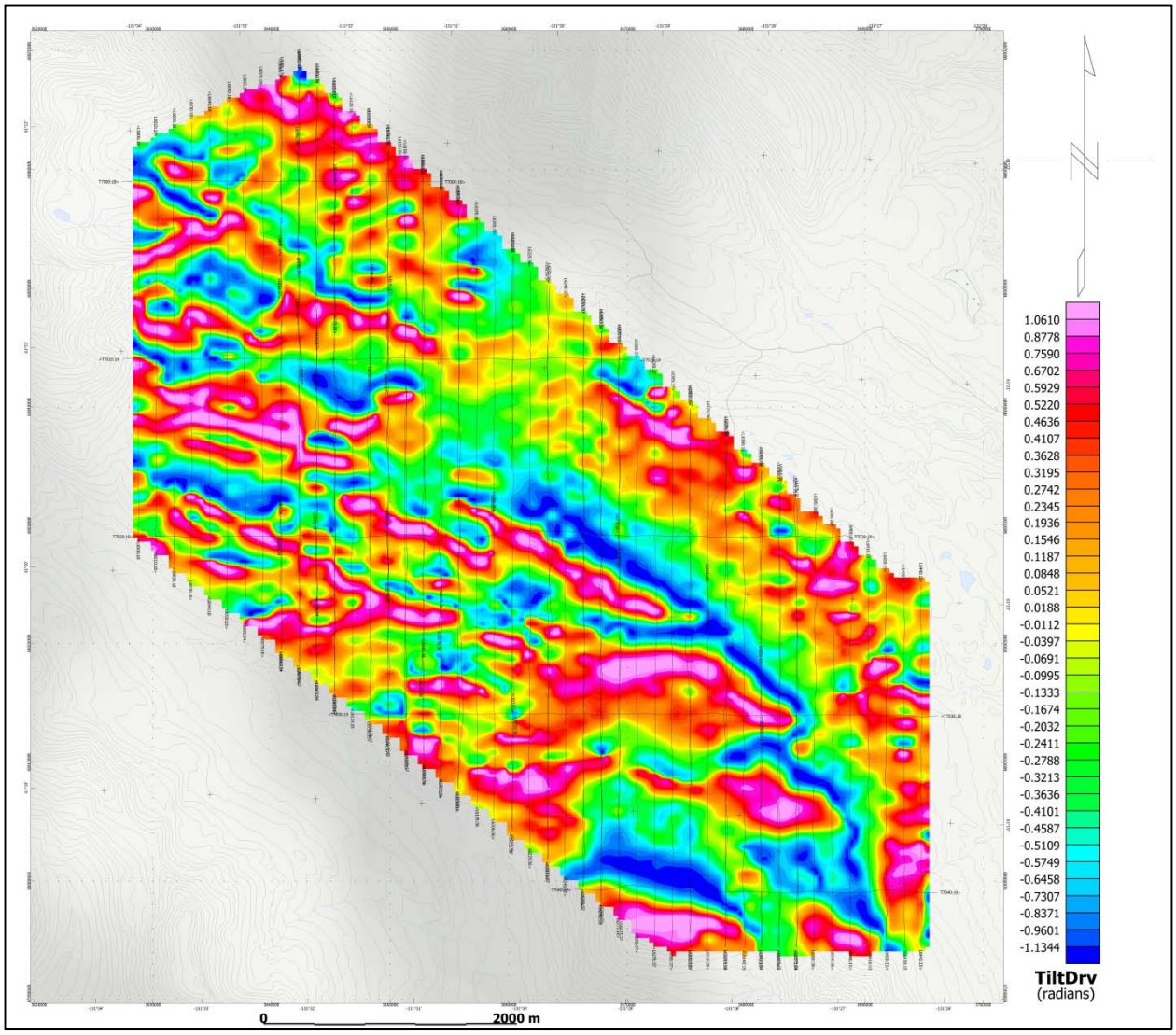
Wolf - Total Magnetic Intensity (TMI)



Wolf - Magnetic Total Horizontal Gradient



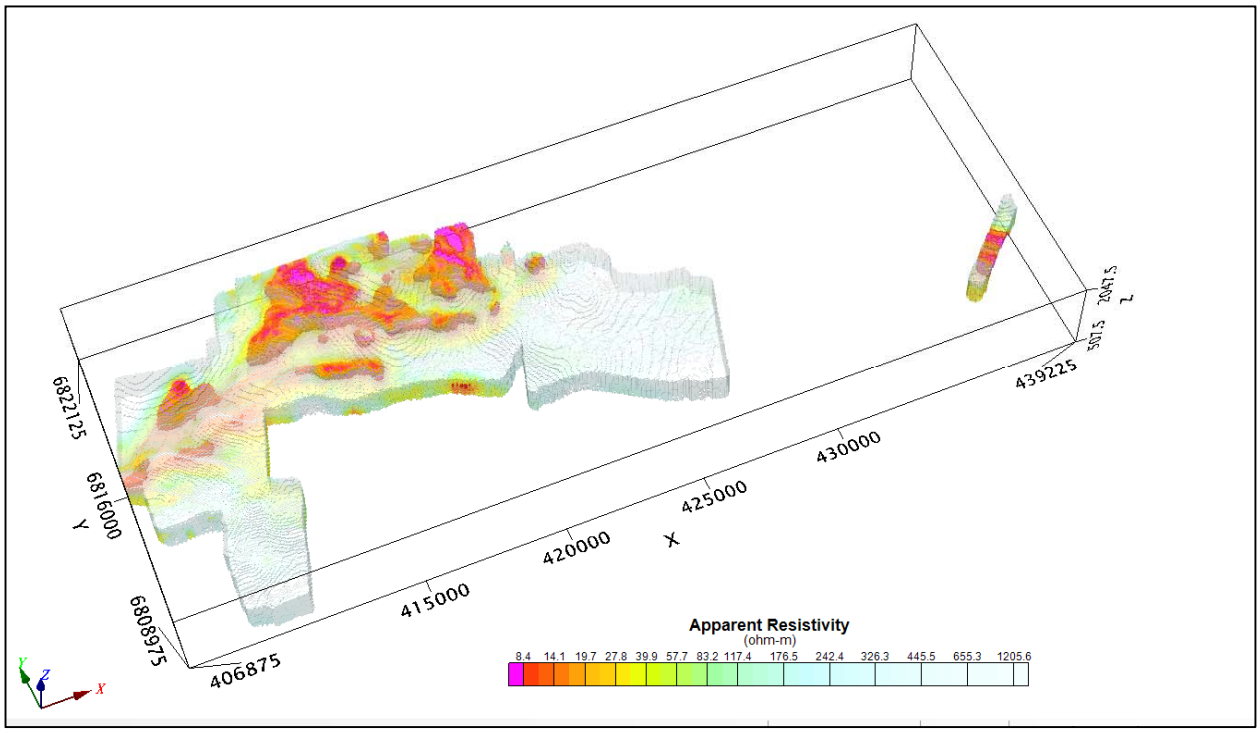
Wolf - dB/dt Calculated Time Constant (Tau) with Calculated Vertical Derivative contours



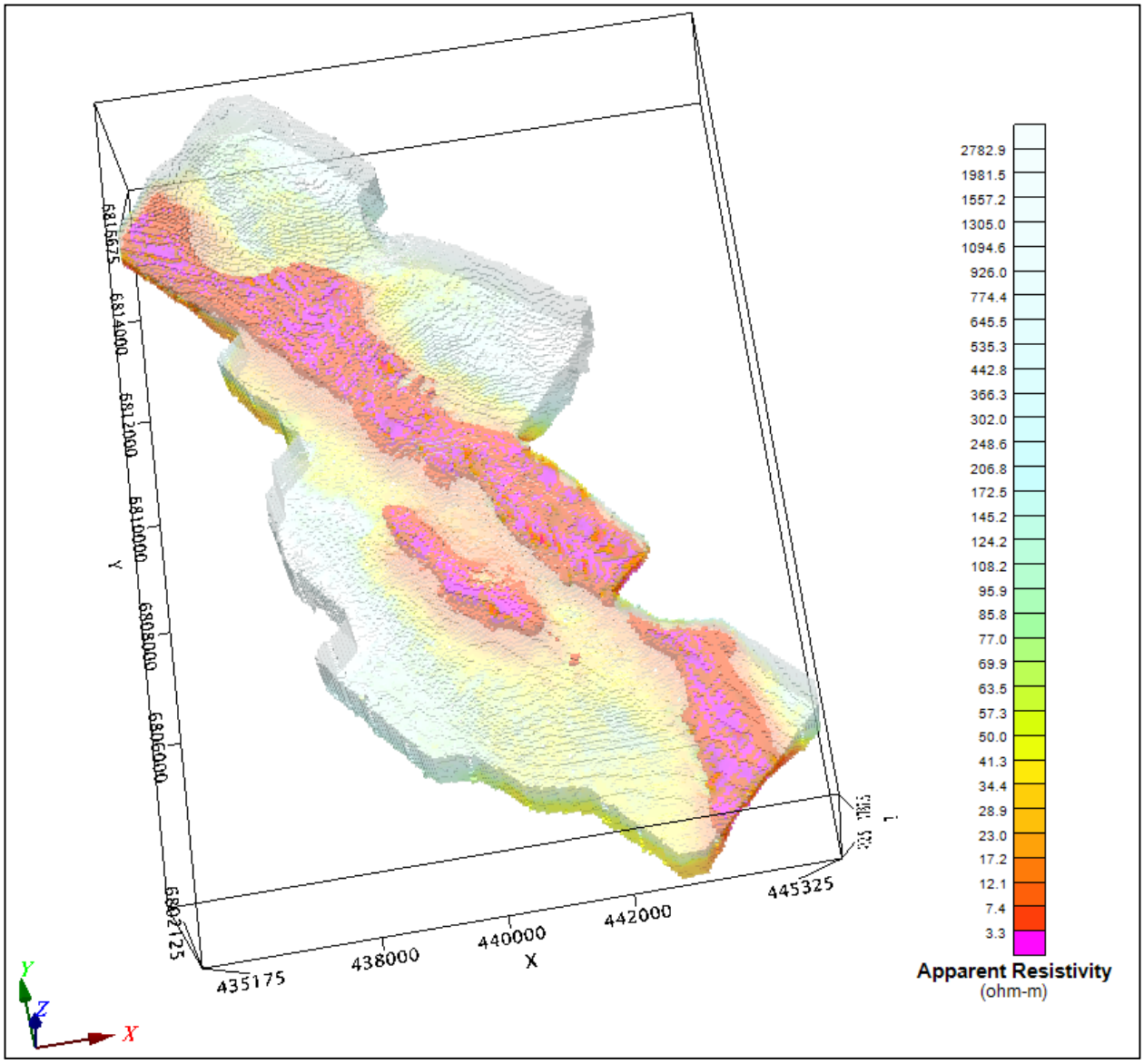
Wolf - Magnetic Tilt - Angle Derivative

RESISTIVITY DEPTH IMAGE (RDI) MAPS

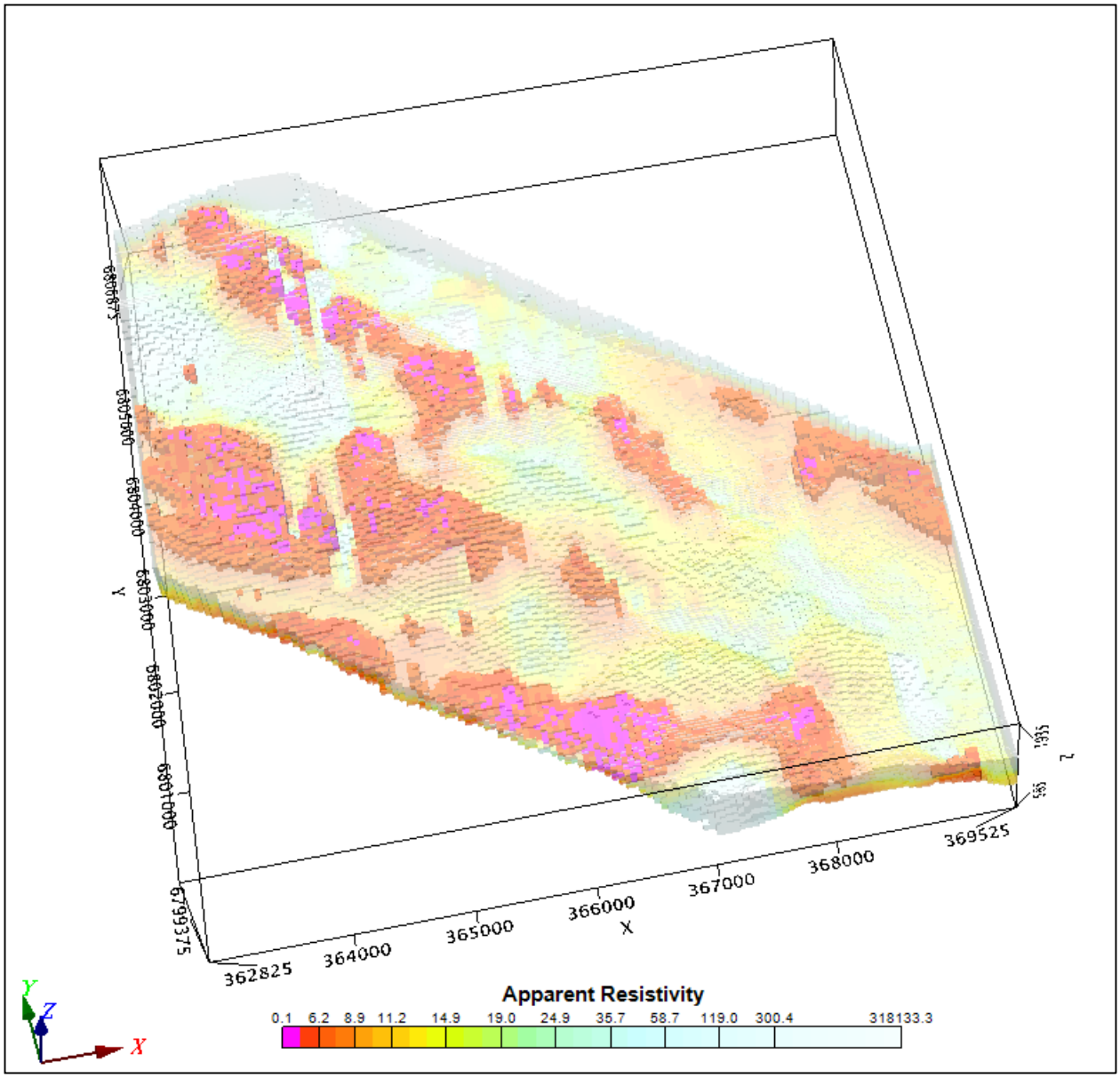
3D Resistivity-Depth Image (RDI)



Kudz Ze Kayah


2782.9
1981.5
1557.2
1305.0
1094.6
926.0
774.4
645.5
535.3
442.8
366.3
302.0
248.6
206.8
172.5
145.2
124.2
108.2
95.9
85.8
77.0
69.9
63.5
57.3
50.0
41.3
34.4
28.9
23.0
17.2
12.1
7.4
3.3
Apparent Resistivity
(ohm-m)
6816675
6814000
6812000
6810000
6808000
6806000
6802725
Y
435175
438000
440000
X
442000
445325
Y
Z
X

Pelly


Apparent Resistivity
0.1 6.2 8.9 11.2 14.9 19.0 24.9 35.7 58.7 119.0 300.4 318133.3
362825
364000
365000
366000
367000
368000
369525
X
6799375
6801000
6802000
6803000
6804000
6805000
6806675
Y
Z
X
Wolf

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.

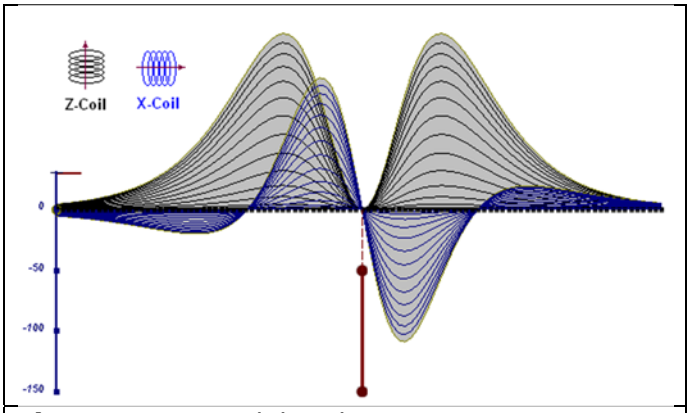


Figure D-1: vertical thin plate

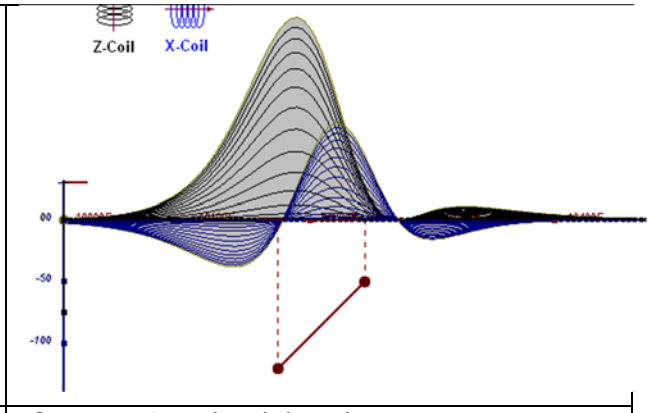


Figure D-2: inclined thin plate

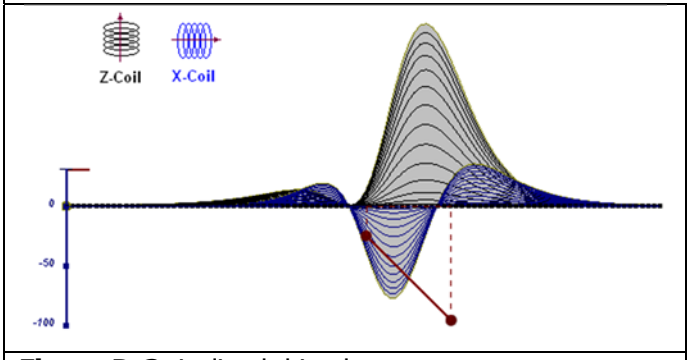


Figure D-3: inclined thin plate

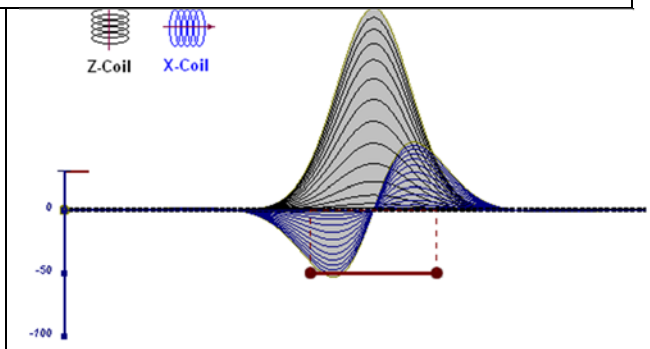


Figure D-4: horizontal thin plate

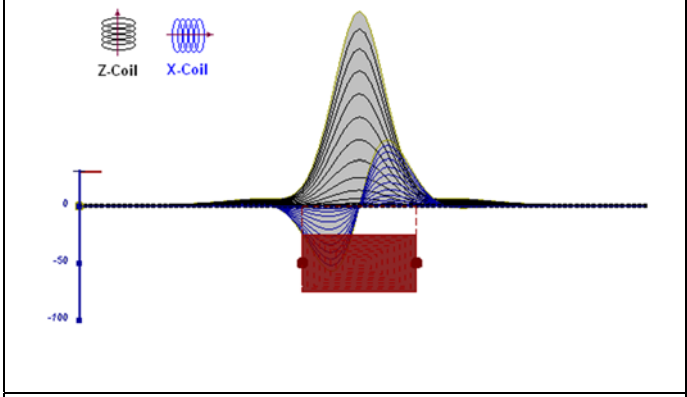


Figure D-5: horizontal thick plate (linear scale of the response)

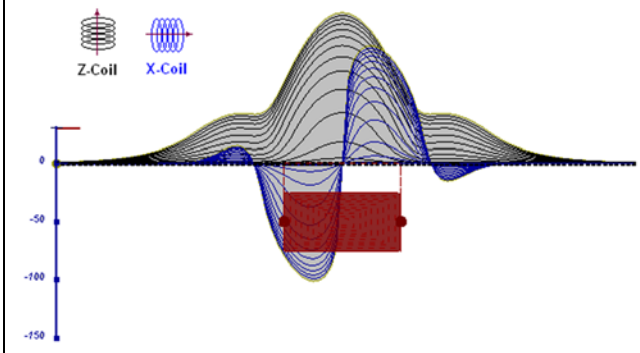


Figure D-6: horizontal thick plate (log scale of the response)

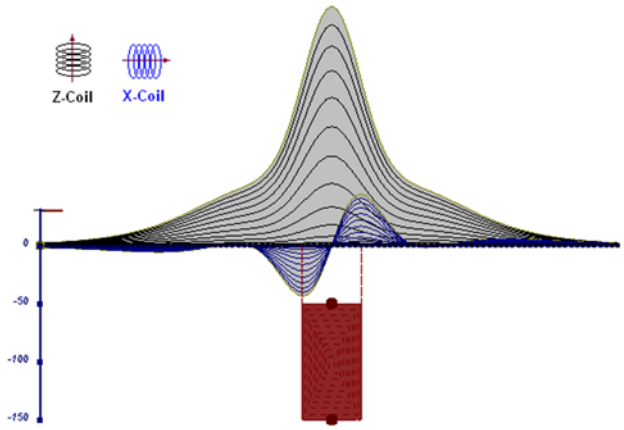


Figure D-7: vertical thick plate (linear scale of the response). 50 m depth

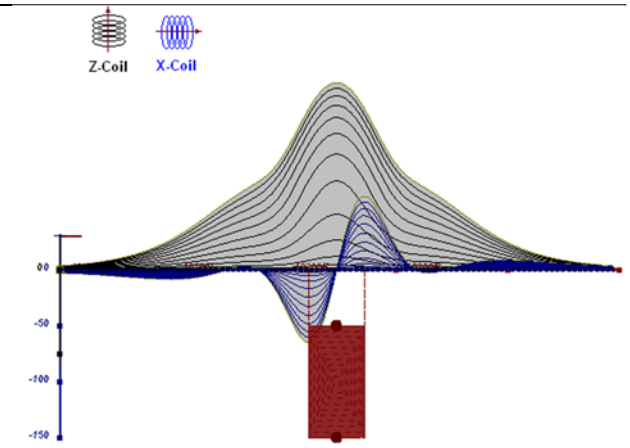


Figure D-8: vertical thick plate (log scale of the response). 50 m depth

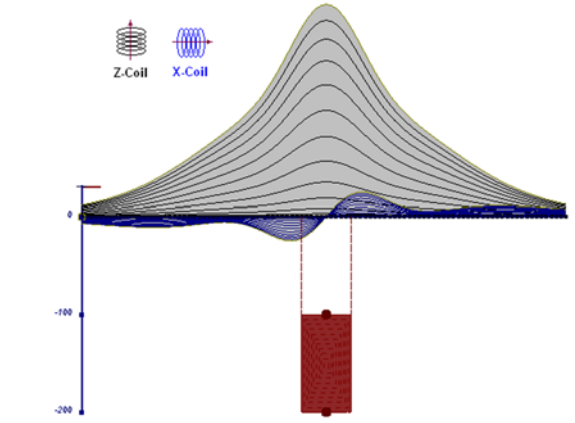


Figure D-9: vertical thick plate (linear scale of the response). 100 m depth

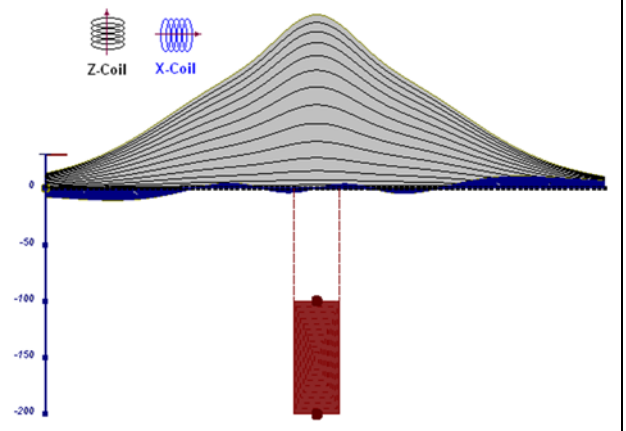


Figure D-10: vertical thick plate (linear scale of the response). Depth / horizontal thickness=2.5

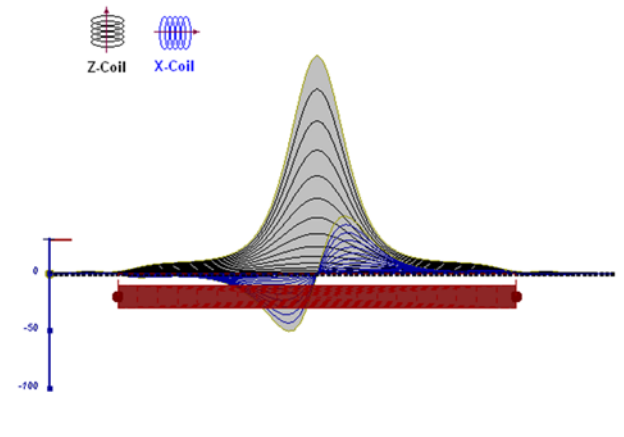


Figure D-11: horizontal thick plate (linear scale of the response)

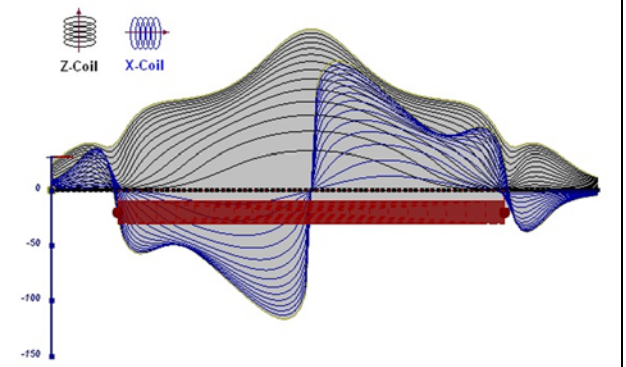


Figure D-12: horizontal thick plate (log scale of the response)

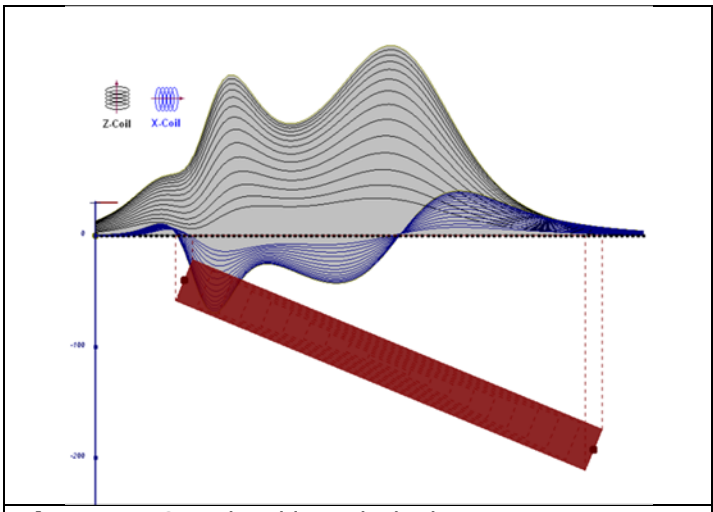


Figure D-13: inclined long thick plate

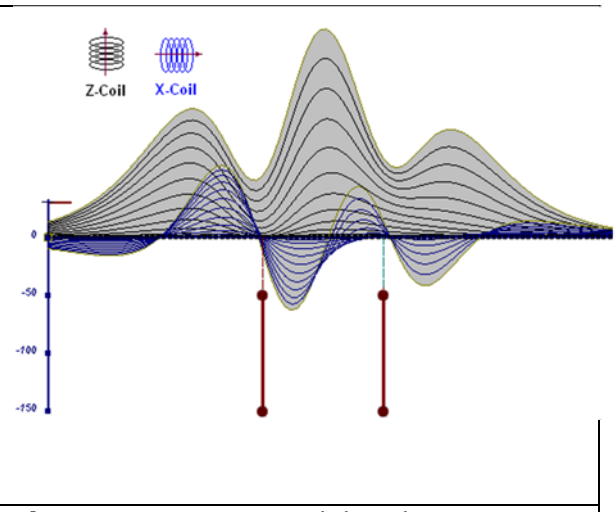


Figure D-14: two vertical thin plates

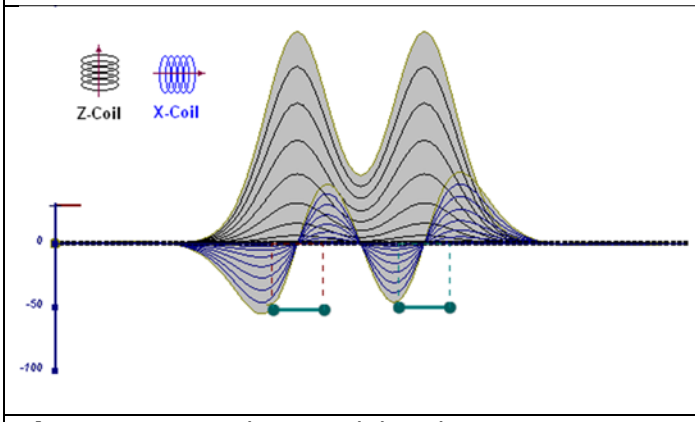


Figure D-15: two horizontal thin plates

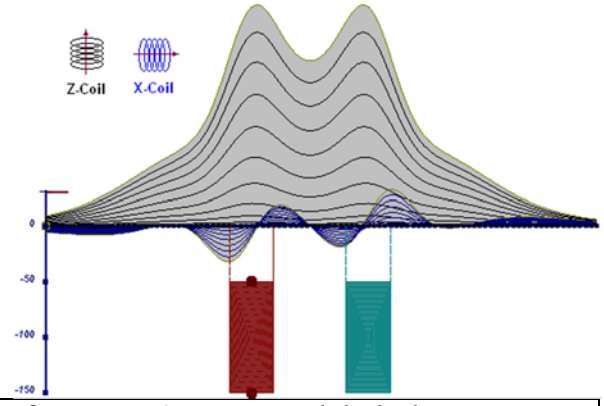


Figure D-16: two vertical thick plates

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

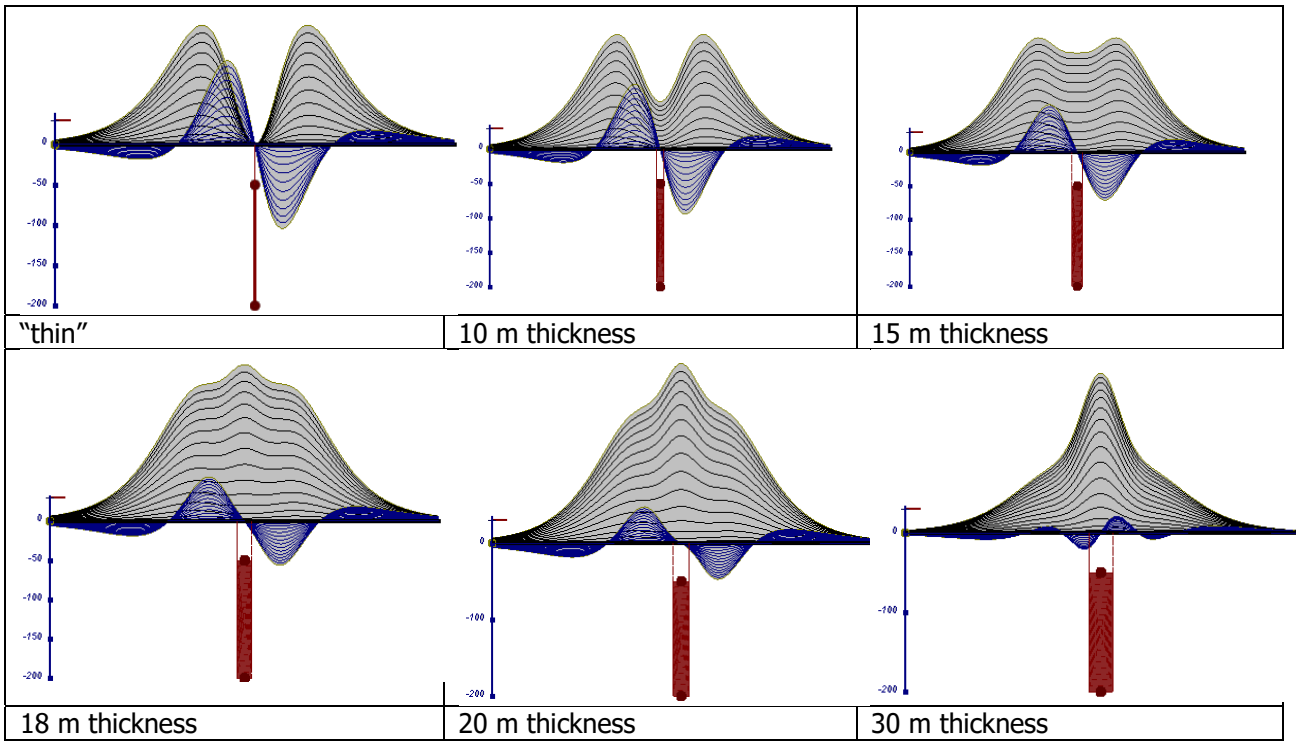


Figure D-17: Conductive vertical plate, depth 50 m, strike length 200 m, depth extends 150 m.

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September 2010

APPENDIX E

EM TIME CONSTANT (TAU) ANALYSIS

Estimation of time constant parameter[1] in transient electromagnetic method is one of the steps toward the extraction of the information about conductances beneath the surface from TEM measurements.

The most reliable method to discriminate or rank conductors from overburden, background or one and other is by calculating the EM field decay time constant (TAU parameter), which directly depends on conductance despite their depth and accordingly amplitude of the response.

THEORY

As established in electromagnetic theory, the magnitude of the electro-motive force (emf) induced is proportional to the time rate of change of primary magnetic field at the conductor. This emf causes eddy currents to flow in the conductor with a characteristic transient decay, whose Time Constant (Tau) is a function of the conductance of the survey target or conductivity and geometry (including dimensions) of the target. The decaying currents generate a proportional secondary magnetic field, the time rate of change of which is measured by the receiver coil as induced voltage during the Off time.

The receiver coil output voltage ($\mathbf{e_0}$) is proportional to the time rate of change of the secondary magnetic field and has the form,

$$e_0 \, \alpha \, (1 / \tau) \, e^{-(t/\tau)}$$

Where,
τ = L/R is the characteristic time constant of the target (TAU)
R = resistance
L = inductance

From the expression, conductive targets that have small value of resistance and hence large value of τ yield signals with small initial amplitude that decays relatively slowly with progress of time. Conversely, signals from poorly conducting targets that have large resistance value and smallτ, have high initial amplitude but decay rapidly with time[1] (Fig. E1).

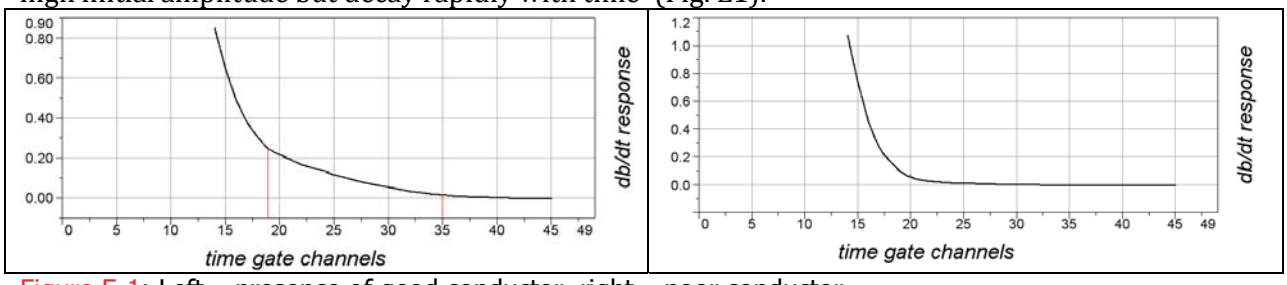


Figure E-1: Left – presence of good conductor, right – poor conductor.

[1] McNeill, JD, 1980, "Applications of Transient Electromagnetic Techniques", Technical Note TN-7 page 5, Geonics Limited, Mississauga, Ontario.

EM Time Constant (Tau) Calculation

The EM Time-Constant (TAU) is a general measure of the speed of decay of the electromagnetic response and indicates the presence of eddy currents in conductive sources as well as reflecting the "conductance quality" of a source. Although TAU can be calculated using either the measured dB/dt decay or the calculated B-field decay, dB/dt is commonly preferred due to better stability (S/N) relating to signal noise. Generally, TAU calculated on base of early time response reflects both near surface overburden and poor conductors whereas, in the late ranges of time, deep and more conductive sources, respectively. For example early time TAU distribution in an area that indicates conductive overburden is shown in Figure 2.

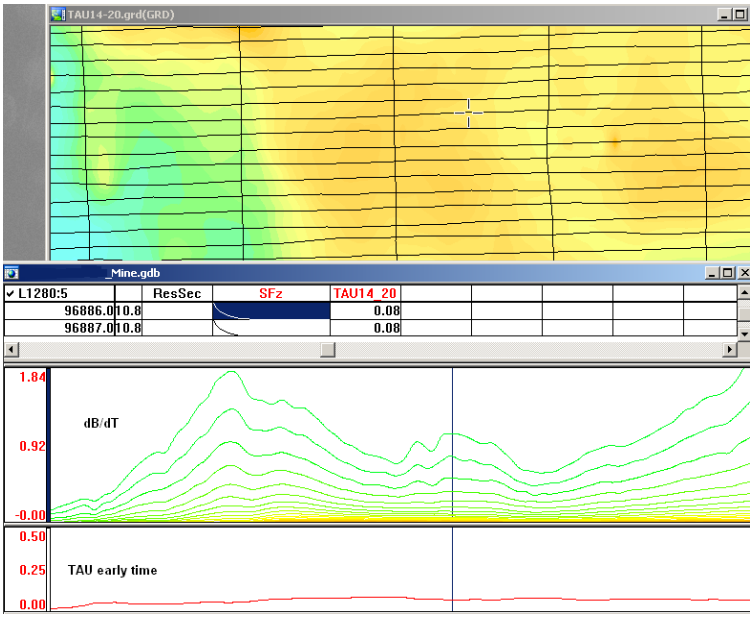


Figure E-2: Map of early time TAU. Area with overburden conductive layer and local sources.

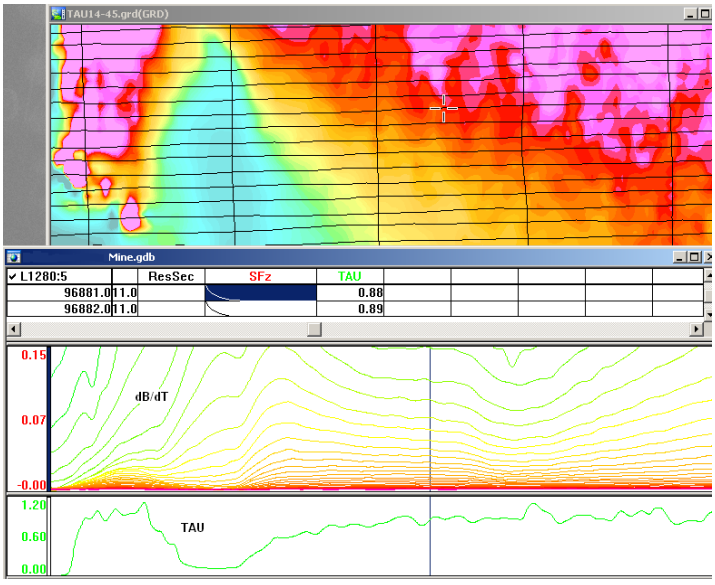


Figure E-3: Map of full time range TAU with EM anomaly due to deep highly conductive target.

There are many advantages of TAU maps:

- TAU depends only on one parameter (conductance) in contrast to response magnitude;
- TAU is integral parameter, which covers time range and all conductive zones and targets are displayed independently of their depth and conductivity on a single map.
- Very good differential resolution in complex conductive places with many sources with different conductivity.
- Signs of the presence of good conductive targets are amplified and emphasized independently of their depth and level of response accordingly.

In the example shown in Figure 4 and 5, three local targets are defined, each of them with a different depth of burial, as indicated on the resistivity depth image (RDI). All are very good conductors but the deeper target (number 2) has a relatively weak dB/dt signal yet also features the strongest total TAU (Figure 4). This example highlights the benefit of TAU analysis in terms of an additional target discrimination tool.

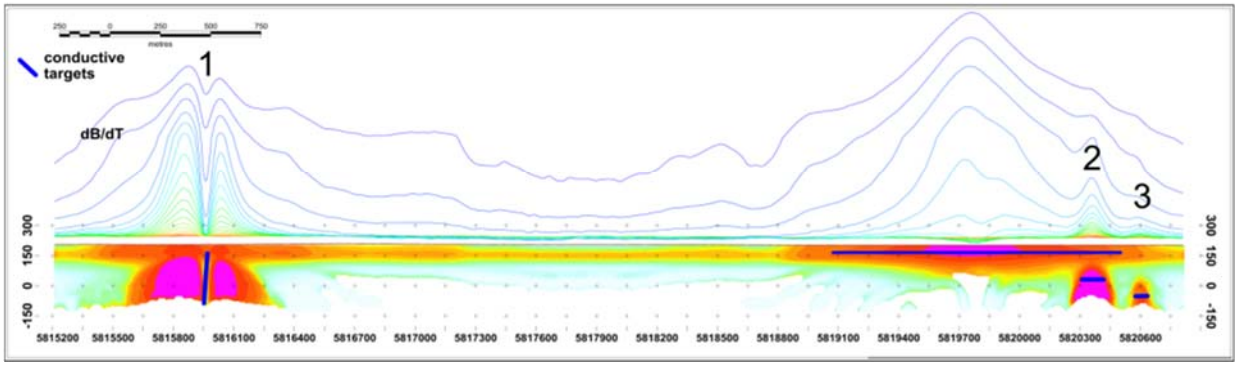


Figure E-4: dB/dt profile and RDI with different depths of targets.

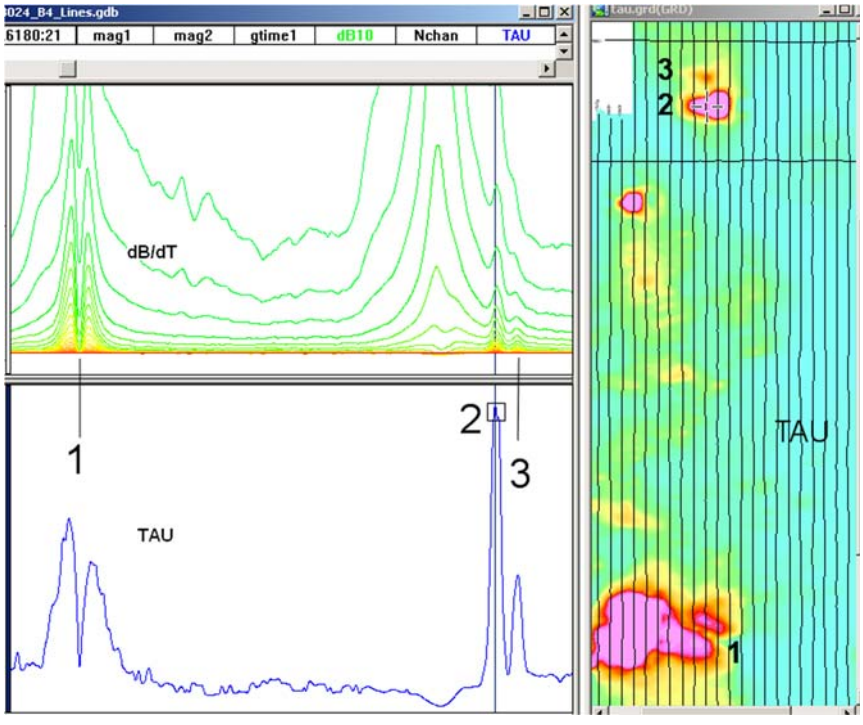


Figure E-5: Map of total TAU and dB/dt profile.

The EM Time Constants for dB/dt and B-field were calculated using the "sliding Tau" in-house program developed at Geotech2. The principle of the calculation is based on using of time window (4 time channels) which is sliding along the curve decay and looking for latest time channels which have a response above the level of noise and decay. The EM decays are obtained from all available decay channels, starting at the latest channel. Time constants are taken from a least square fit of a straight-line (log/linear space) over the last 4 gates above a pre-set signal threshold level (Figure F6). Threshold settings are pointed in the "label" property of TAU database channels. The sliding Tau method determines that, as the amplitudes increase, the time-constant is taken at progressively later times in the EM decay. Conversely, as the amplitudes decrease, Tau is taken at progressively earlier times in the decay. If the maximum signal amplitude falls below the threshold, or becomes negative for any of the 4 time gates, then Tau is not calculated and is assigned a value of "dummy" by default.

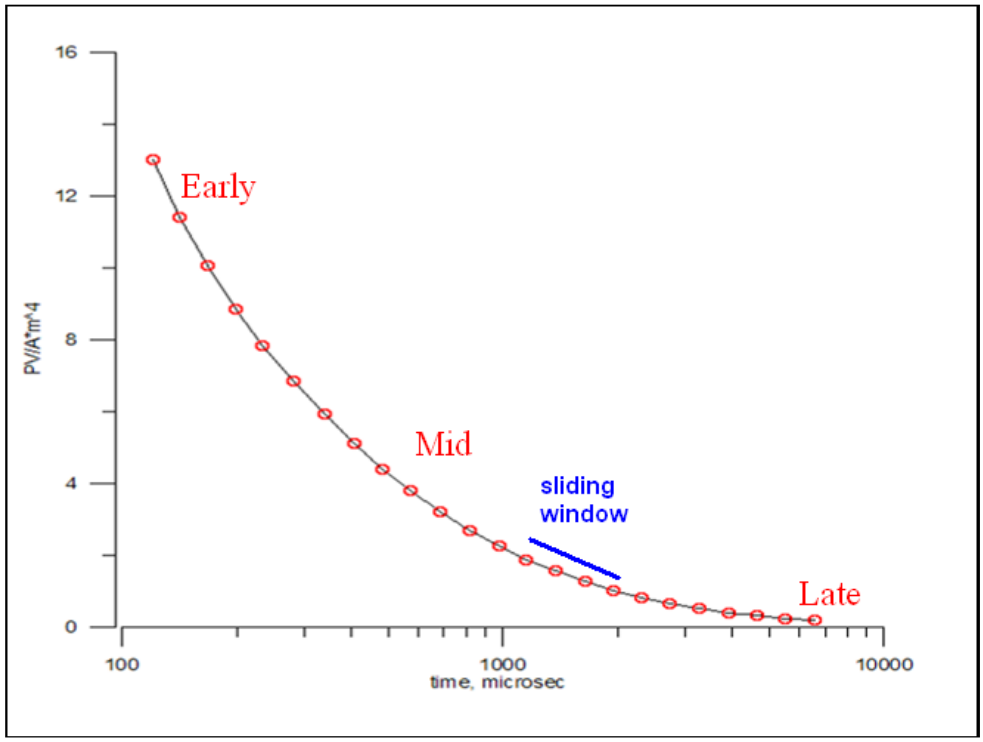


Figure E-6: Typical dB/dt decays of Vtem data

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September 2010

[2] by A.Prikhodko

APPENDIX F

TEM RESISTIVITY DEPTH IMAGING (RDI)

Resistivity depth imaging (RDI) is technique used to rapidly convert EM profile decay data into an equivalent resistivity versus depth cross-section, by deconvolving the measured TEM data.
The used RDI algorithm of Resistivity-Depth transformation is based on scheme of the apparent resistivity transform of Maxwell A.Meju (1998)[1] and TEM response from conductive half-space. The program is developed by Alexander Prikhodko and depth calibrated based on forward plate modeling for VTEM system configuration (Fig. 1-10).

RDIs provide reasonable indications of conductor relative depth and vertical extent, as well as accurate 1D layered-earth apparent conductivity/resistivity structure across VTEM flight lines. Approximate depth of investigation of a TEM system, image of secondary field distribution in half space, effective resistivity, initial geometry and position of conductive targets is the information obtained on base of the RDIs.

Maxwell forward modeling with RDI sections from the synthetic responses (VTEM system).

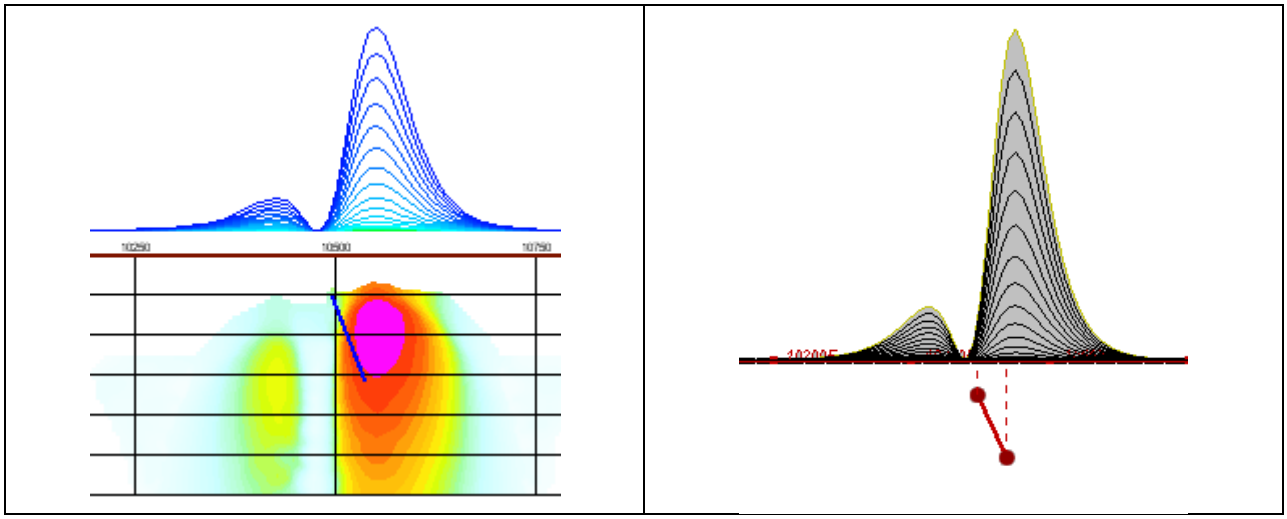


Figure F-1: Maxwell plate model and RDI from the calculated response for conductive "thin" plate (depth 50 m, dip 65 degree, depth extend 100 m).

[1] Maxwell A.Meju, 1998, Short Note: A simple method of transient electromagnetic data analysis, Geophysics, **63**, 405–410.

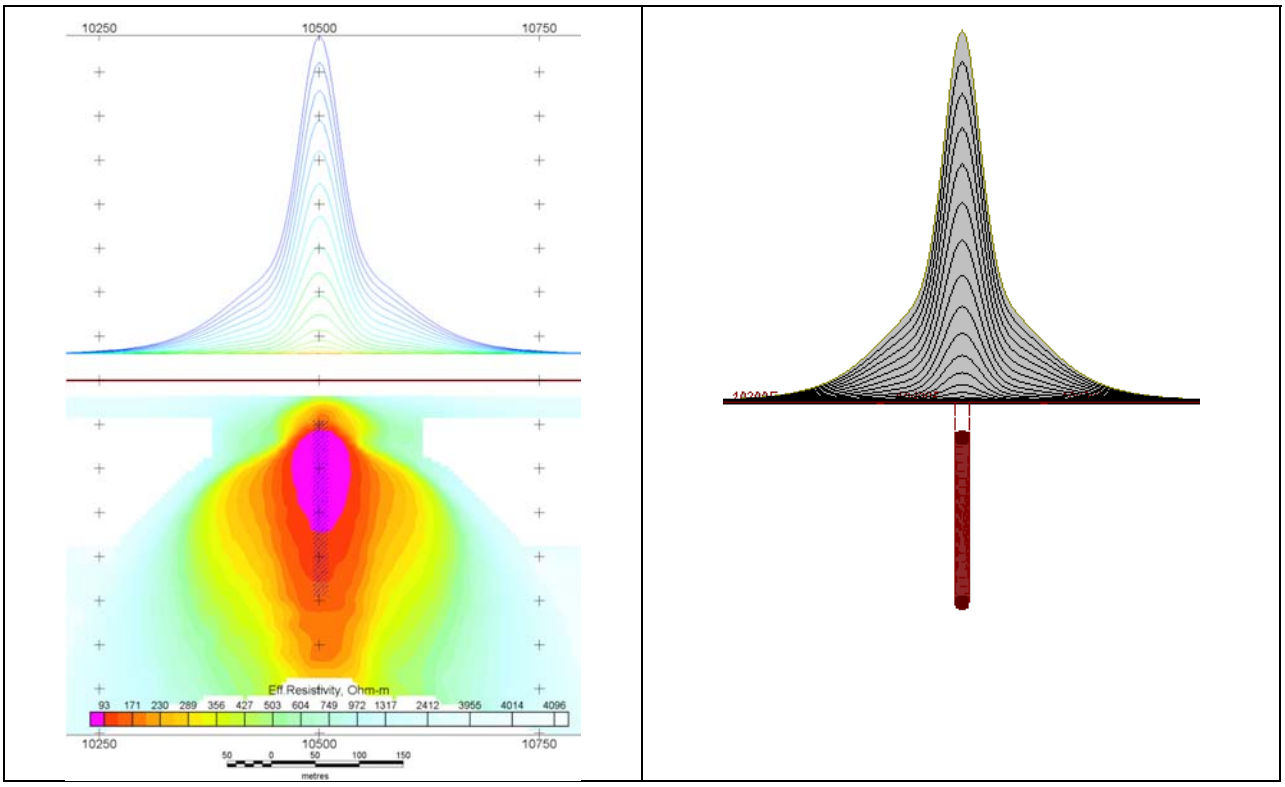


Figure F-2: Maxwell plate model and RDI from the calculated response for "thick" plate 18 m thickness, depth 50 m, depth extend 200 m).

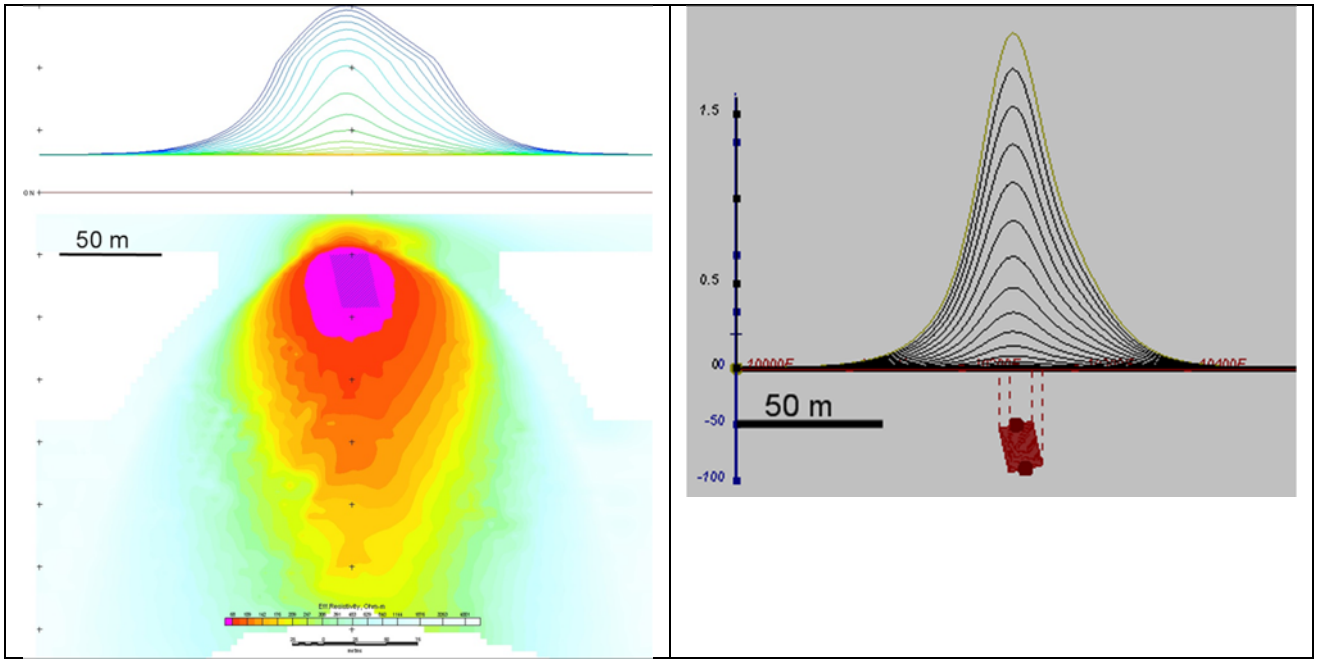


Figure F-3: Maxwell plate model and RDI from the calculated response for bulk ("thick") 100 m length, 40 m depth extend, 30 m thickness

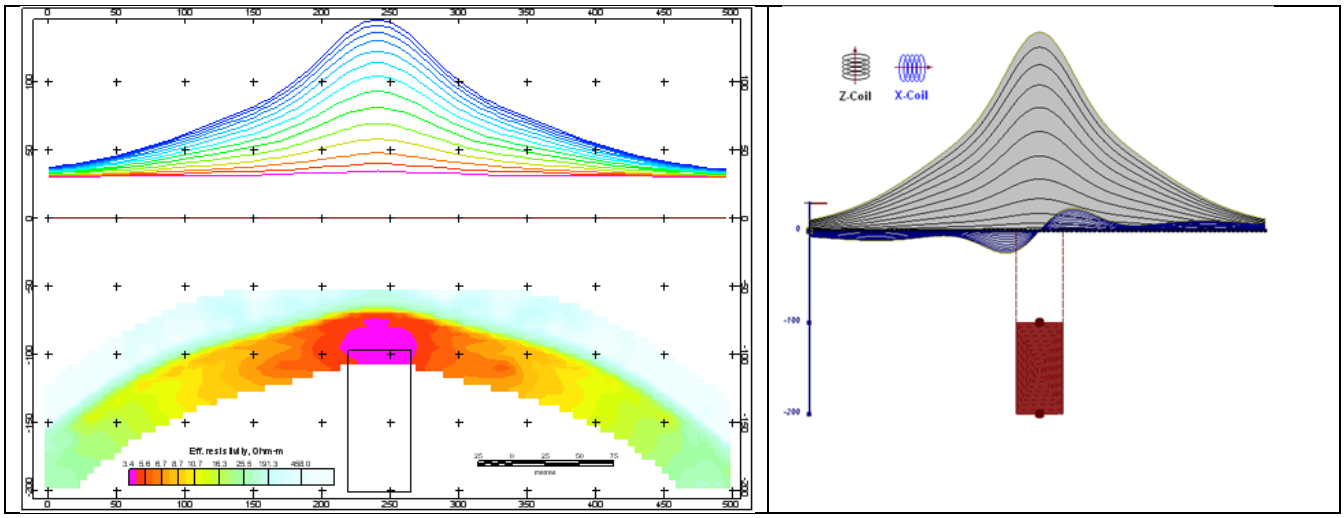


Figure F-4: Maxwell plate model and RDI from the calculated response for "thick" vertical target (depth 100 m, depth extend 100 m). 19-44 chan.

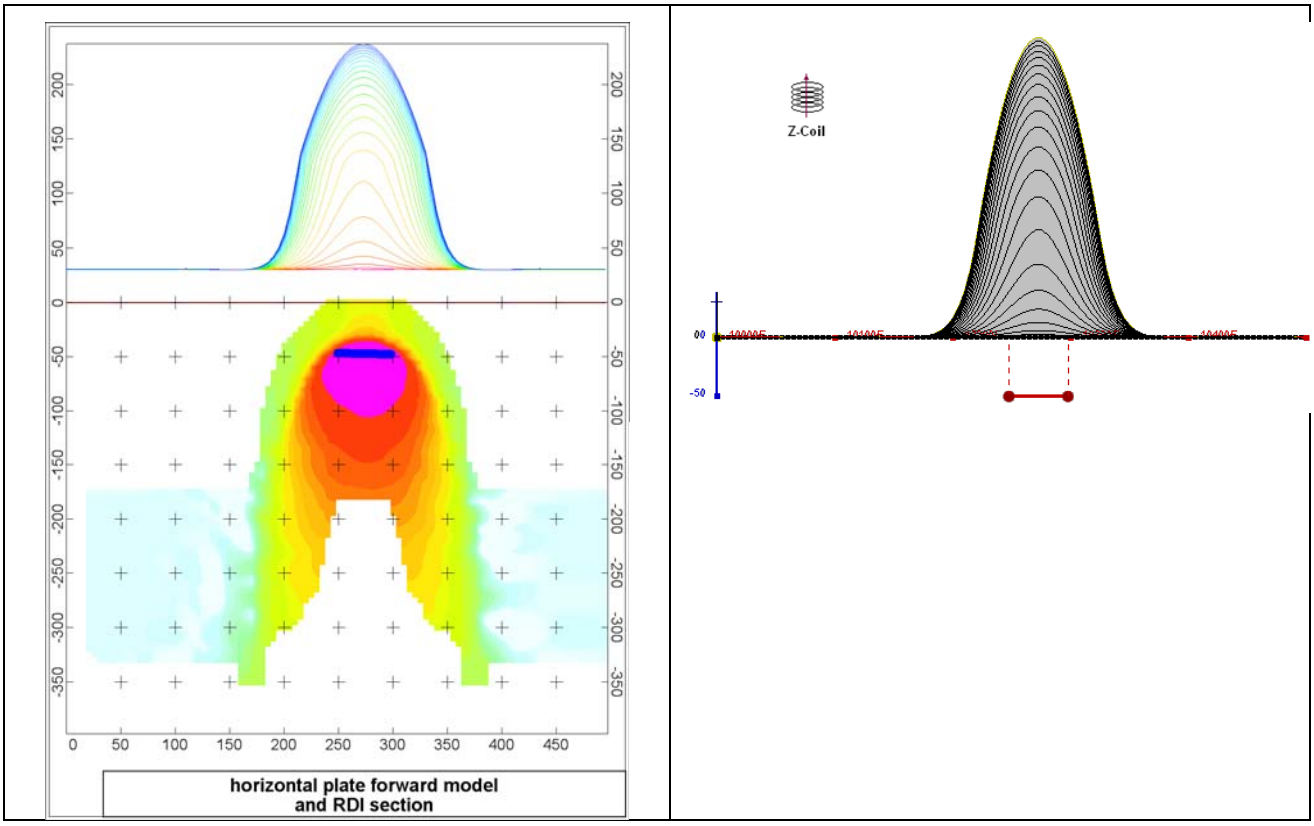


Figure F-5: Maxwell plate model and RDI from the calculated response for horizontal thin plate (depth 50 m, dim 50x100 m). 15-44 chan.

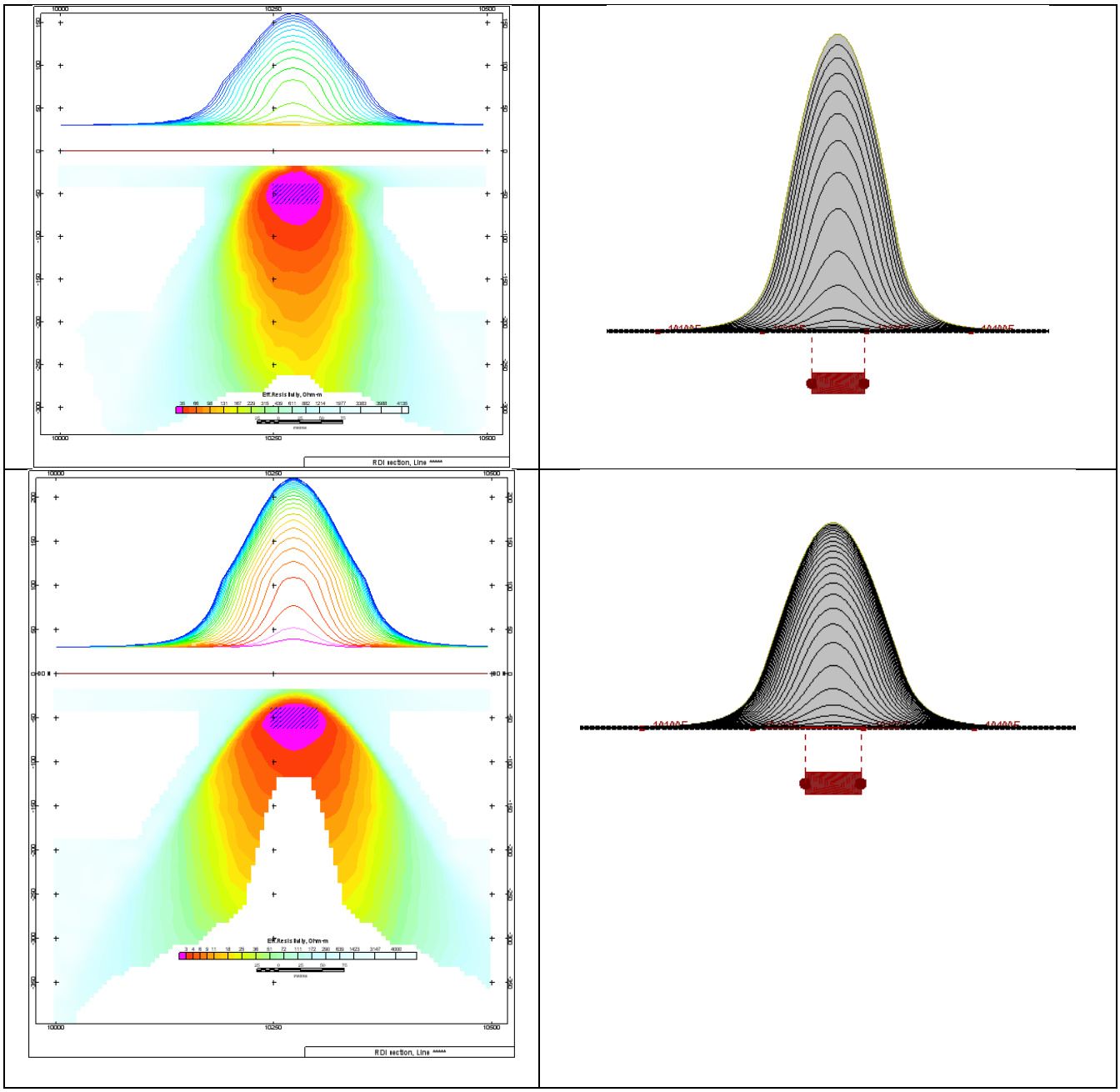


Figure F-6: Maxwell plate model and RDI from the calculated response for horizontal thick (20m) plate – less conductive (on the top), more conductive (below).

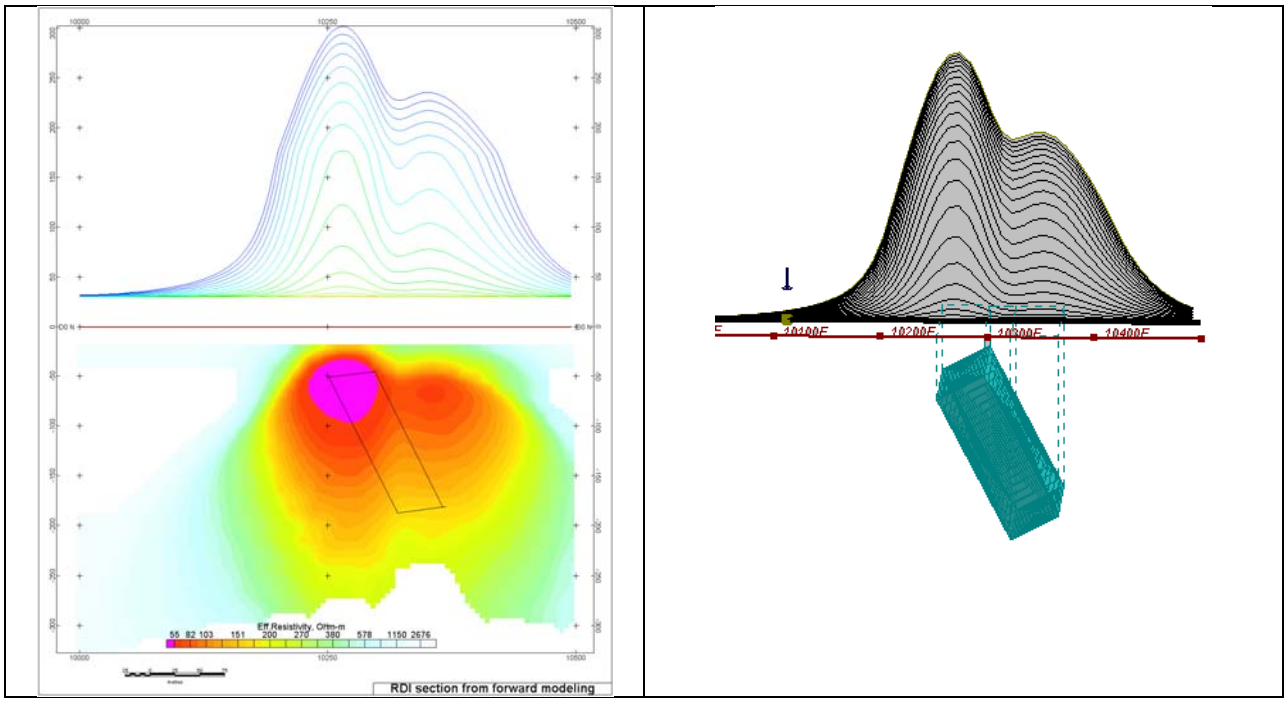


Figure F-7: Maxwell plate model and RDI from the calculated response for inclined thick (50m) plate. Depth extends 150 m, depth to the target 50 m.

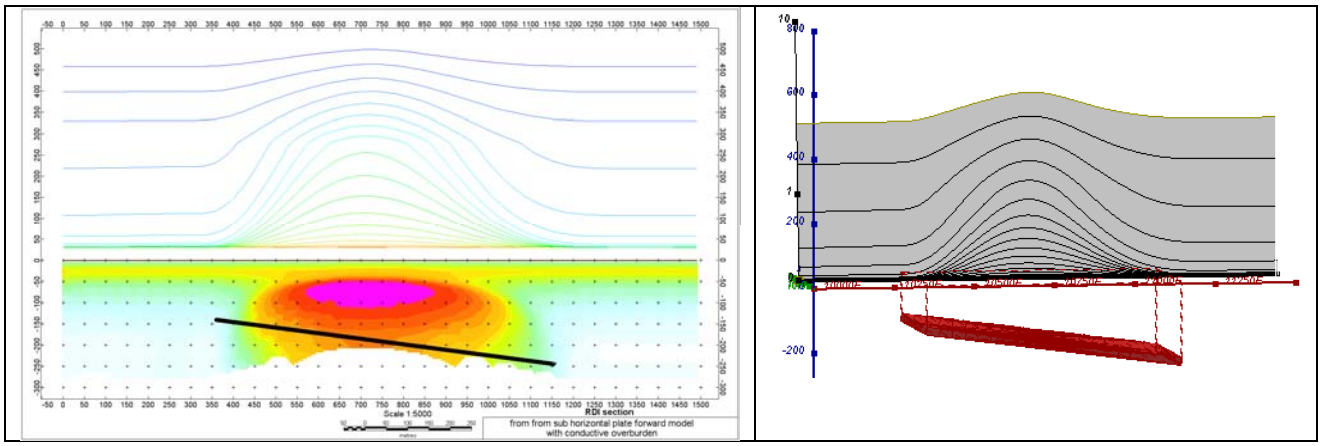


Figure F-8: Maxwell plate model and RDI from the calculated response for the long, wide and deep subhorizontal plate (depth 140 m, dim 25x500x800 m) with conductive overburden.

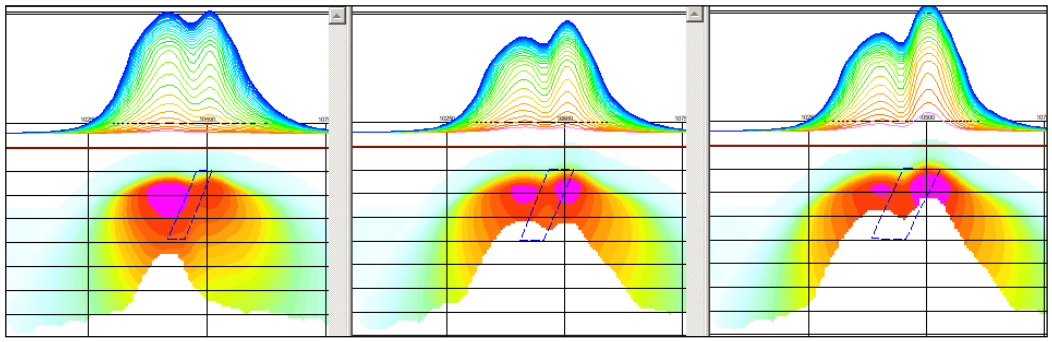


Figure F-9: Maxwell plate models and RDIs from the calculated response for "thick" dipping plates (35, 50, 75 m thickness), depth 50 m, conductivity 2.5 S/m.

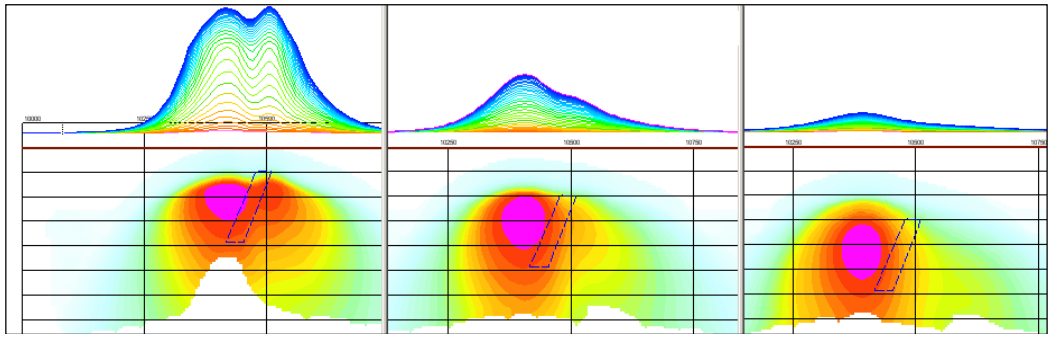
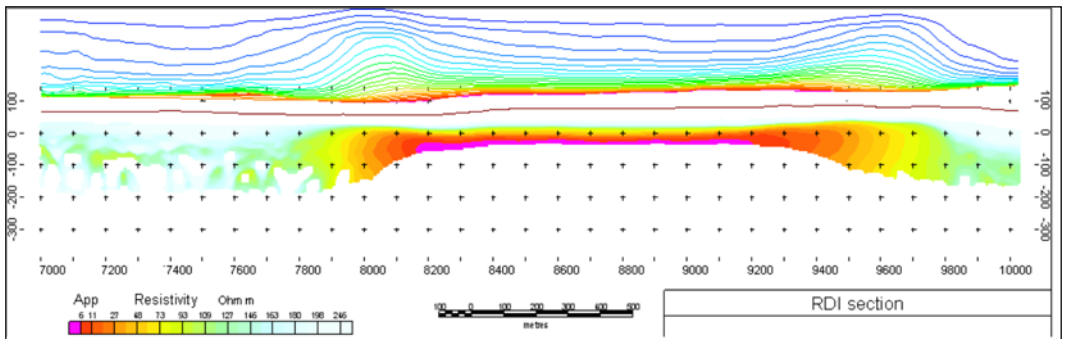


Figure F-10: Maxwell plate models and RDIs from the calculated response for "thick" (35 m thickness) dipping plate on different depth (50, 100, 150 m), conductivity 2.5 S/m.



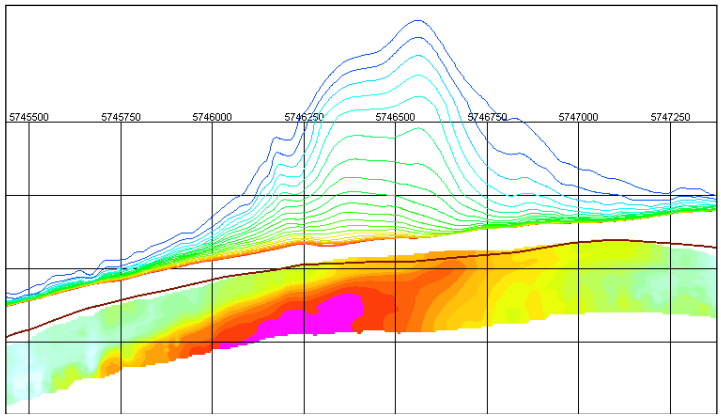
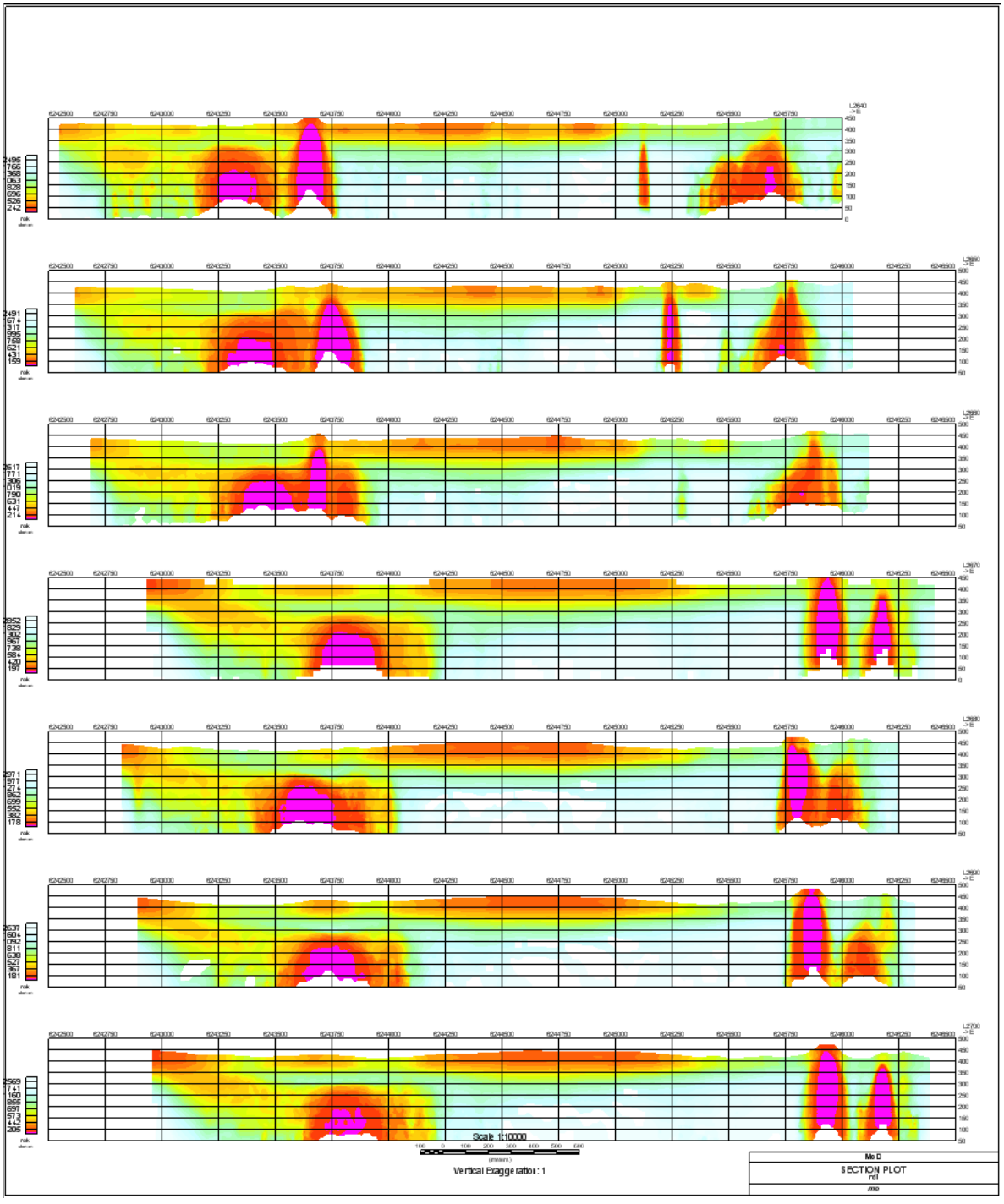


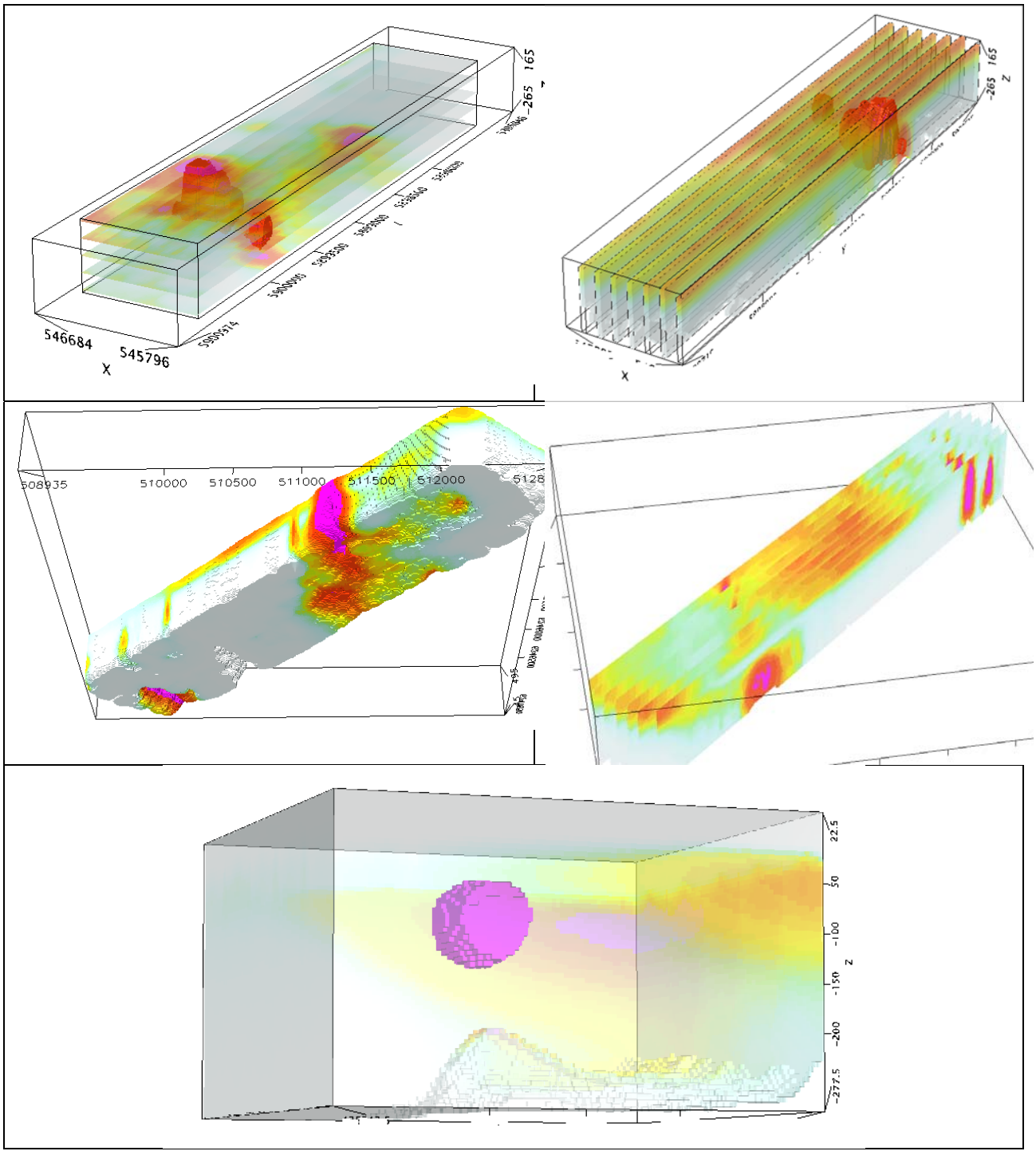
Figure F-11: RDI section for the real horizontal and slightly dipping conductive layers

FORMS OF RDI PRESENTATION

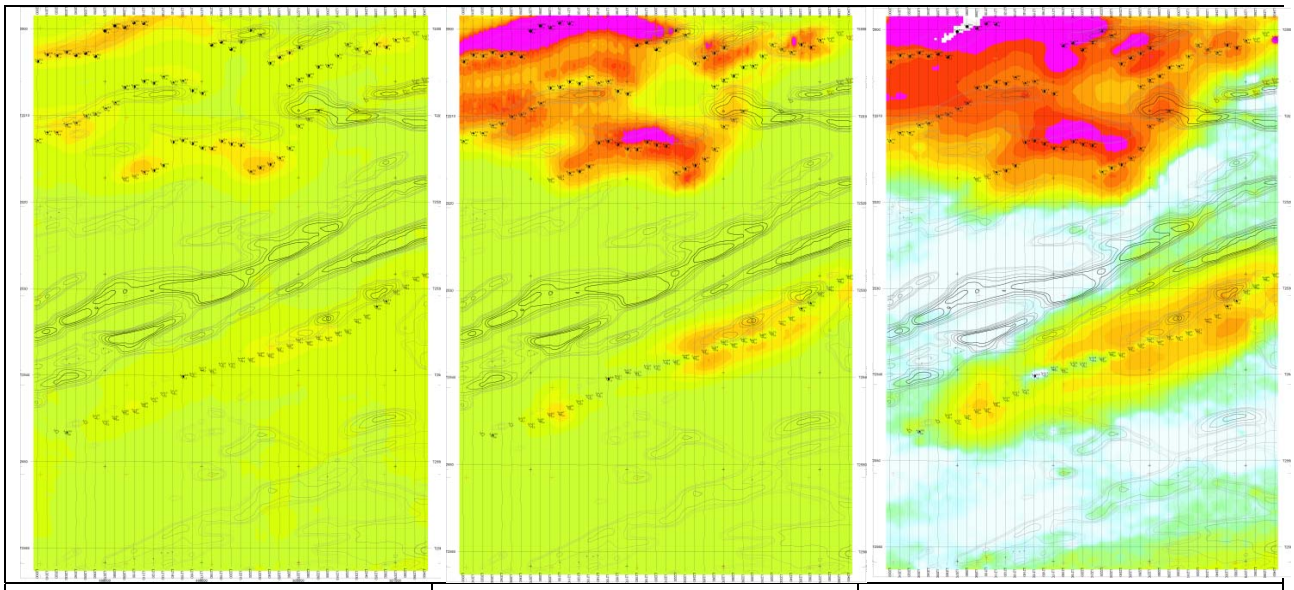
PRESENTATION OF SERIES OF LINES



3D PRESENTATION OF RDIS

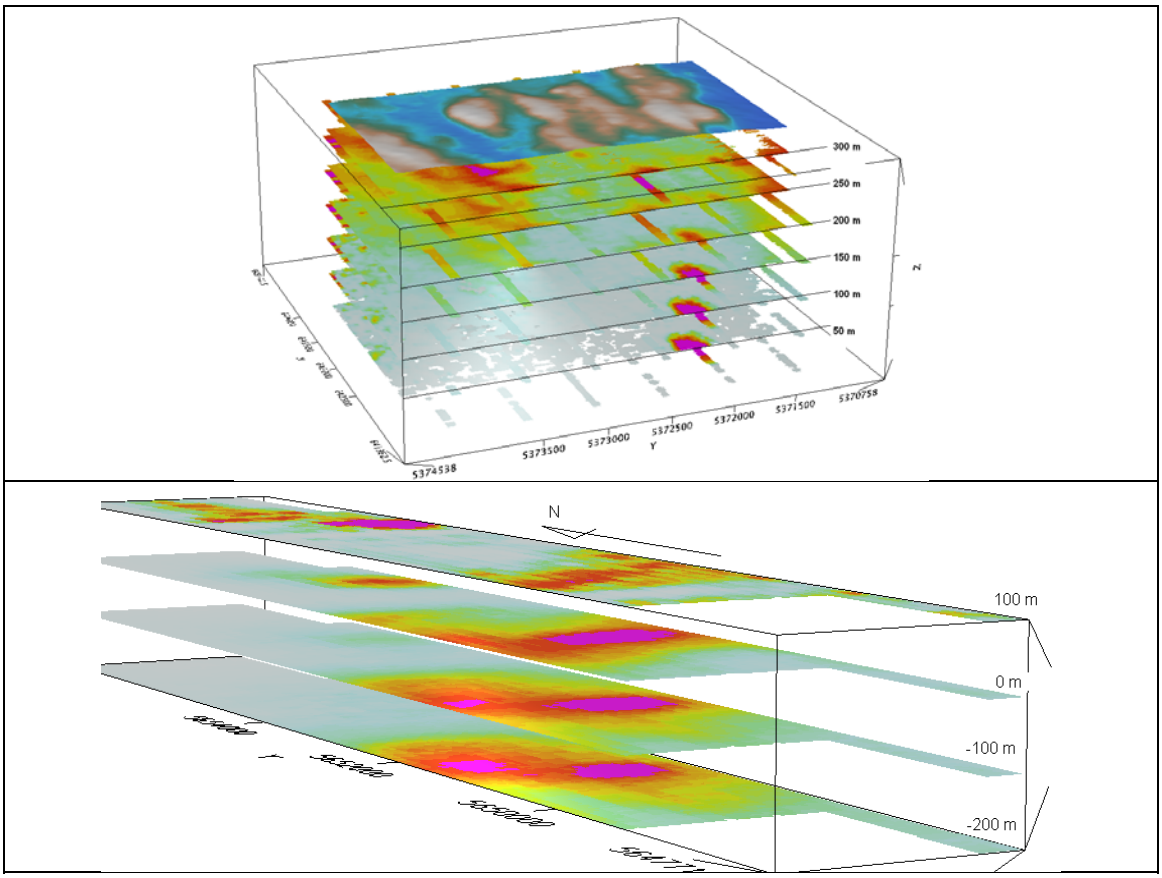


APPARENT RESISTIVITY DEPTH SLICES PLANS:



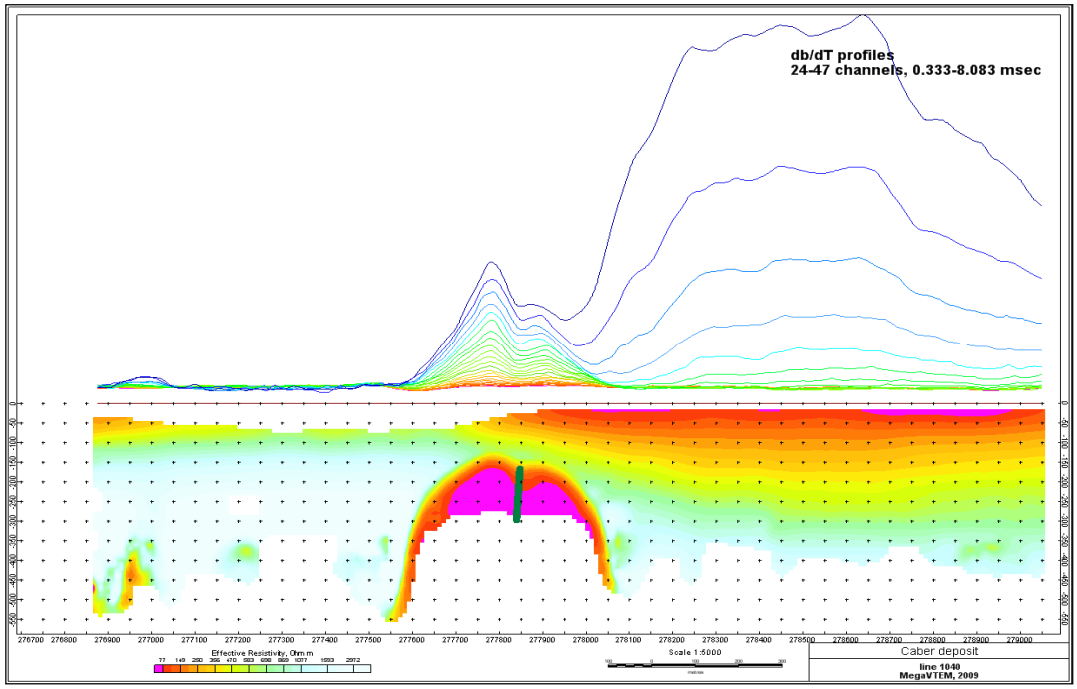
0 m (surface)	-100 m	-200 m

3D VIEWS OF APPARENT RESISTIVITY DEPTH SLICES:

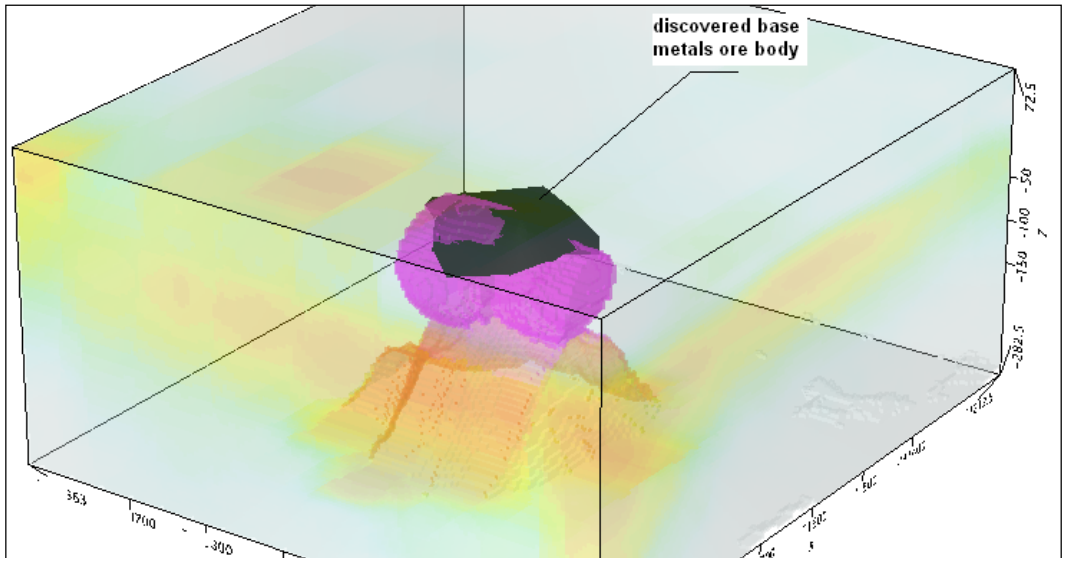


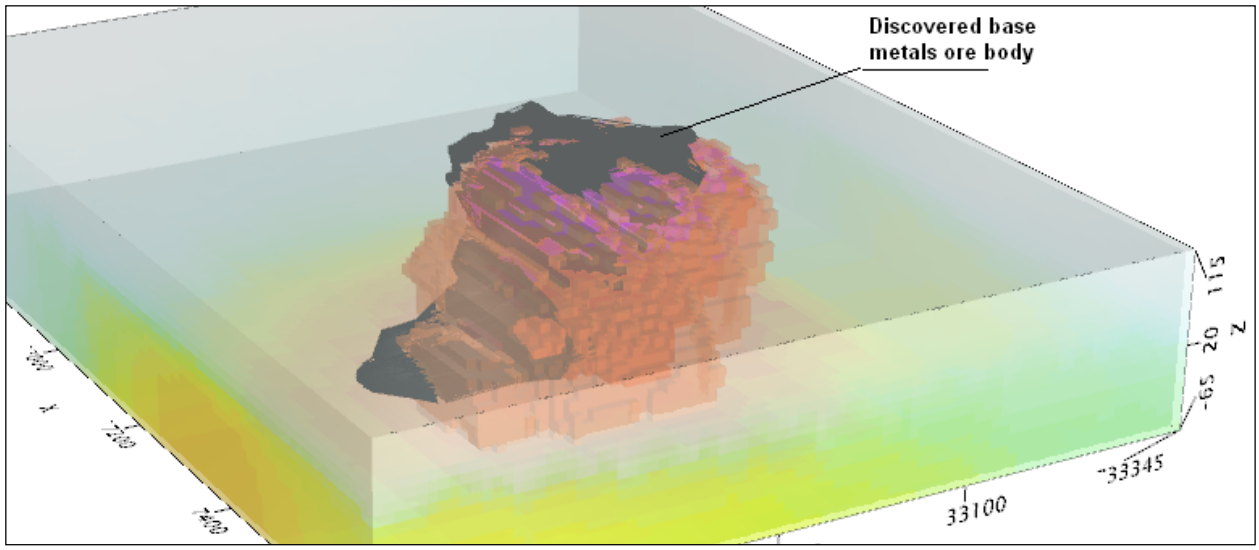
REAL BASE METAL TARGETS IN COMPARISON WITH RDIS:

RDI section of the line over Caber deposit ("thin" subvertical plate target and conductive overburden.



3D RDI VOXELS WITH BASE METALS ORE BODIES (MIDDLE EAST):





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April 2011

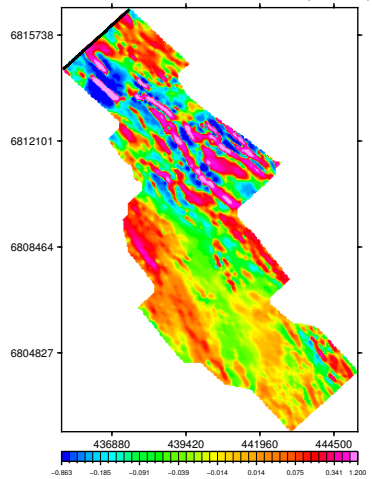
APPENDIX G
RESISTIVITY DEPTH IMAGES (RDI)

Please see attached DVD for the PDF.

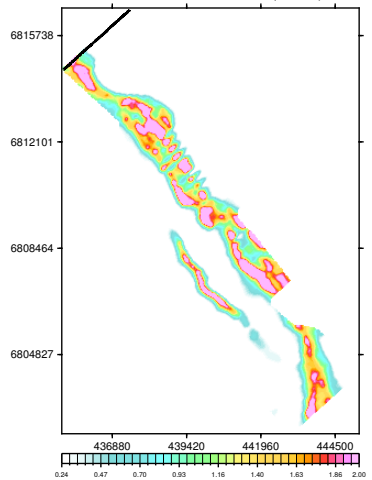
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

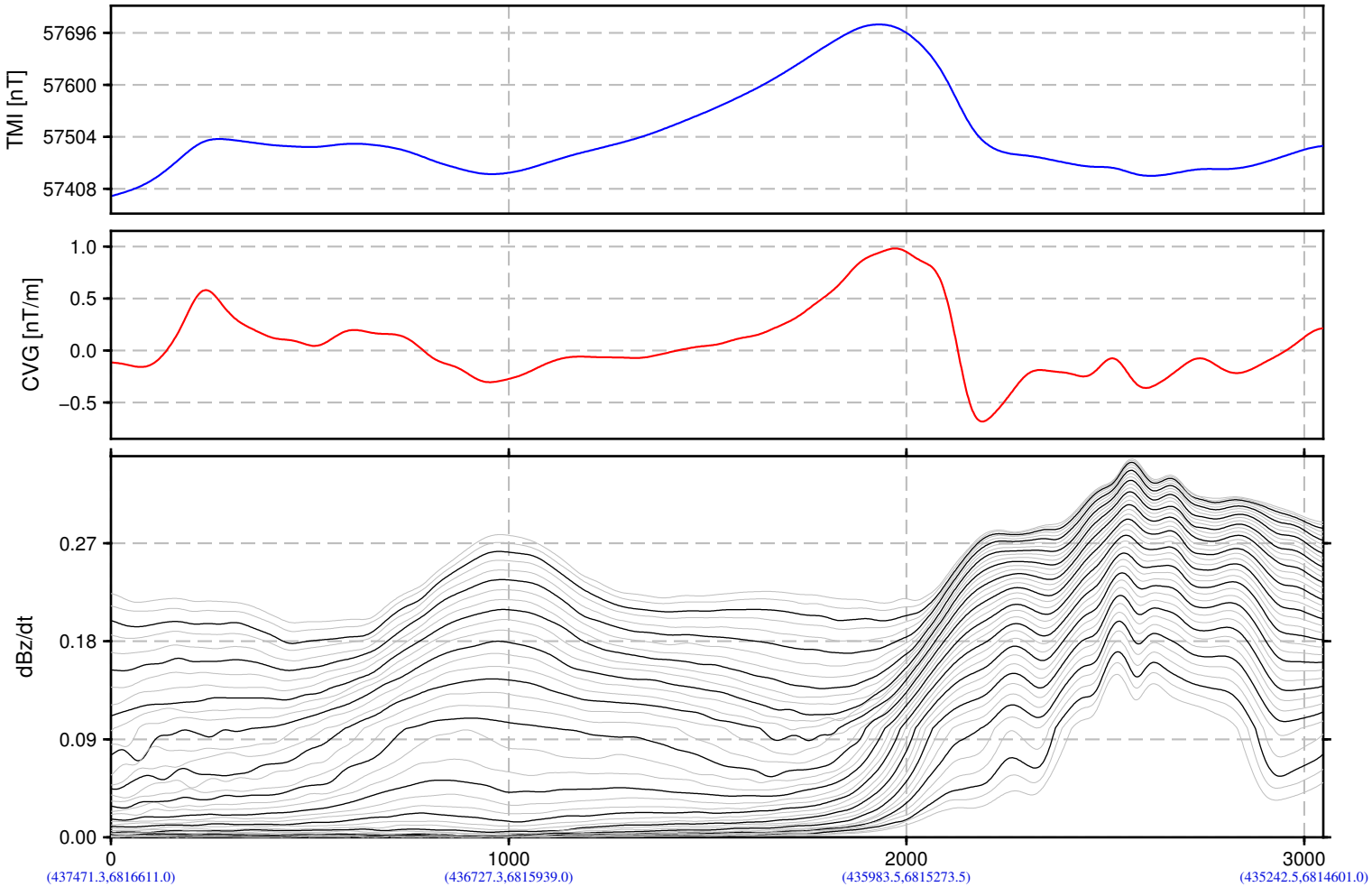
Resistivity Depth Image (RDI) for Line 4000

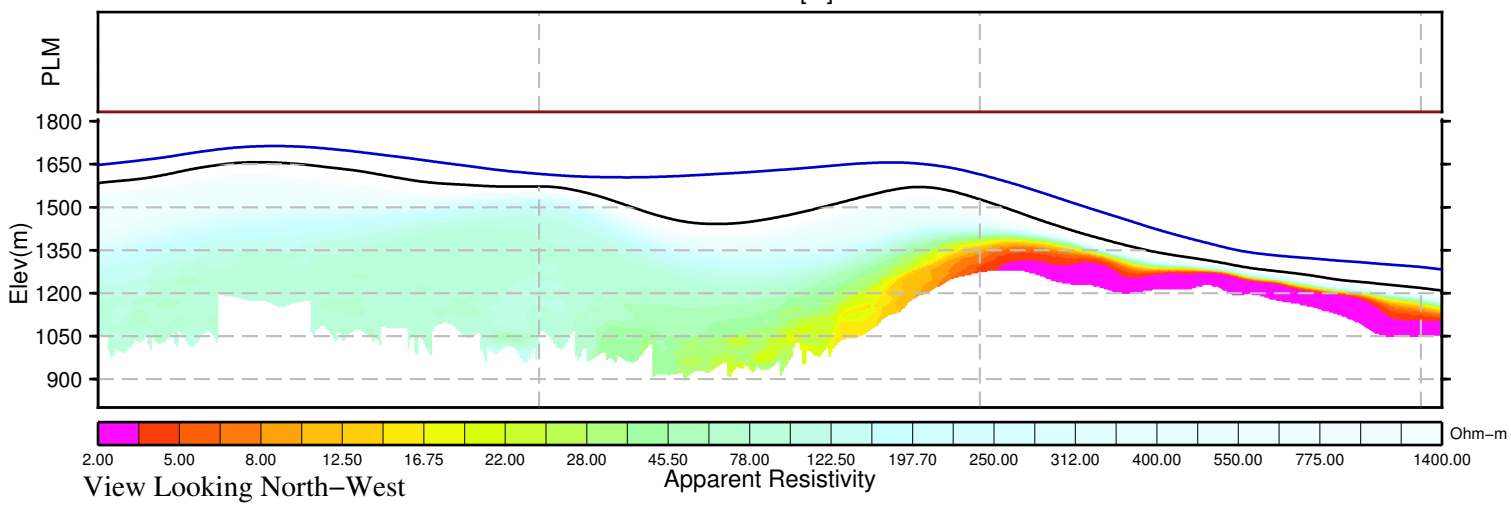
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

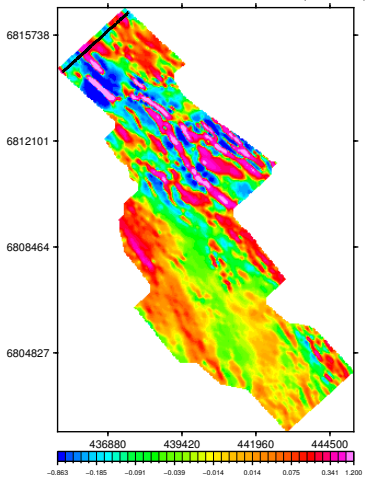
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Job Number:GL160037
Resistivity Depth Image (RDI)
Flown by Geotech Ltd.
Processed by Geotech Ltd.
245 Industrial Parkway North
Aurora, Ontario, Canada L4G 4C4
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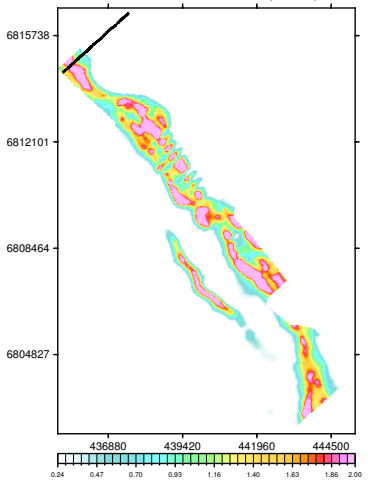
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AIRBORNE GEOPHYSICAL SURVEYS

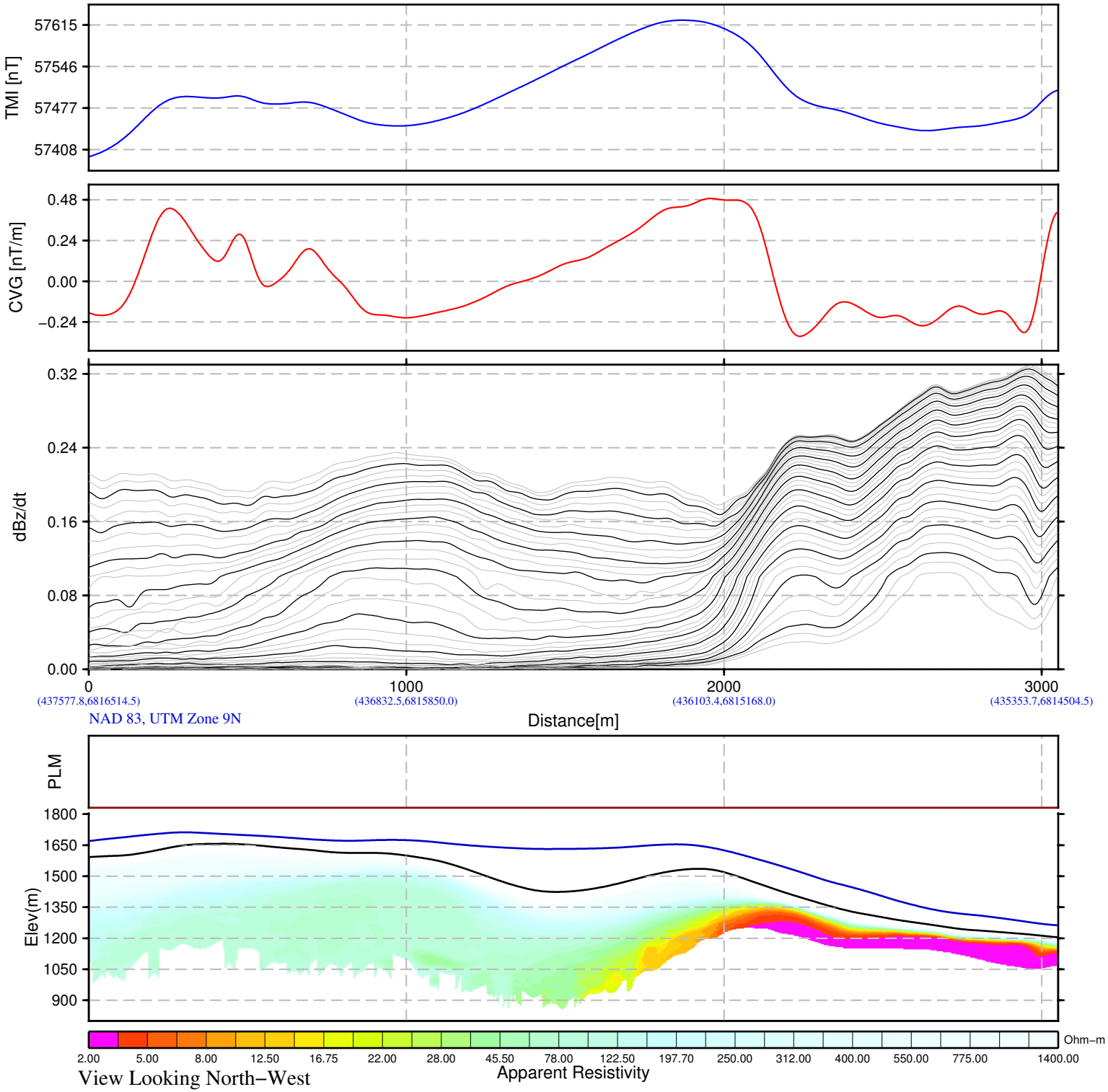
Resistivity Depth Image (RDI) for Line 4010

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

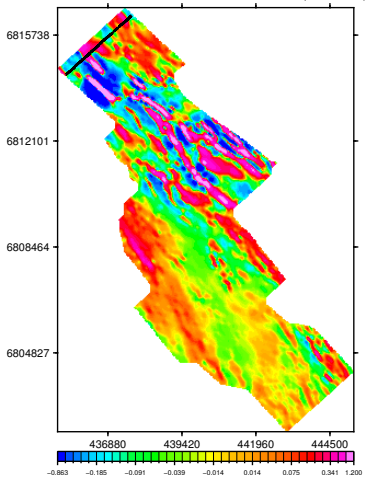
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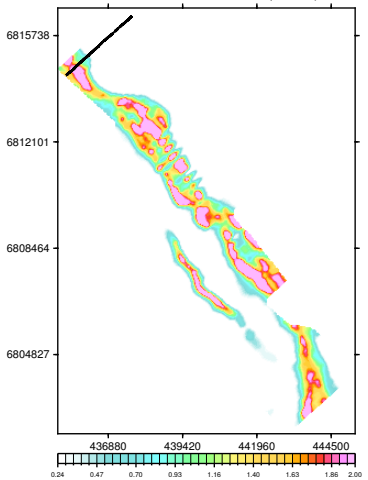
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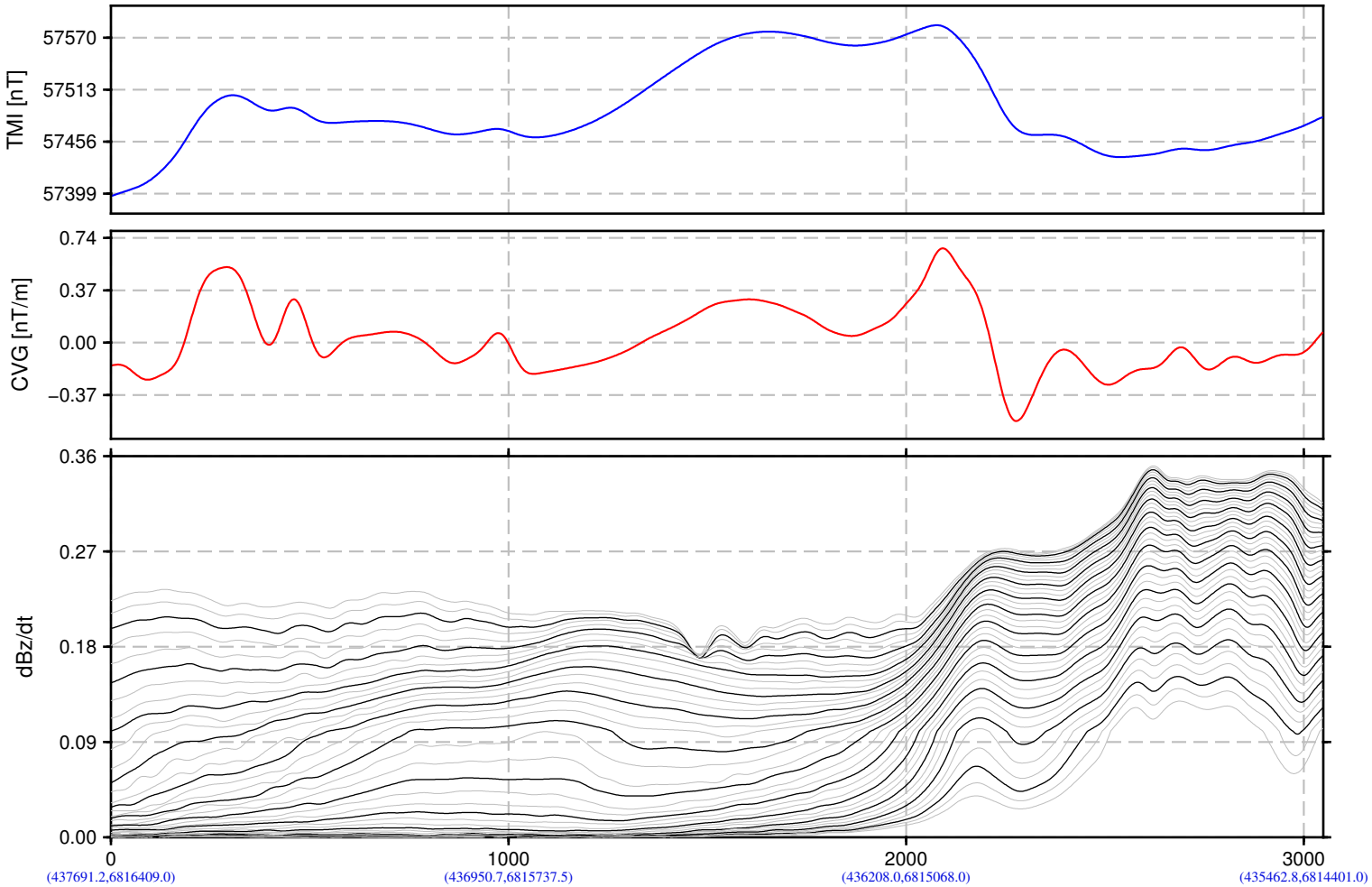
Resistivity Depth Image (RDI) for Line 4020

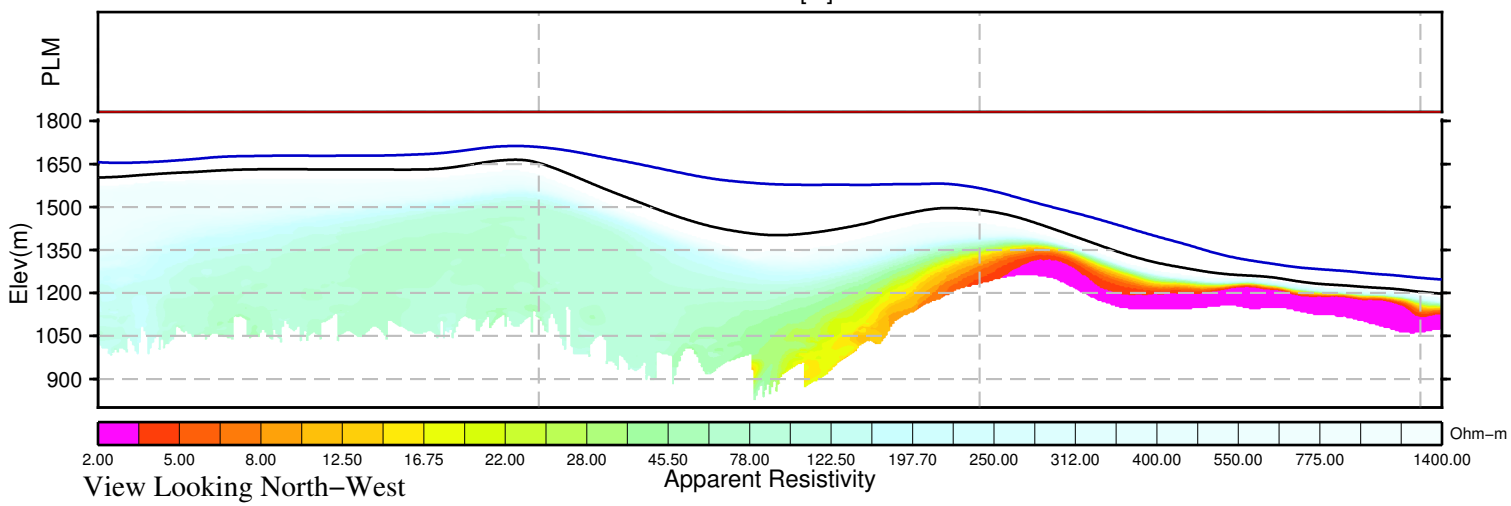
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







View Looking North−West

BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

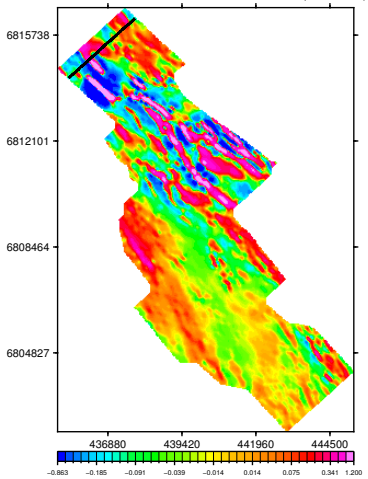
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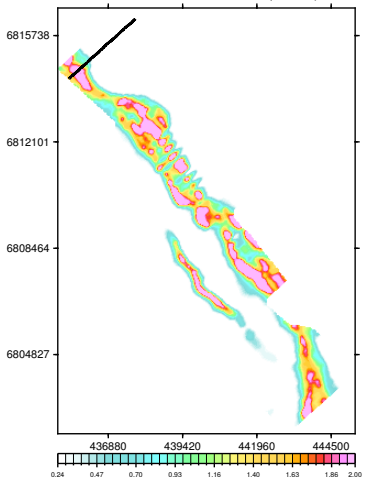
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AIRBORNE GEOPHYSICAL SURVEYS

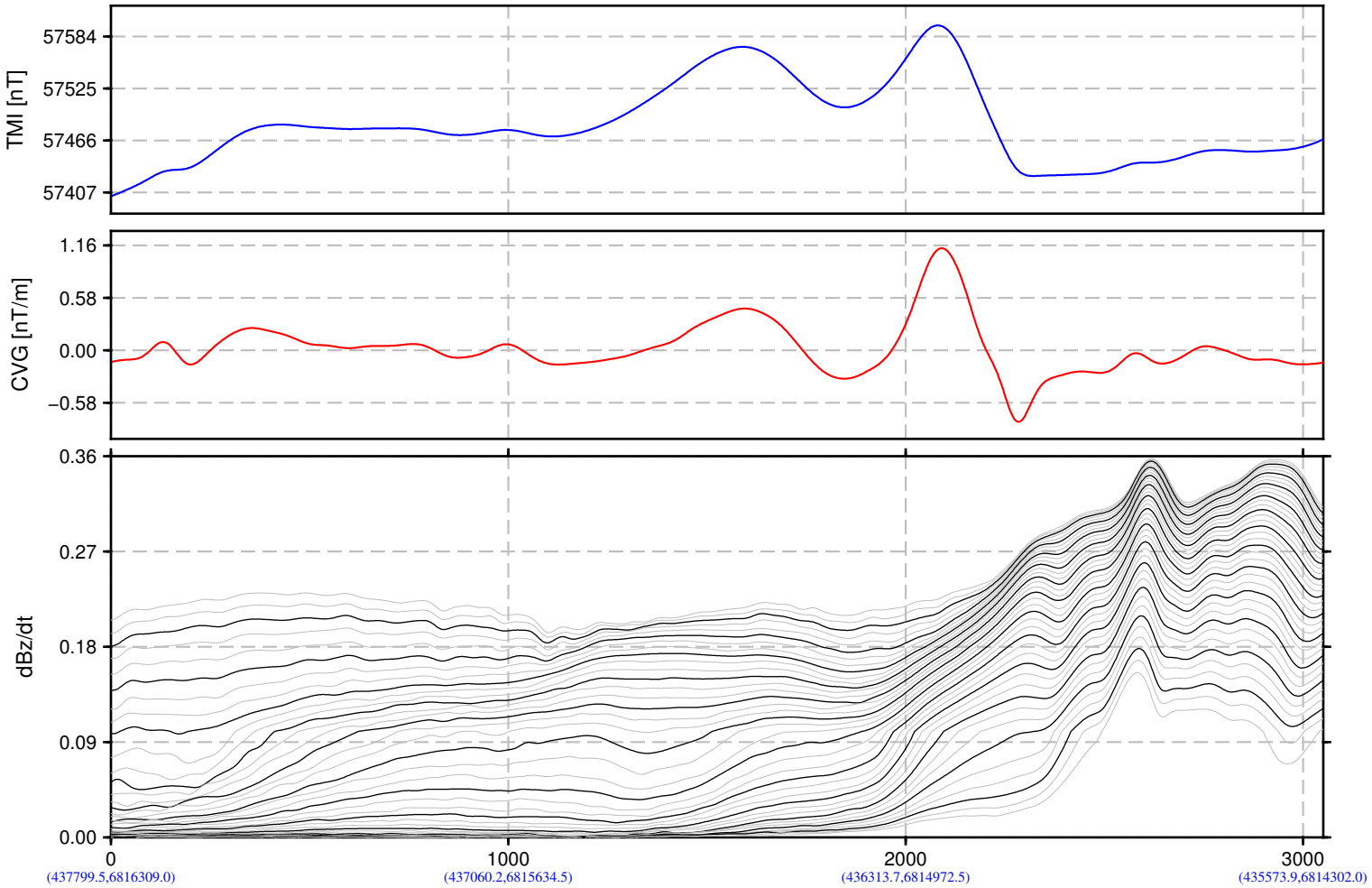
Resistivity Depth Image (RDI) for Line 4030

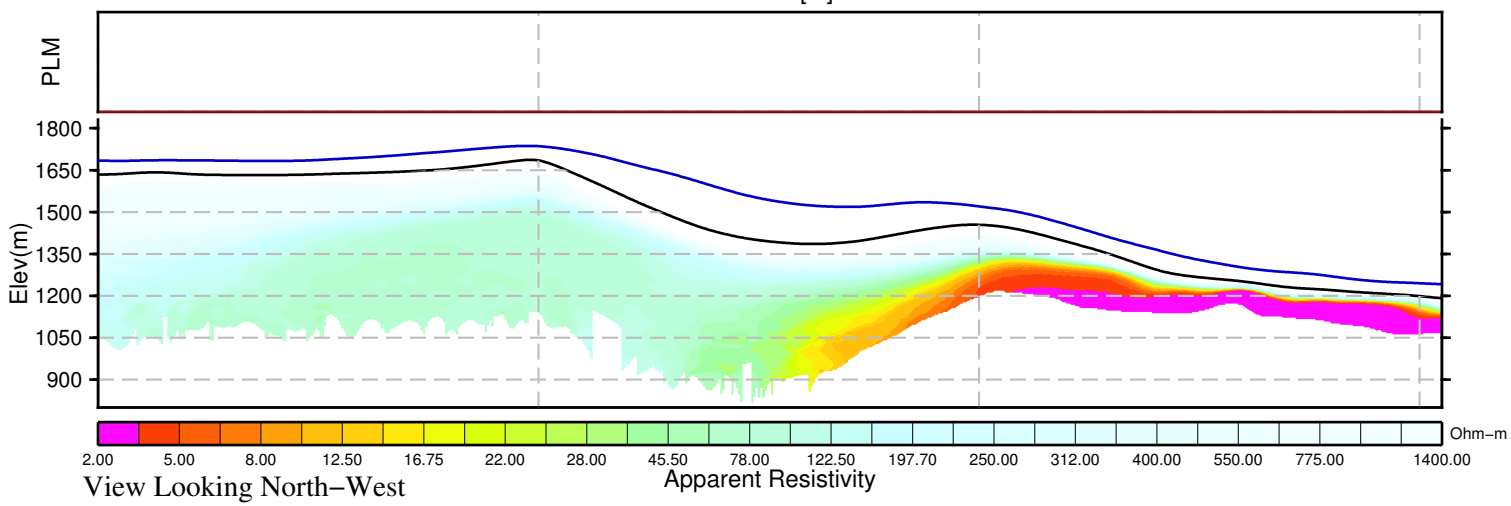
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

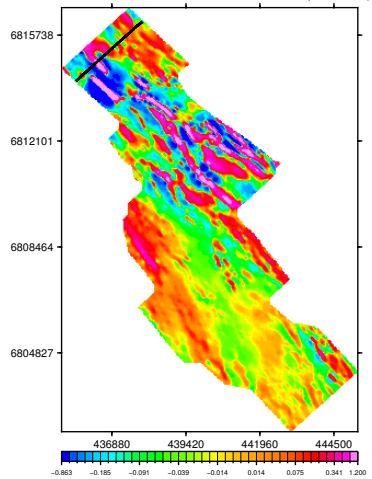
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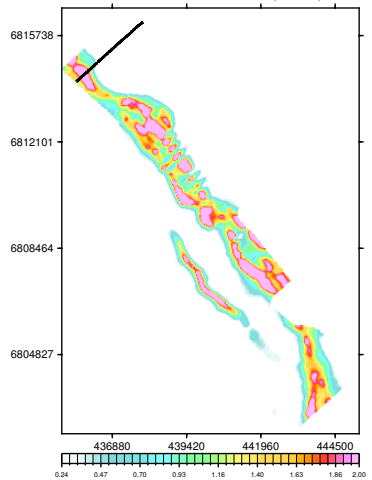
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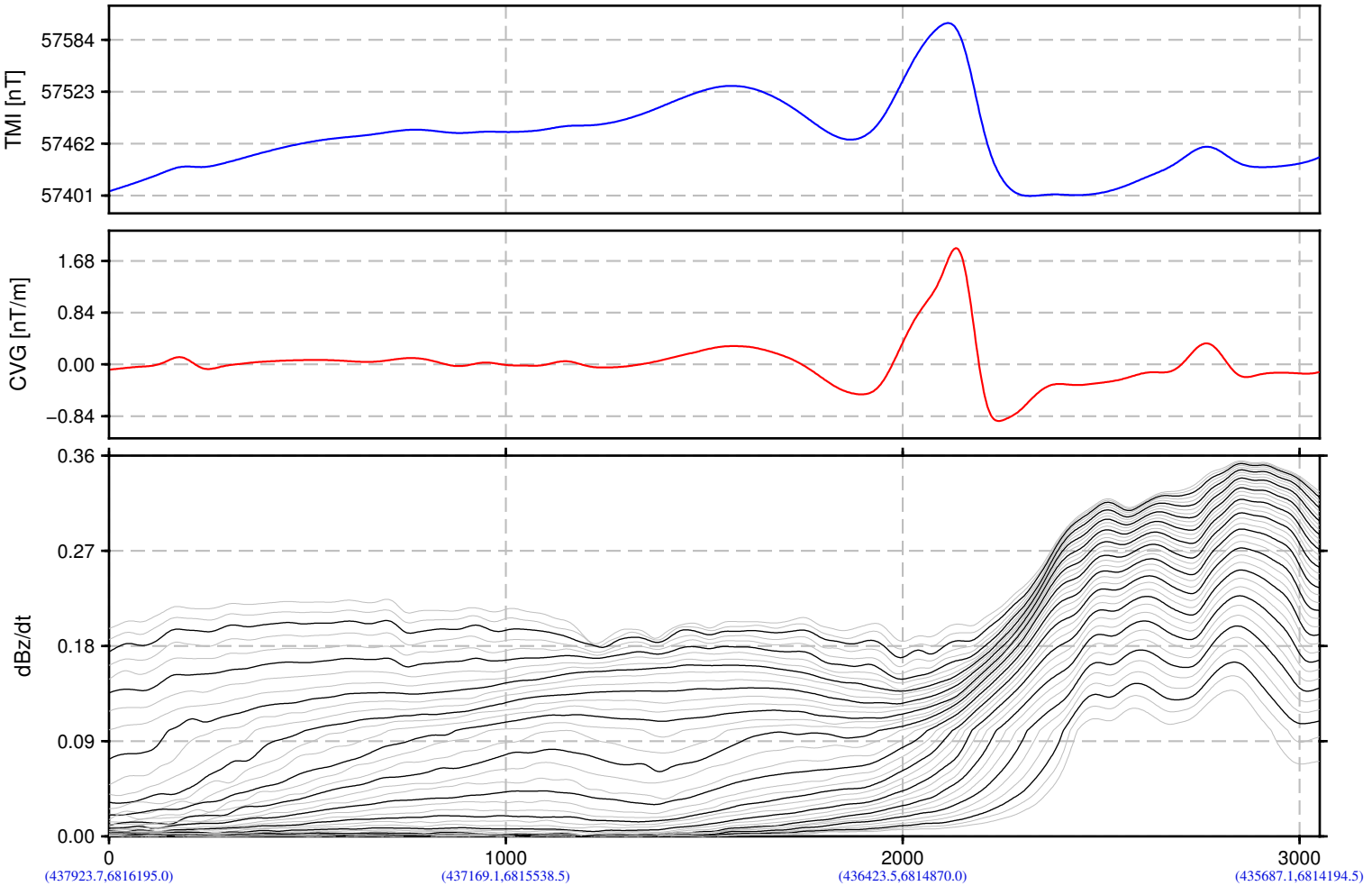
Resistivity Depth Image (RDI) for Line 4040

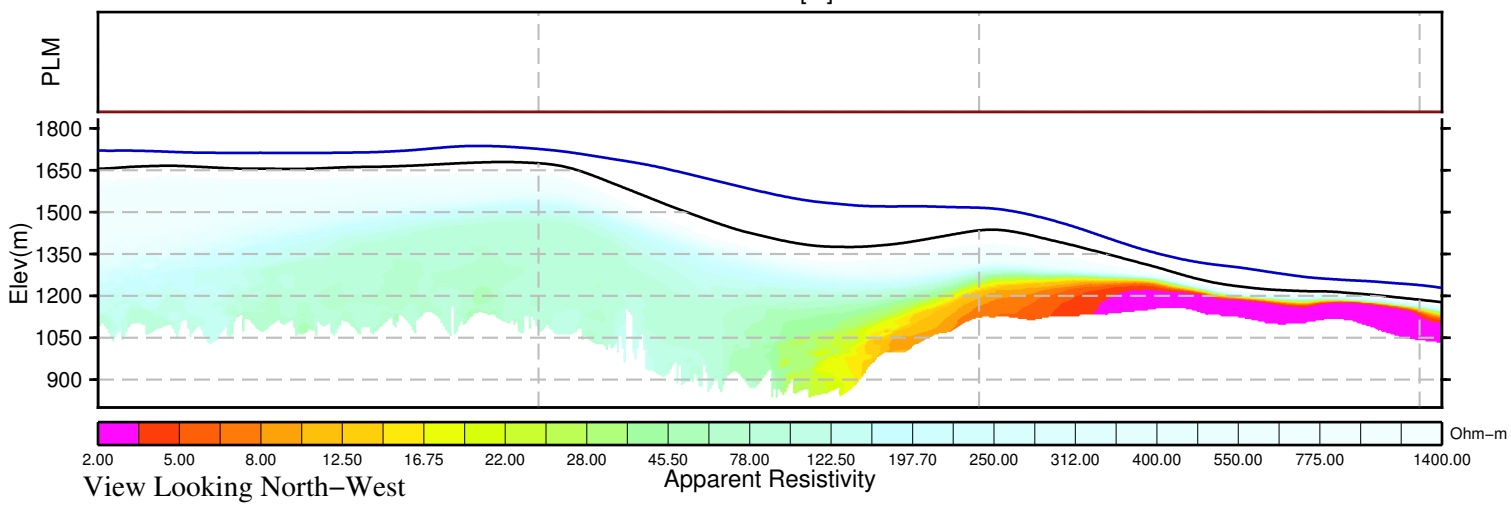
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

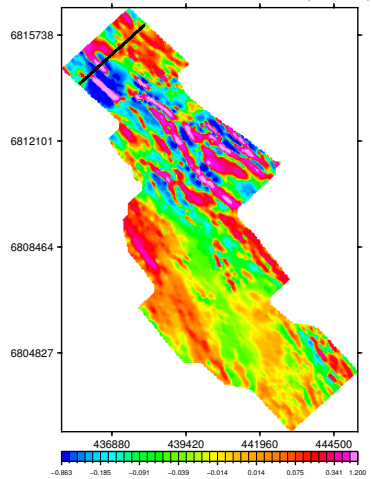
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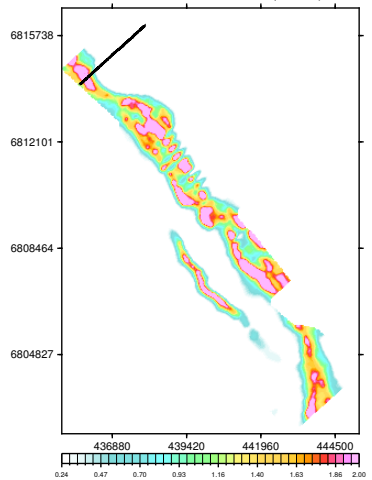
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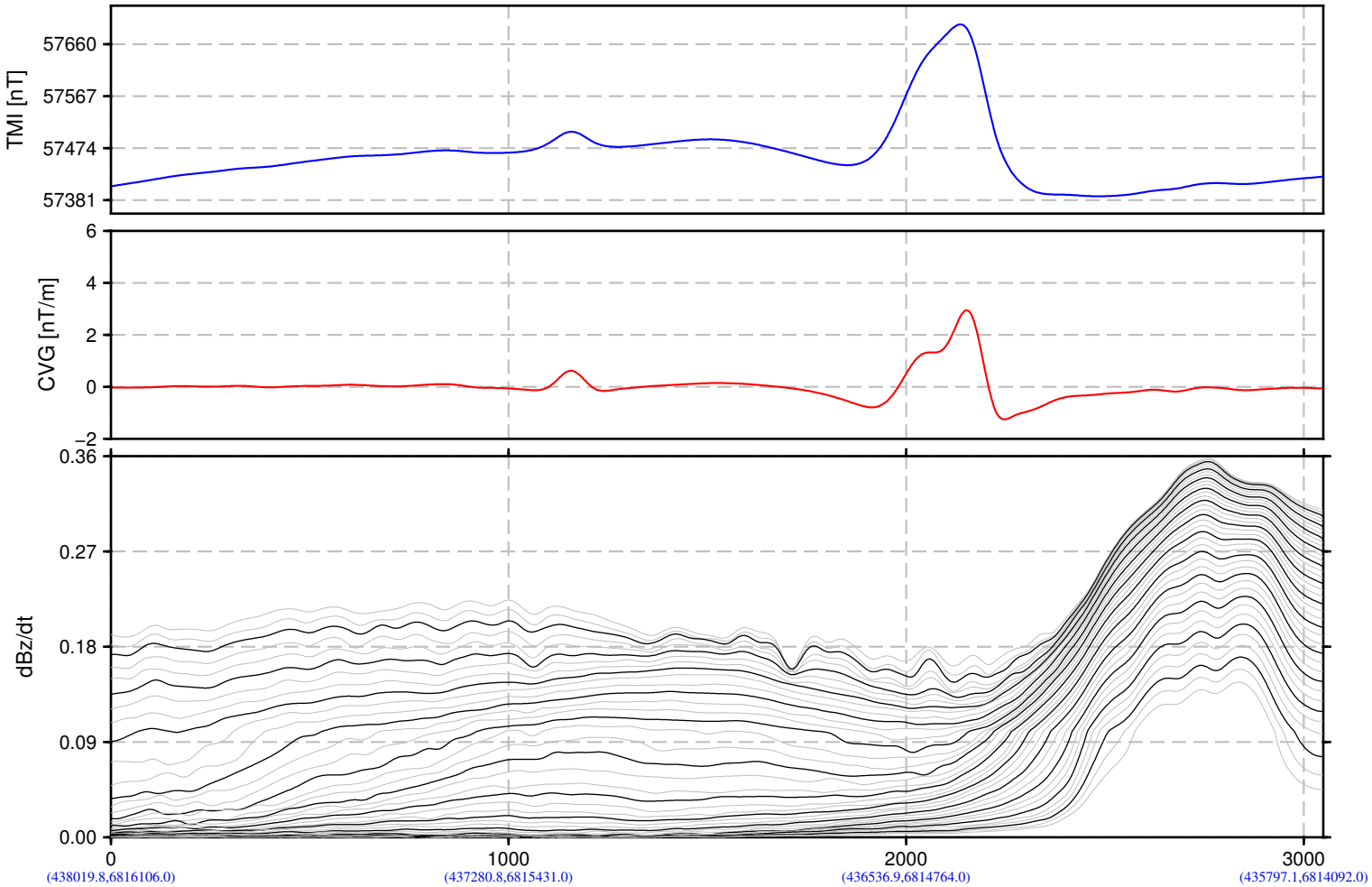
Resistivity Depth Image (RDI) for Line 4050

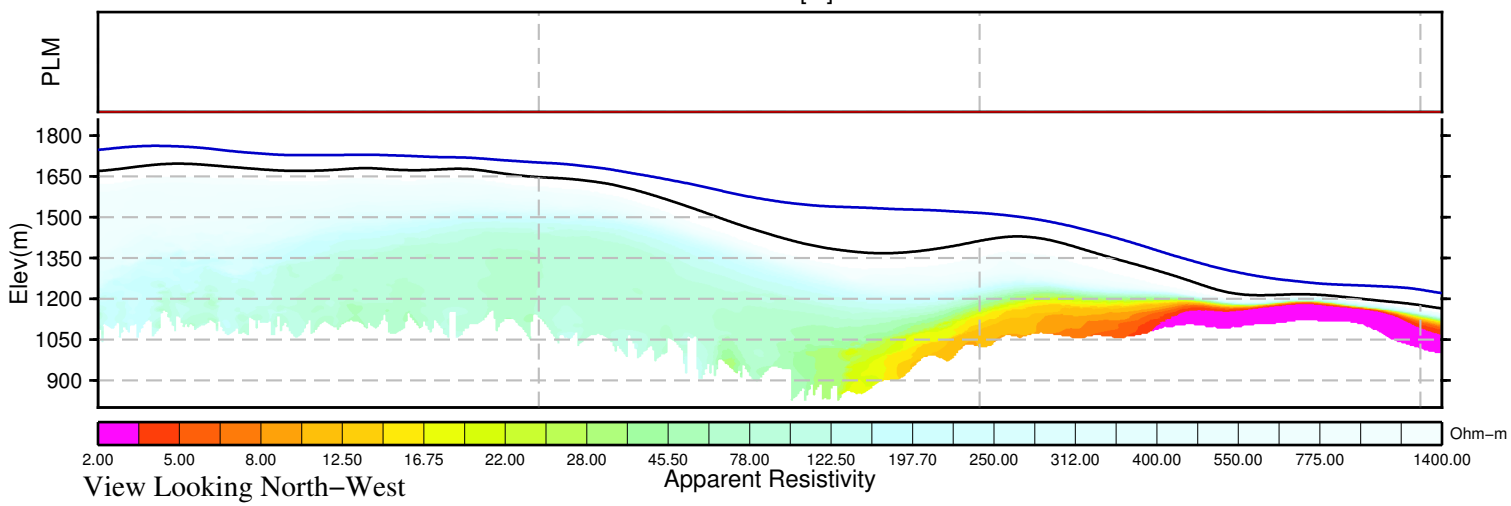
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







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Pelly Block
Yukon, Canada

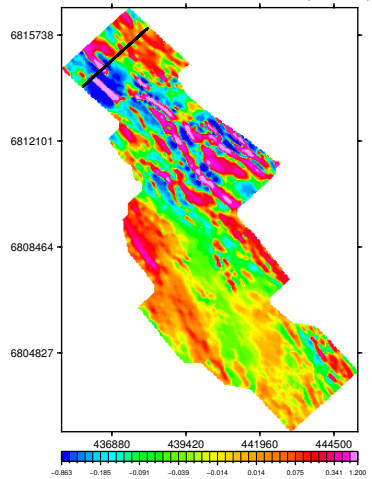
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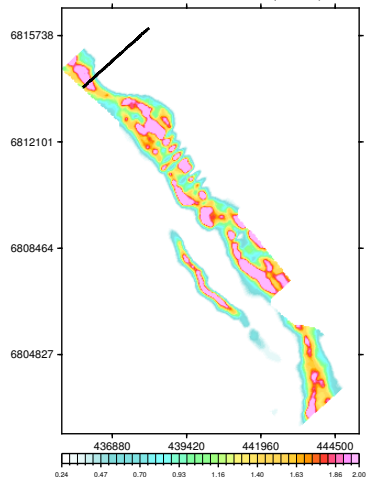
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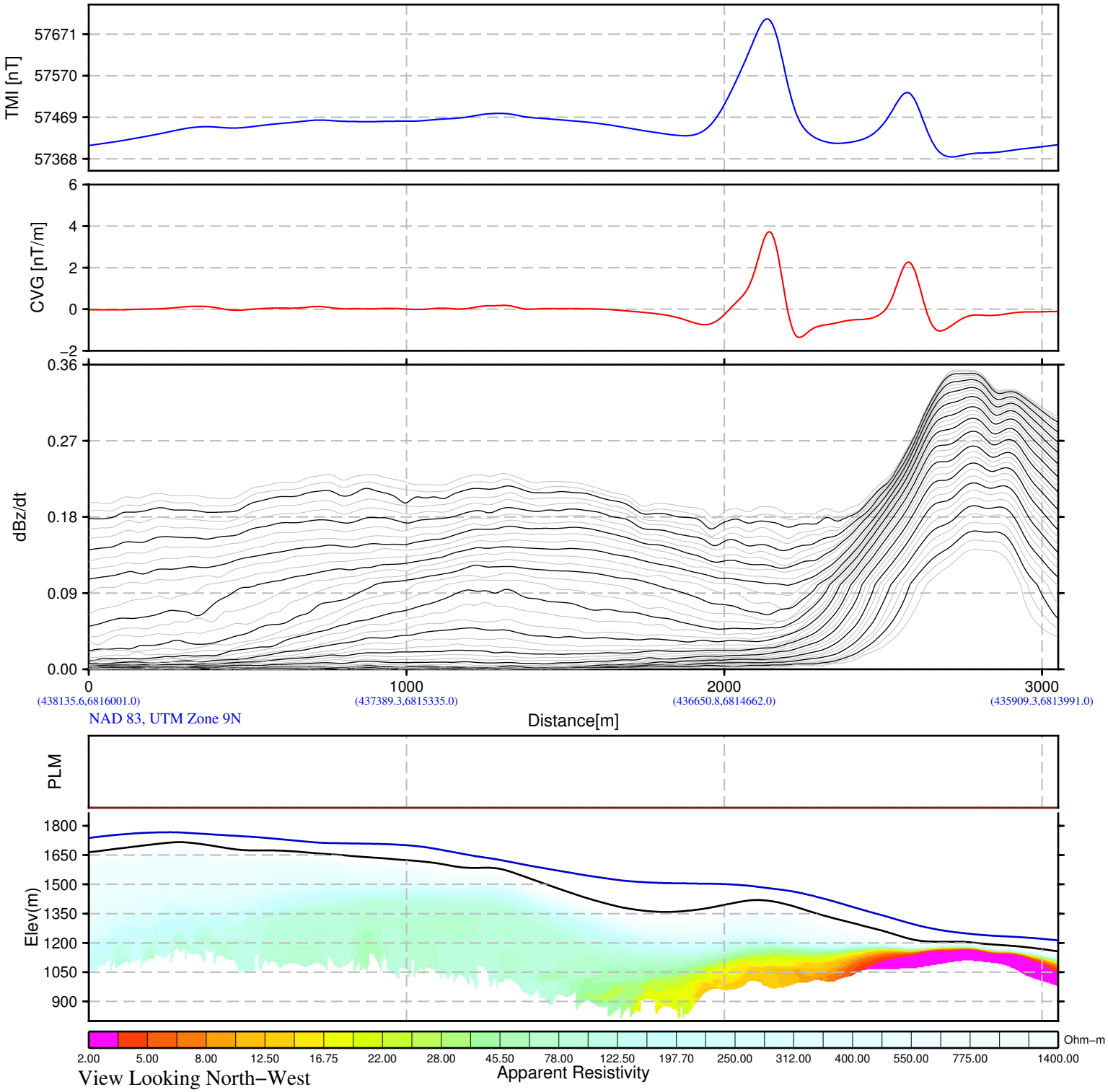
Resistivity Depth Image (RDI) for Line 4060

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

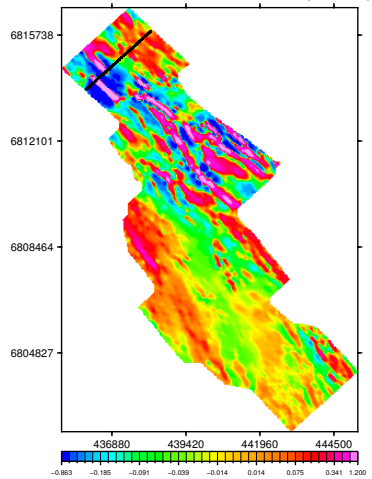
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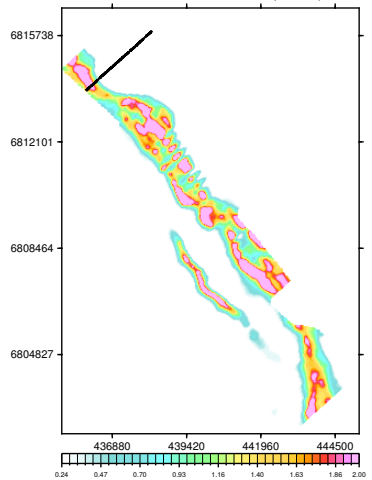
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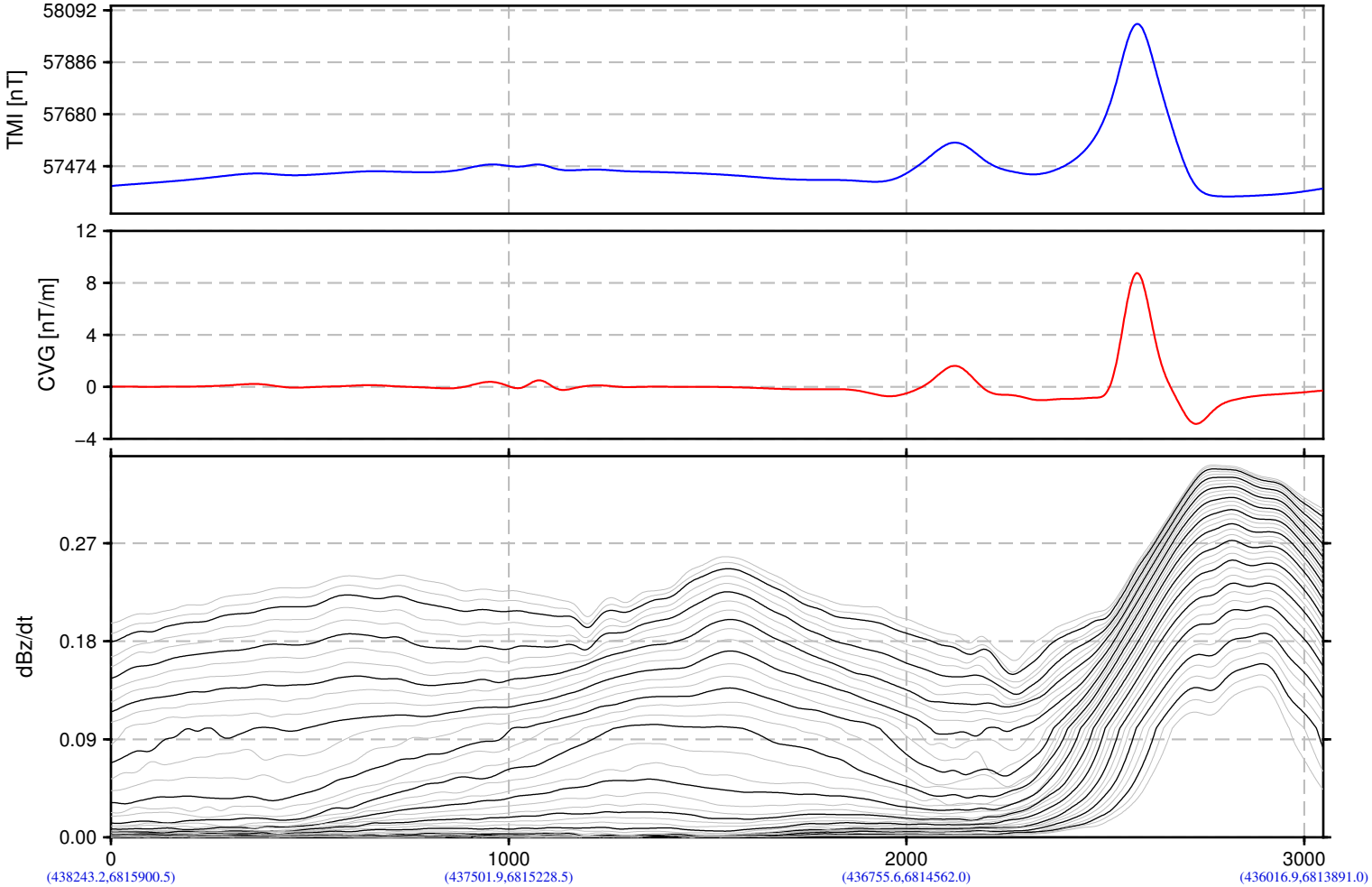
Resistivity Depth Image (RDI) for Line 4070

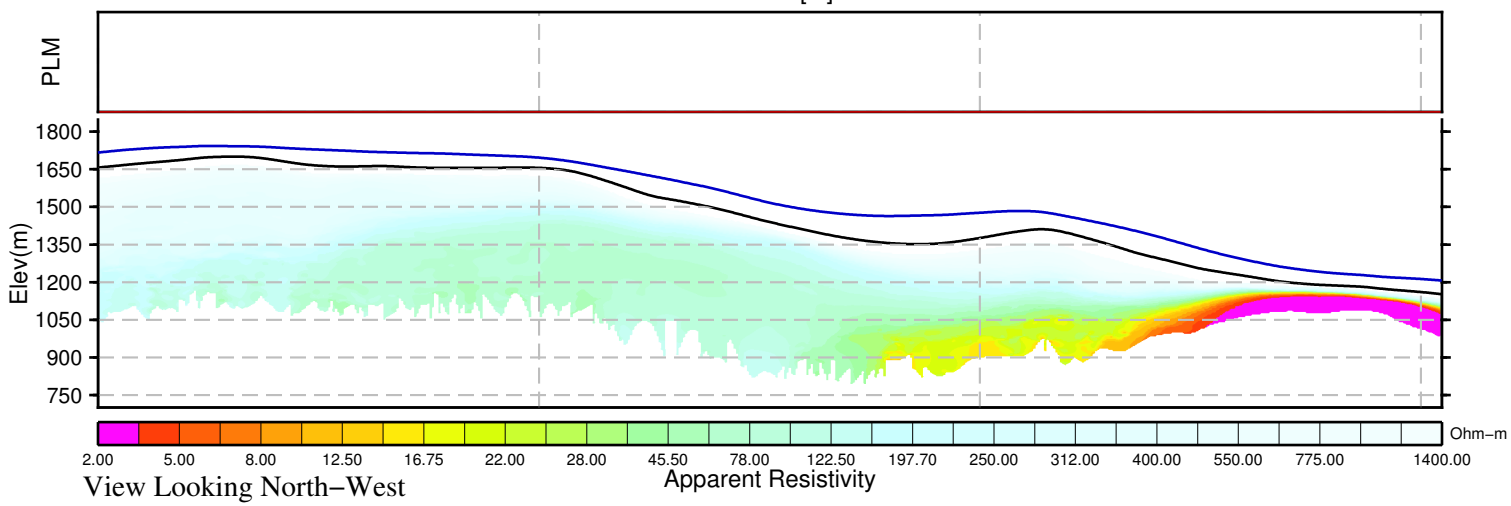
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

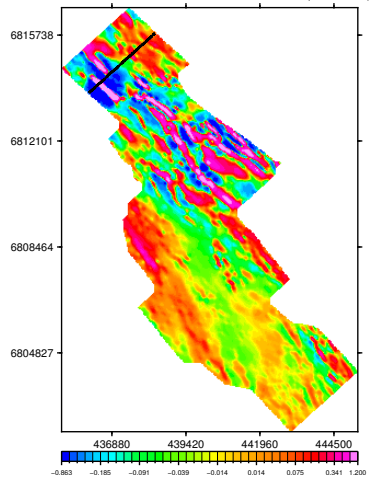
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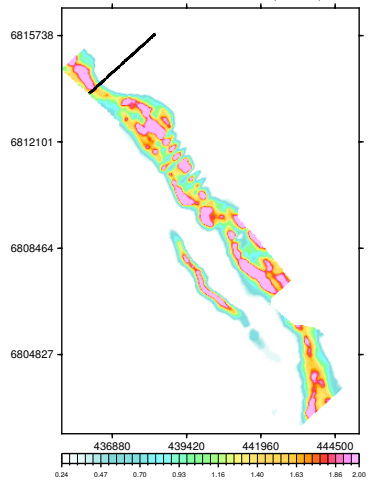
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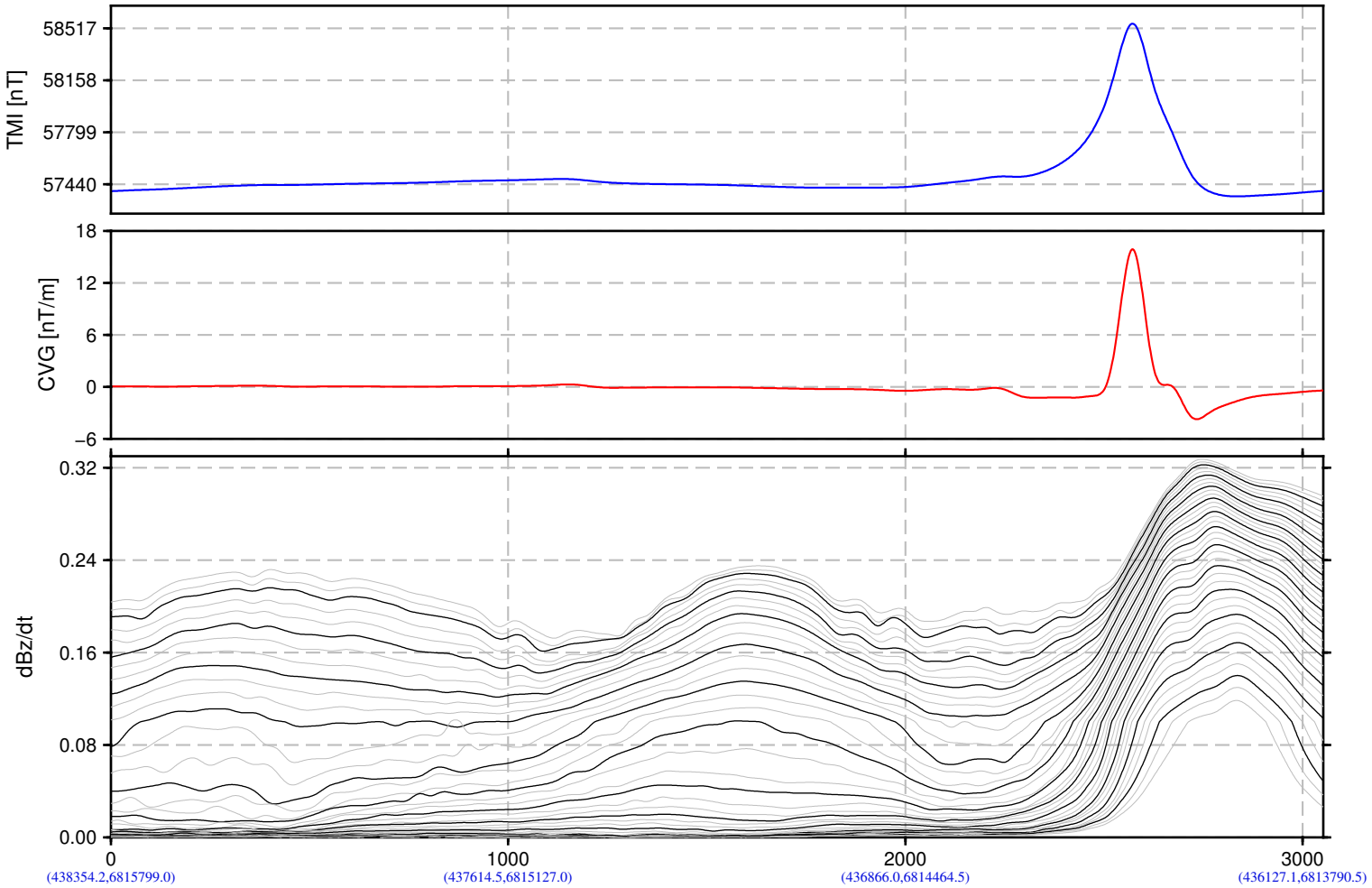
Resistivity Depth Image (RDI) for Line 4080

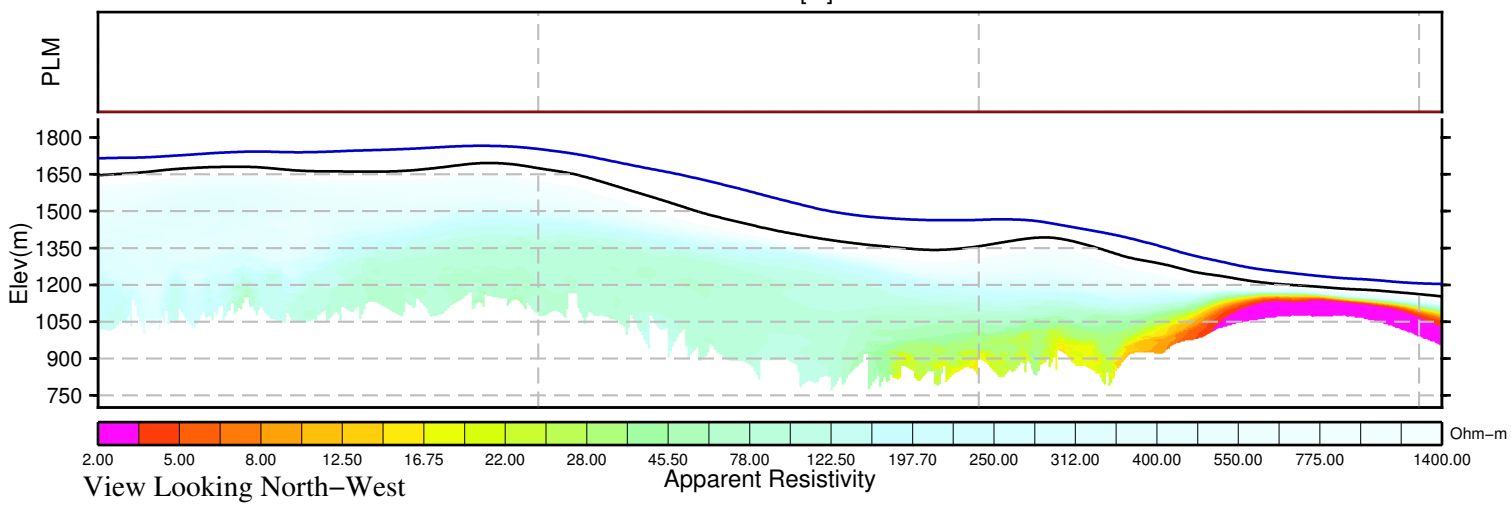
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

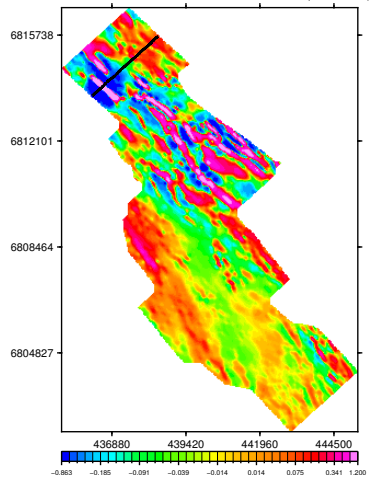
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Job Number:GL160037
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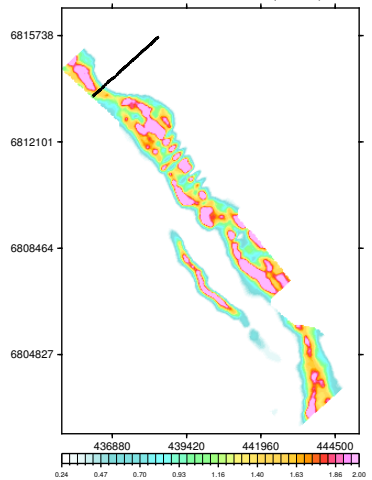
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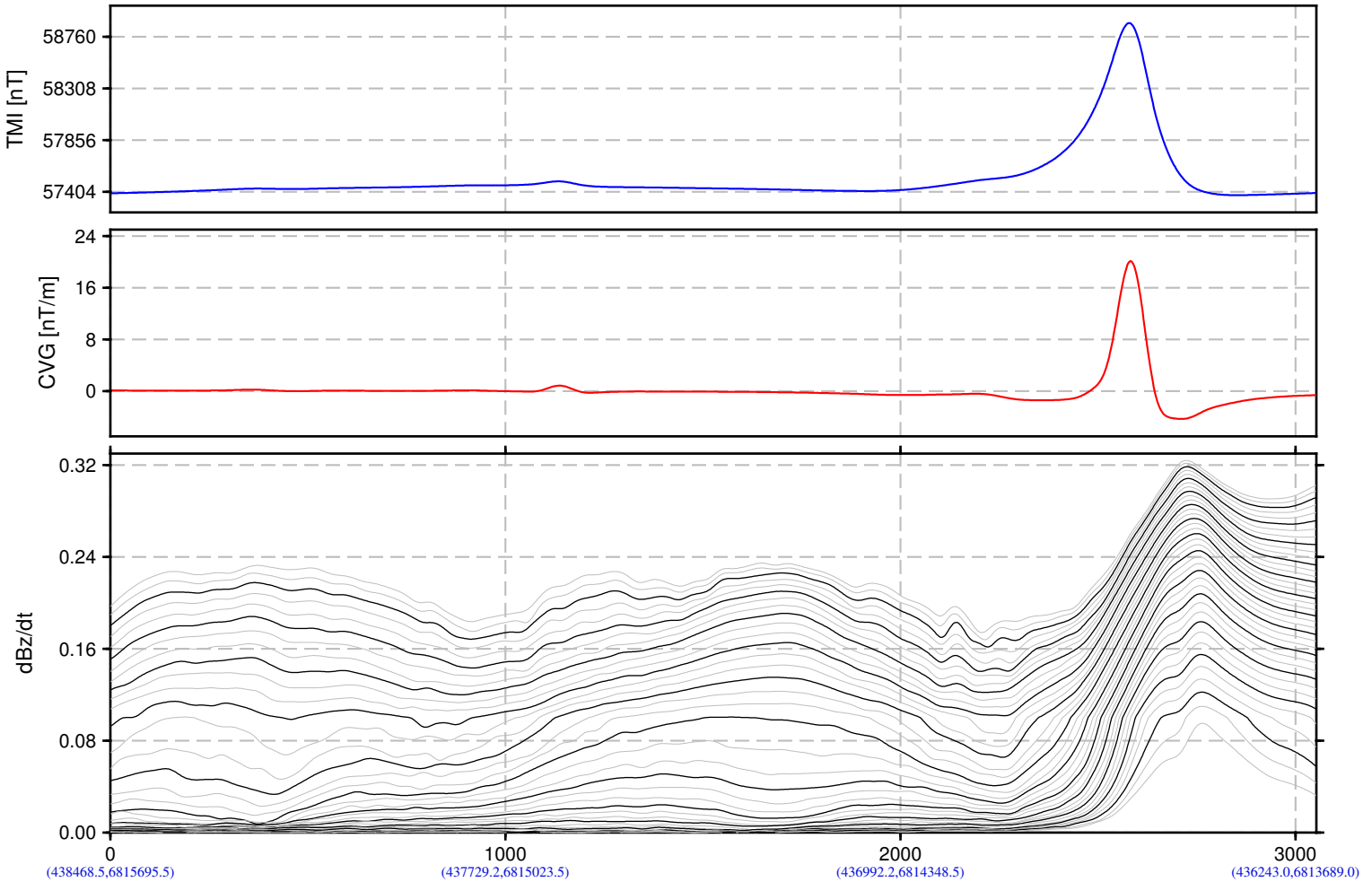
Resistivity Depth Image (RDI) for Line 4090

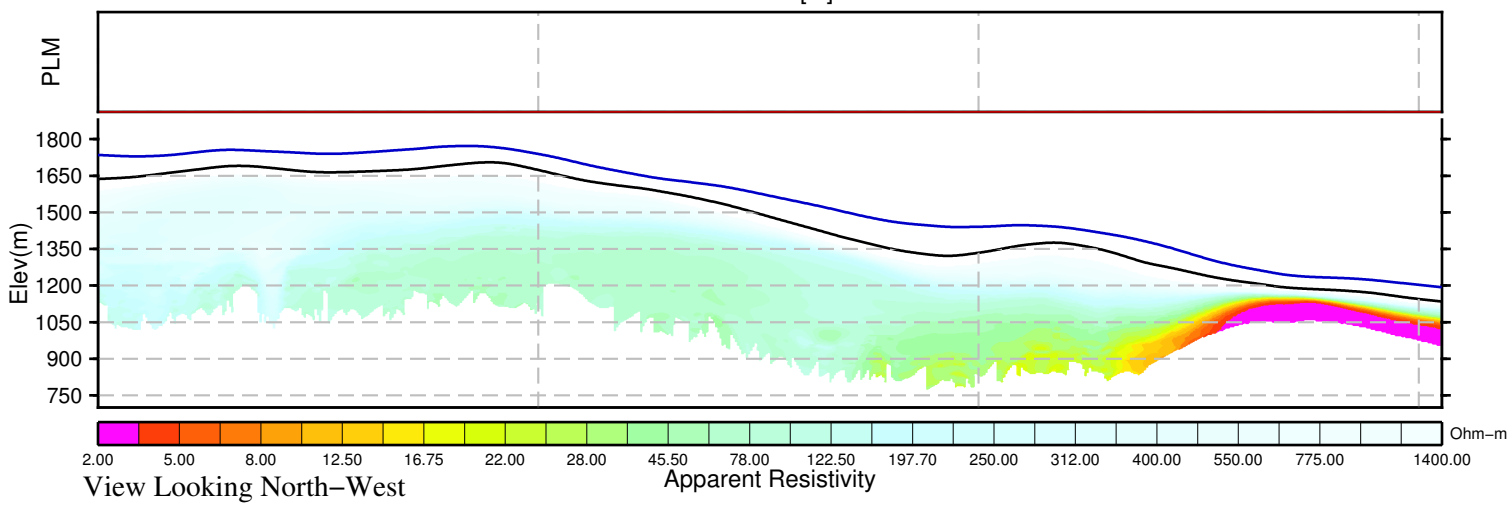
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

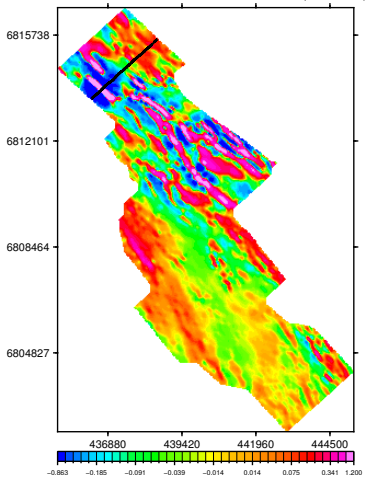
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Job Number:GL160037
Resistivity Depth Image (RDI)
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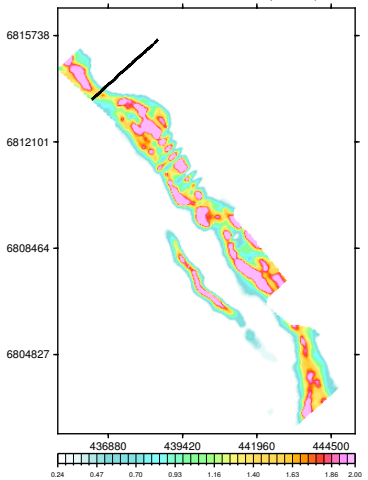
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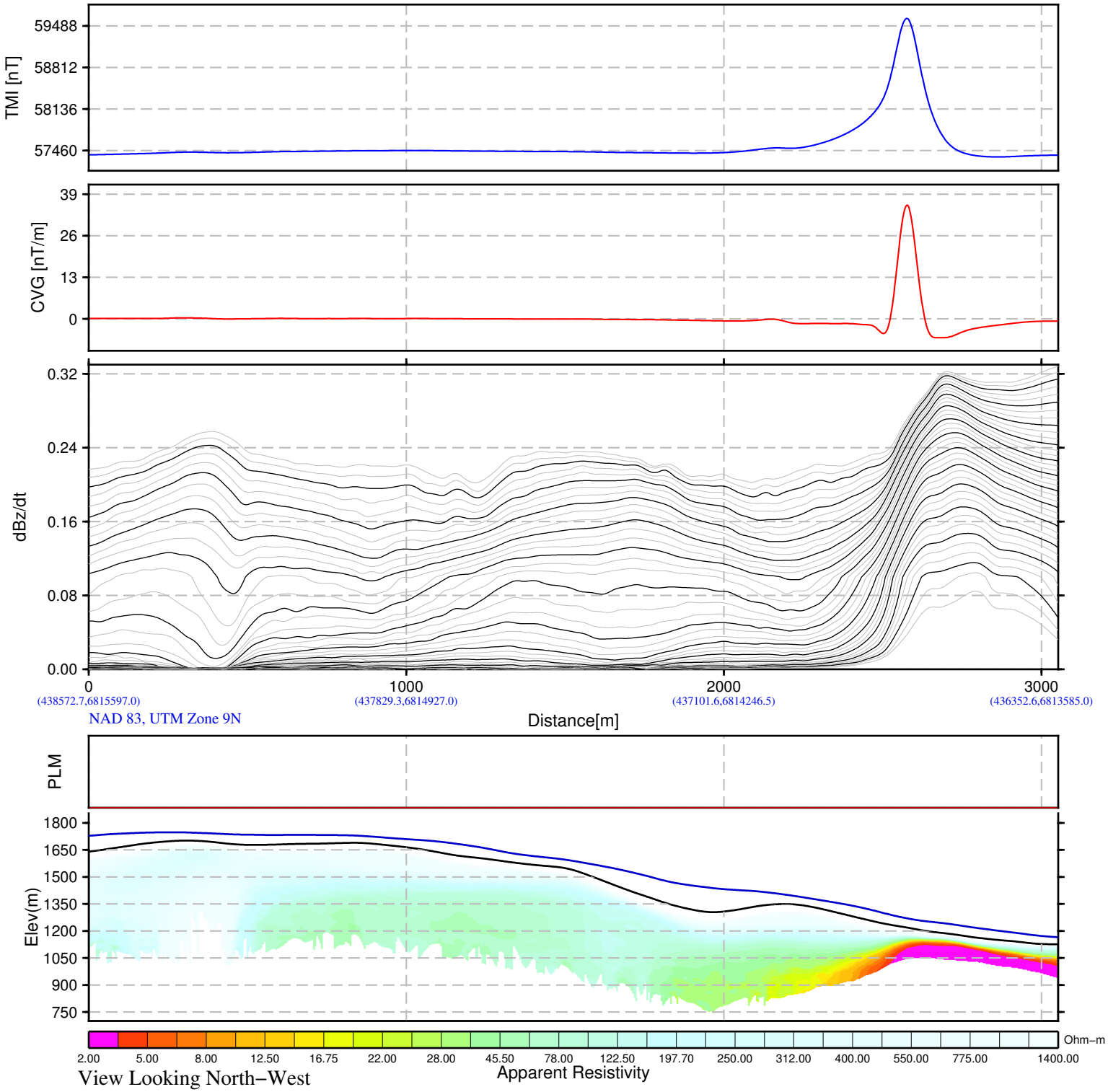
Resistivity Depth Image (RDI) for Line 4100

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

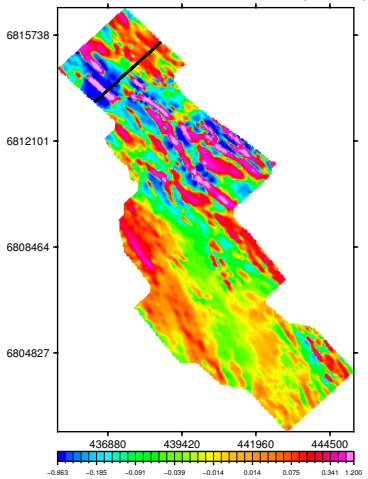
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Job Number:GL160037
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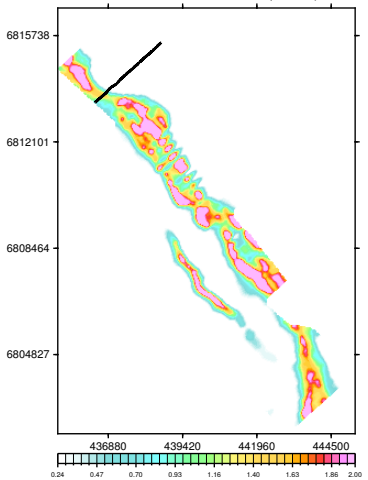
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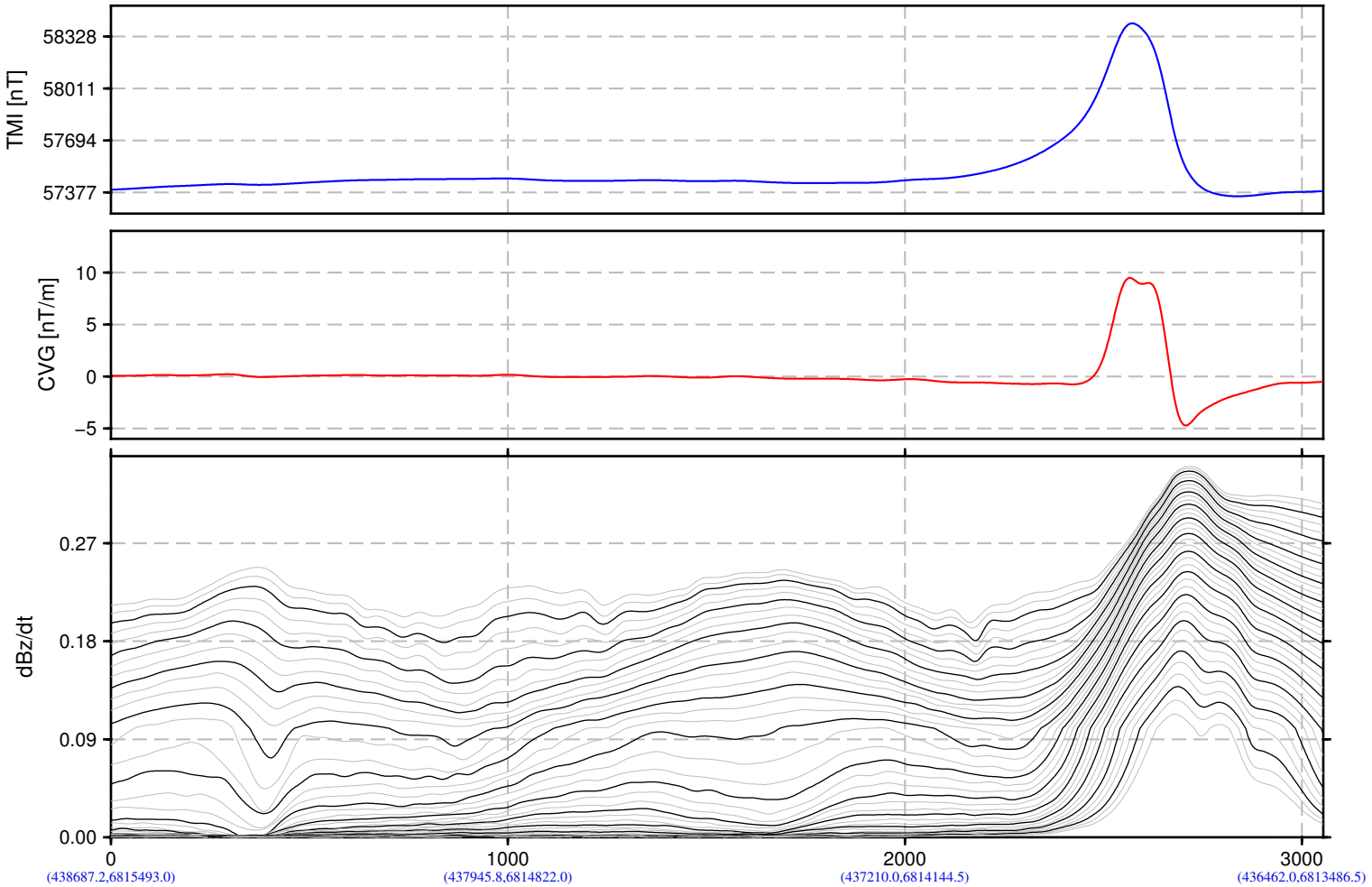
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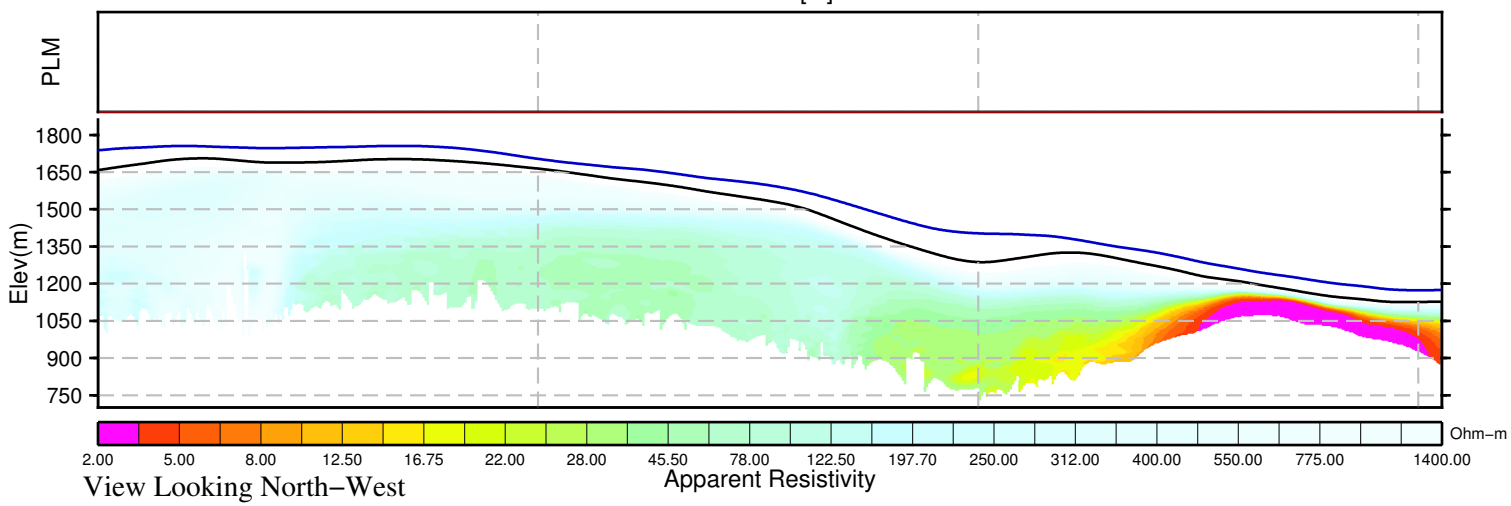
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

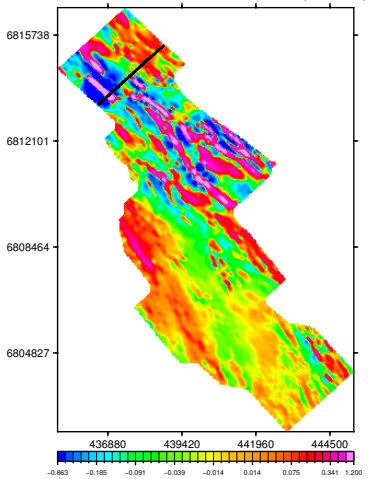
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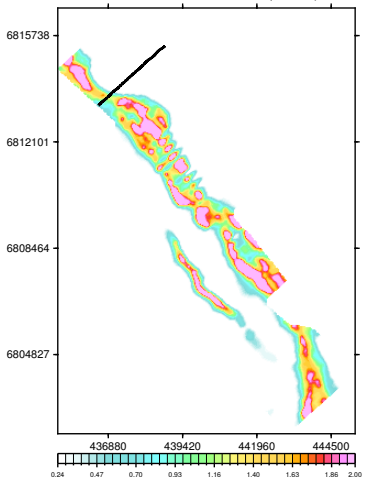
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AIRBORNE GEOPHYSICAL SURVEYS

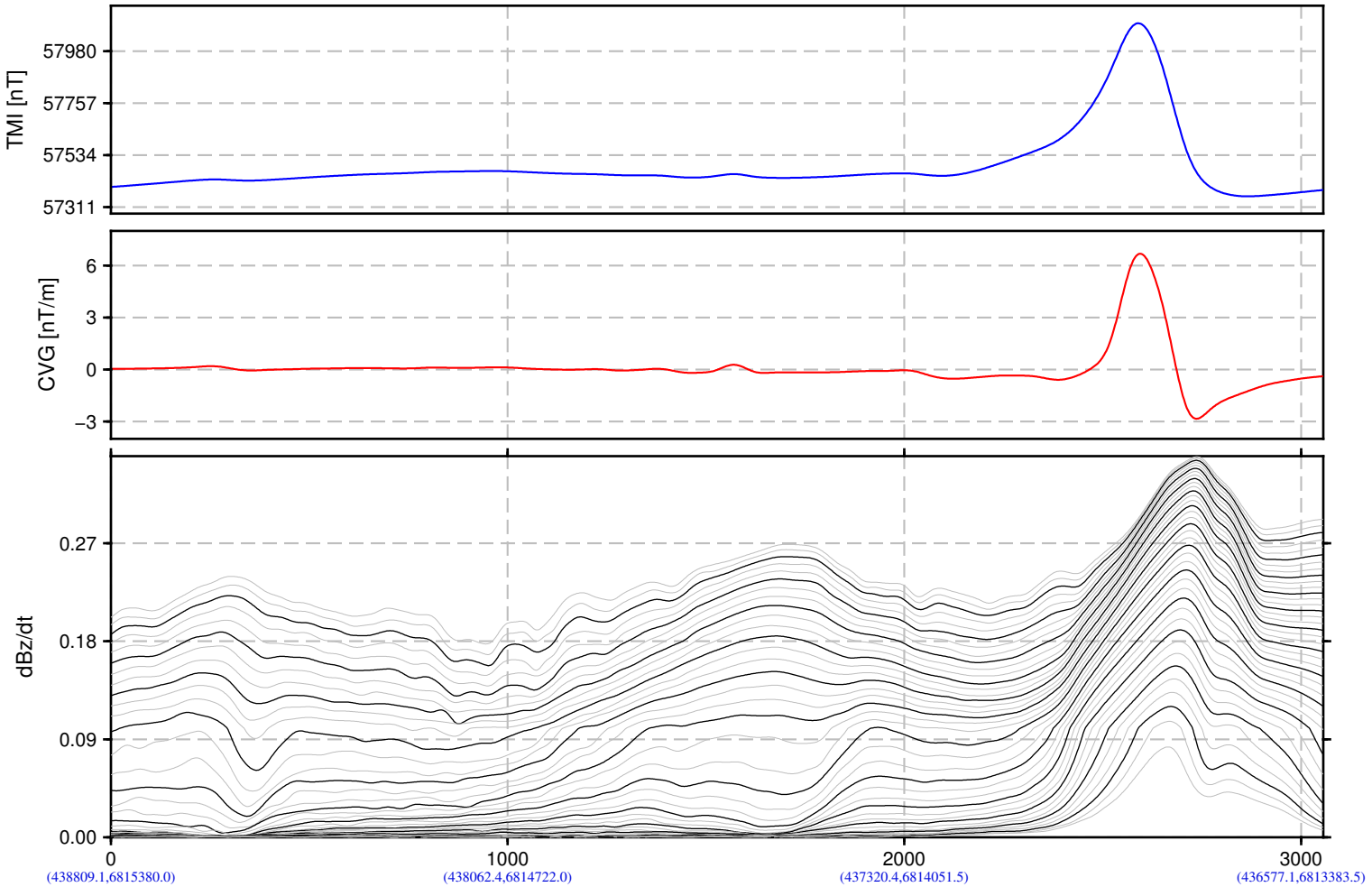
Resistivity Depth Image (RDI) for Line 4120

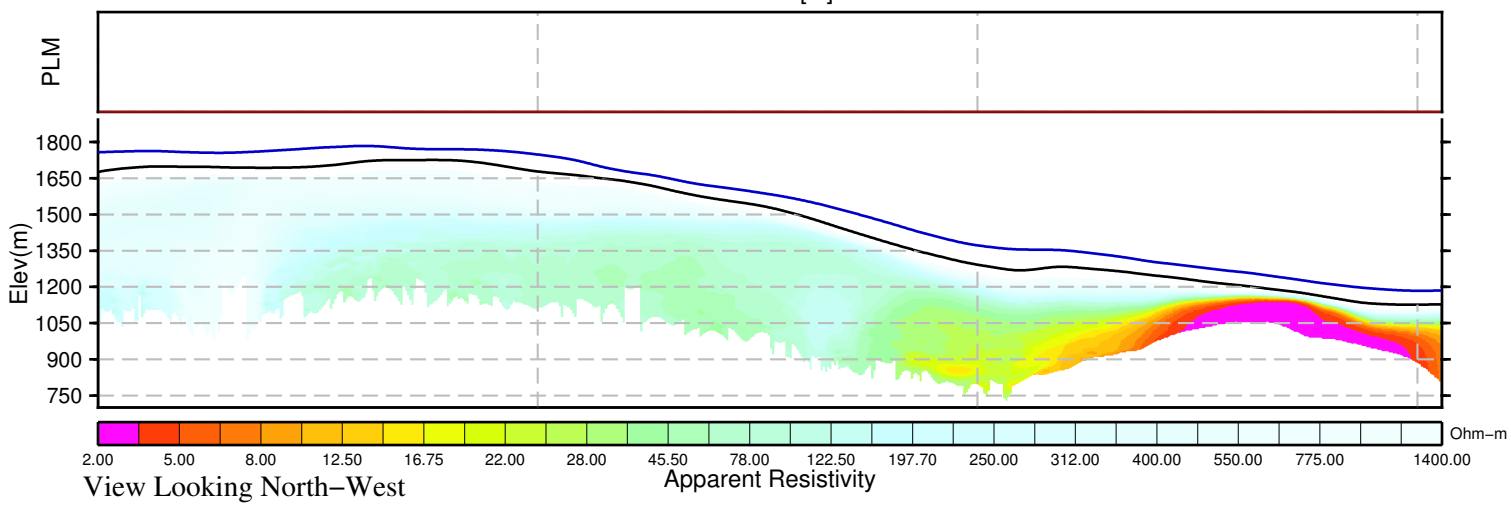
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

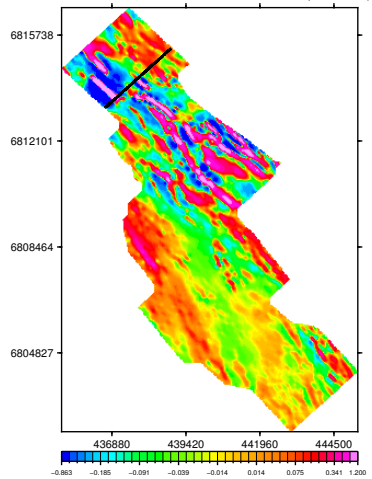
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Job Number:GL160037
Resistivity Depth Image (RDI)
Flown by Geotech Ltd.
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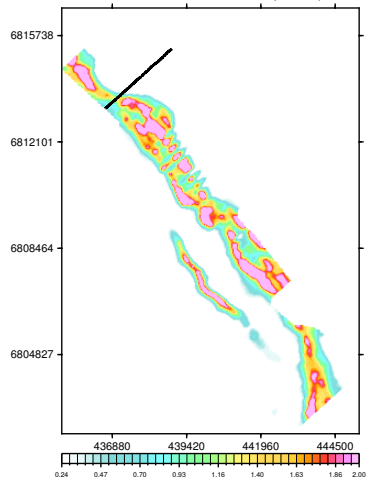
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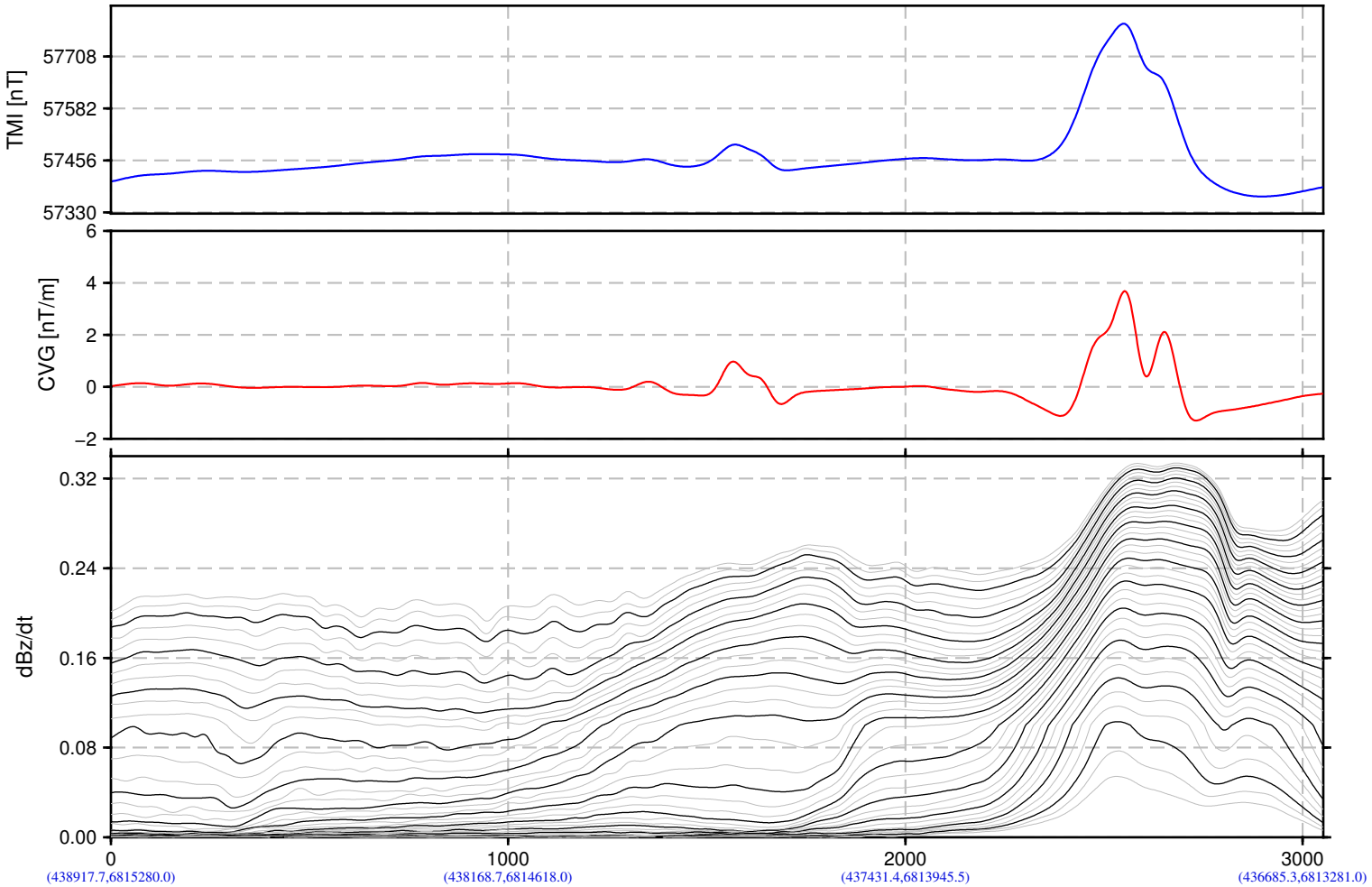
Resistivity Depth Image (RDI) for Line 4130

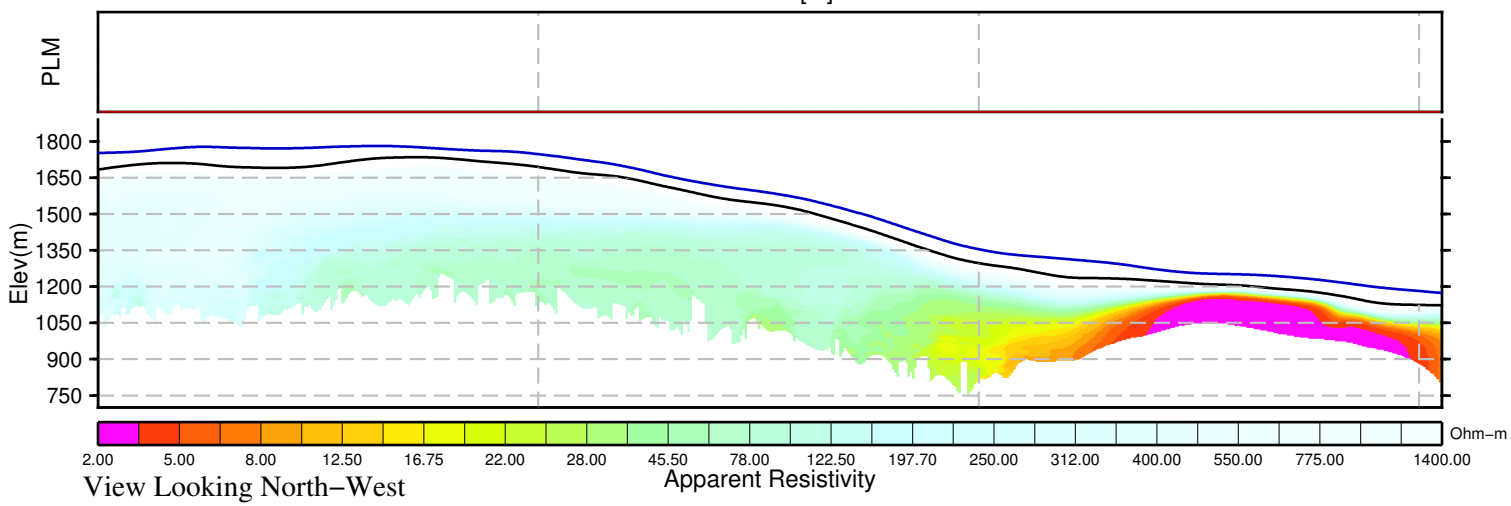
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

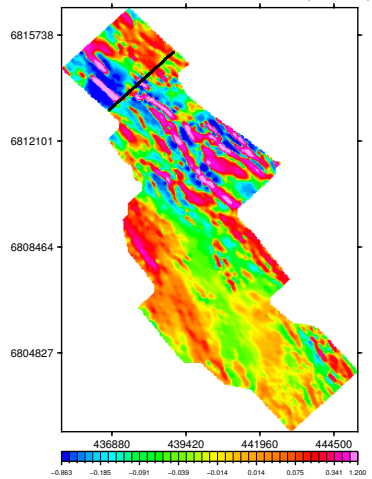
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Job Number:GL160037
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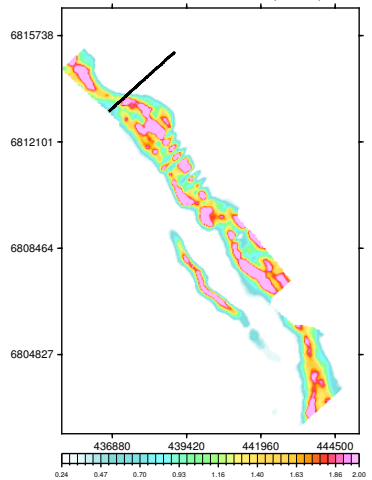
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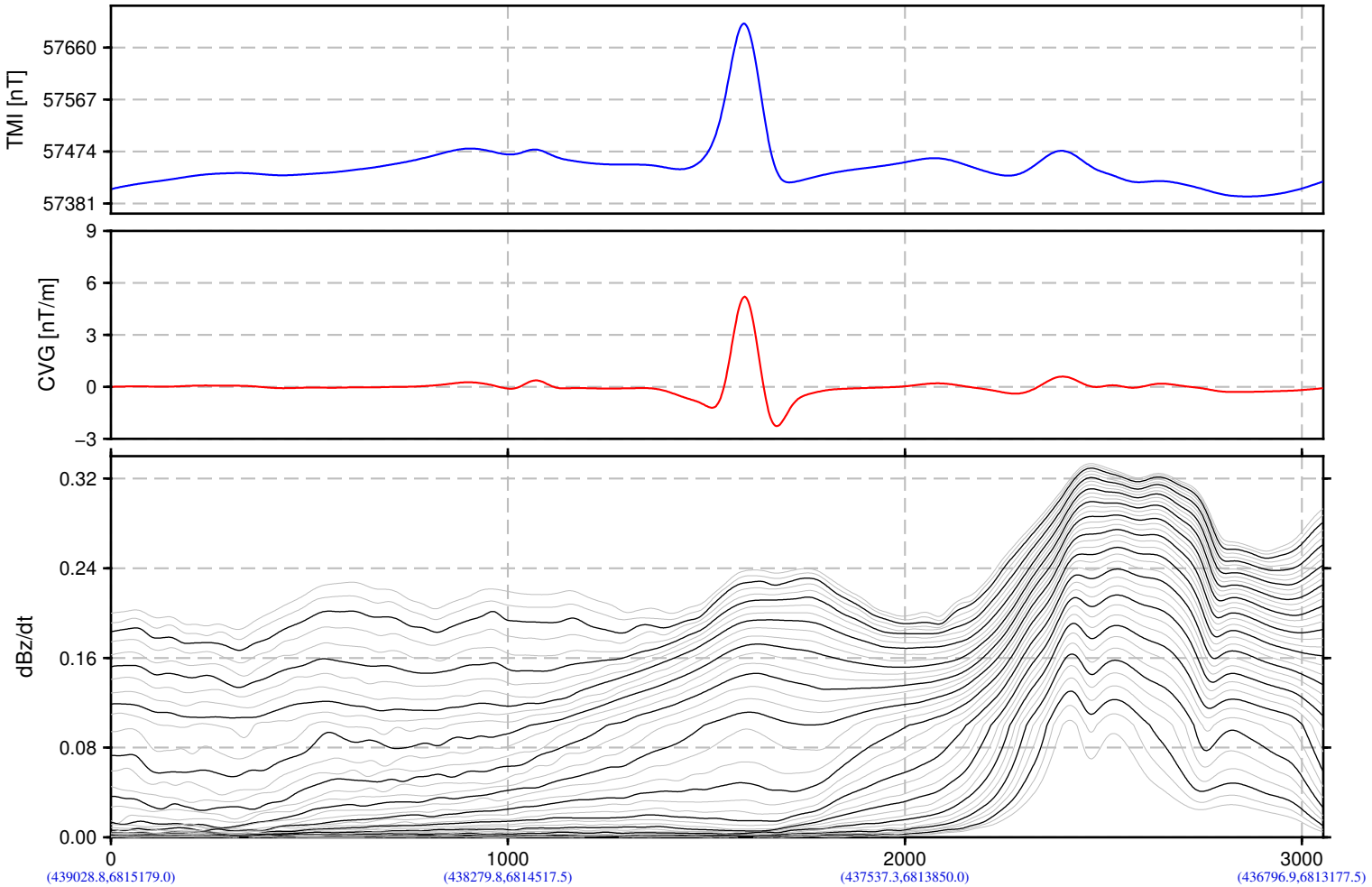
Resistivity Depth Image (RDI) for Line 4140

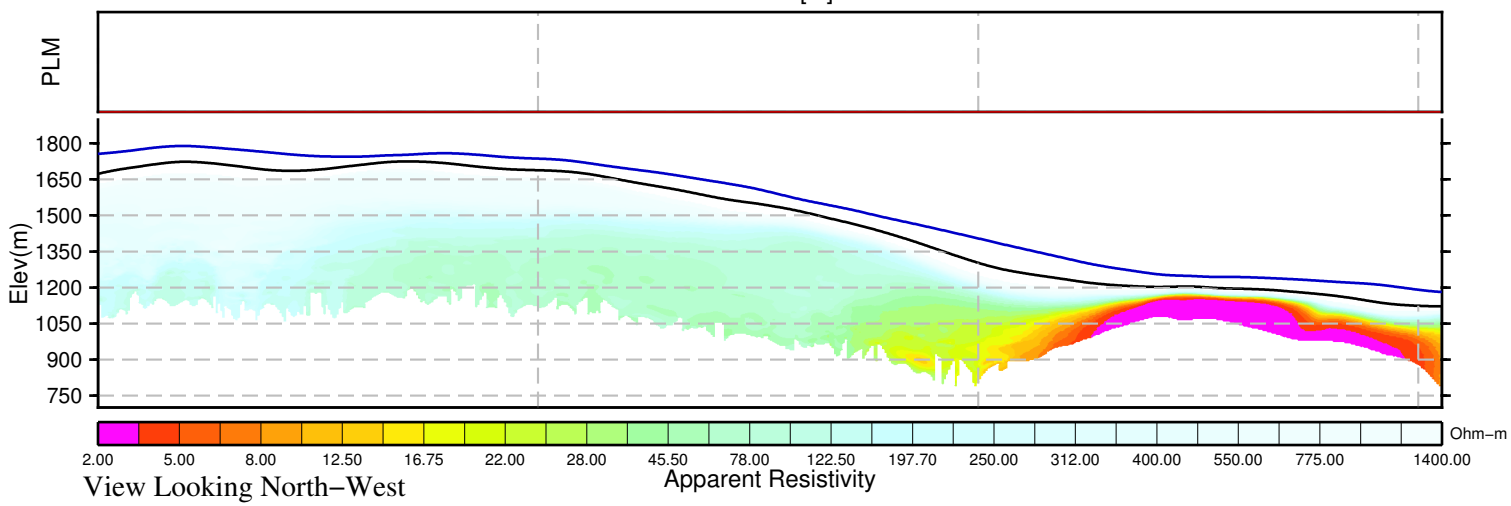
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

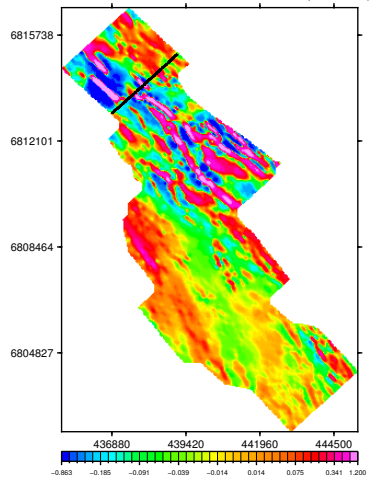
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Job Number:GL160037
Resistivity Depth Image (RDI)
Flown by Geotech Ltd.
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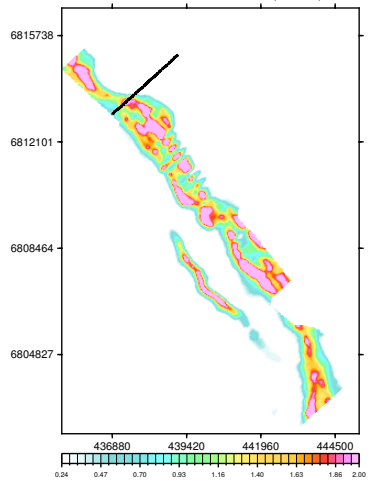
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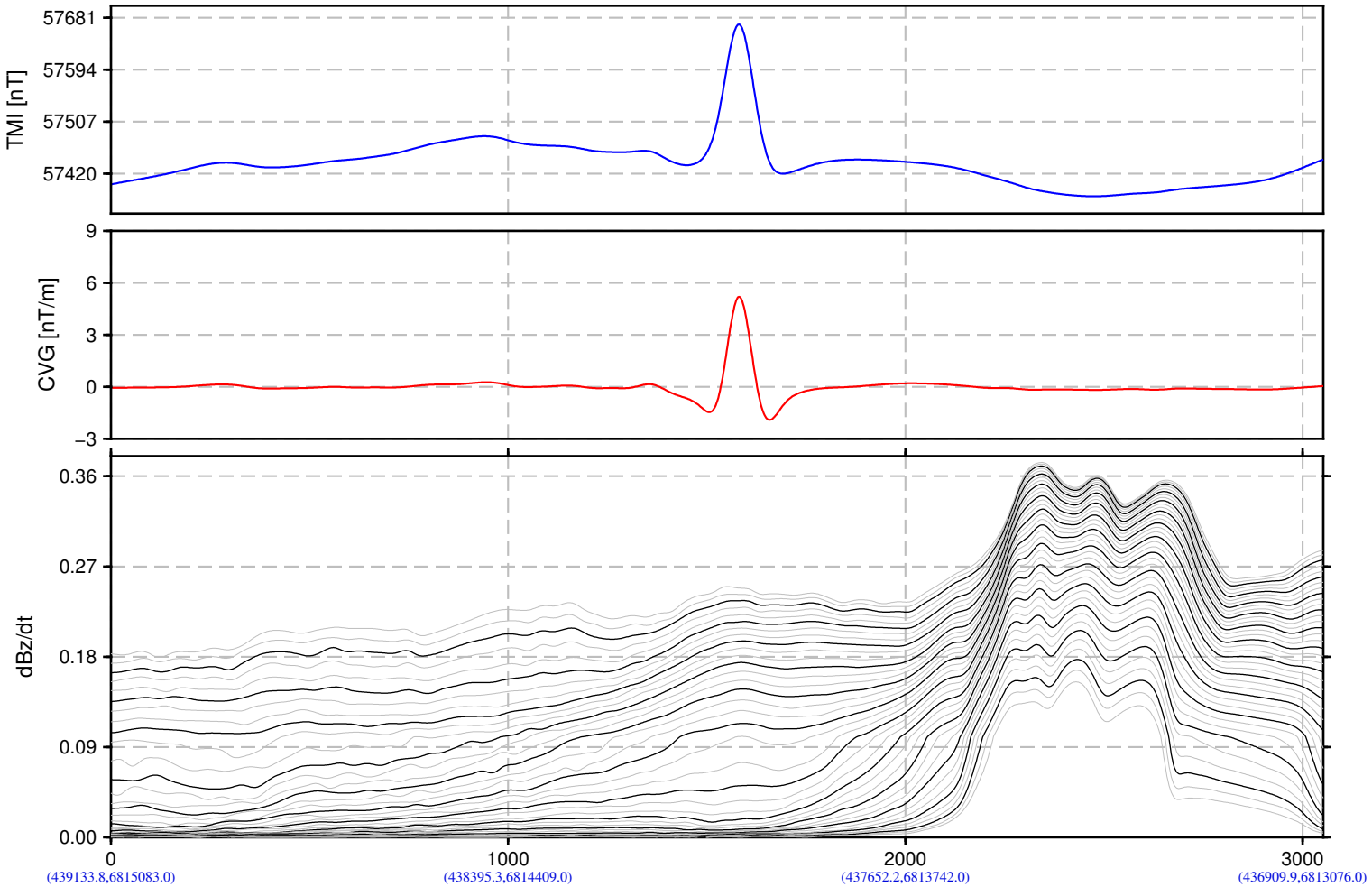
Resistivity Depth Image (RDI) for Line 4150

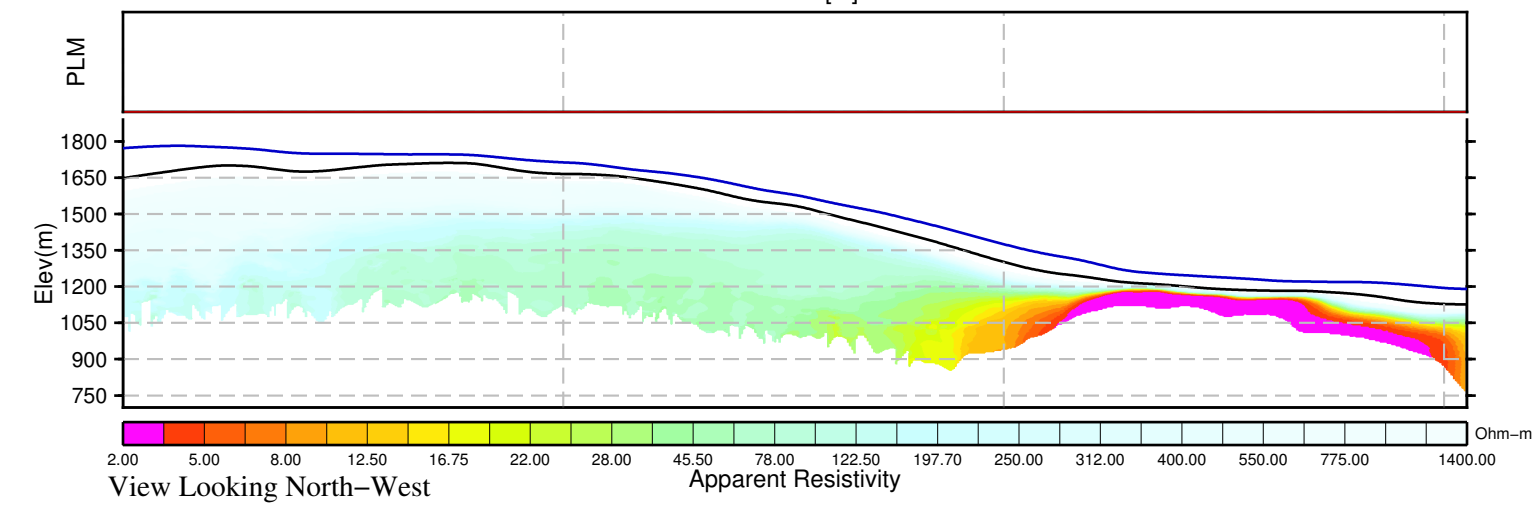
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

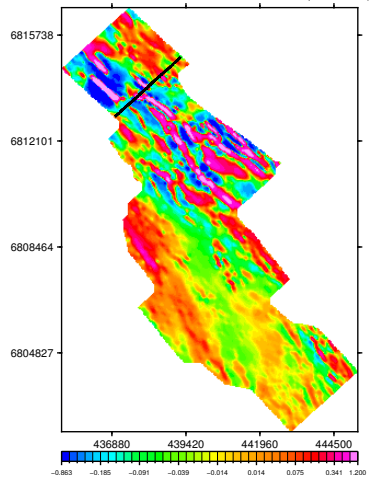
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Job Number:GL160037
Resistivity Depth Image (RDI)
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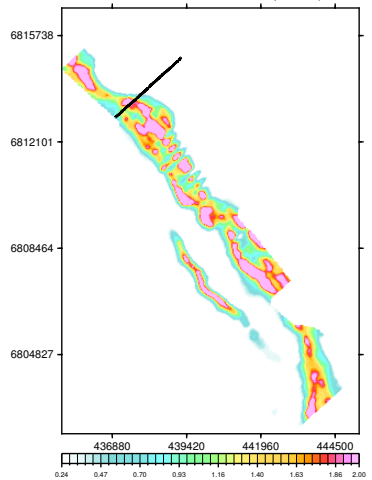
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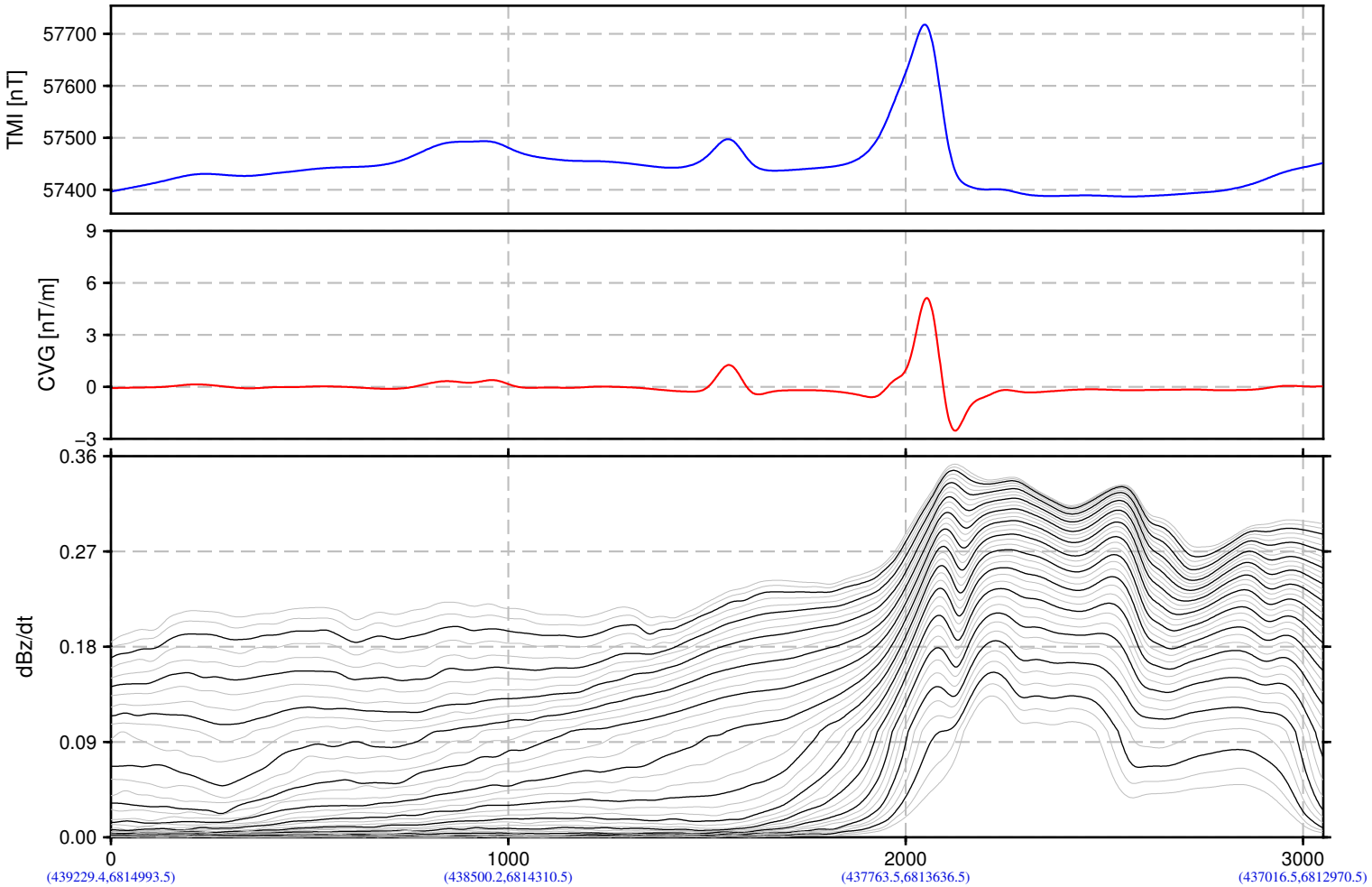
Resistivity Depth Image (RDI) for Line 4160

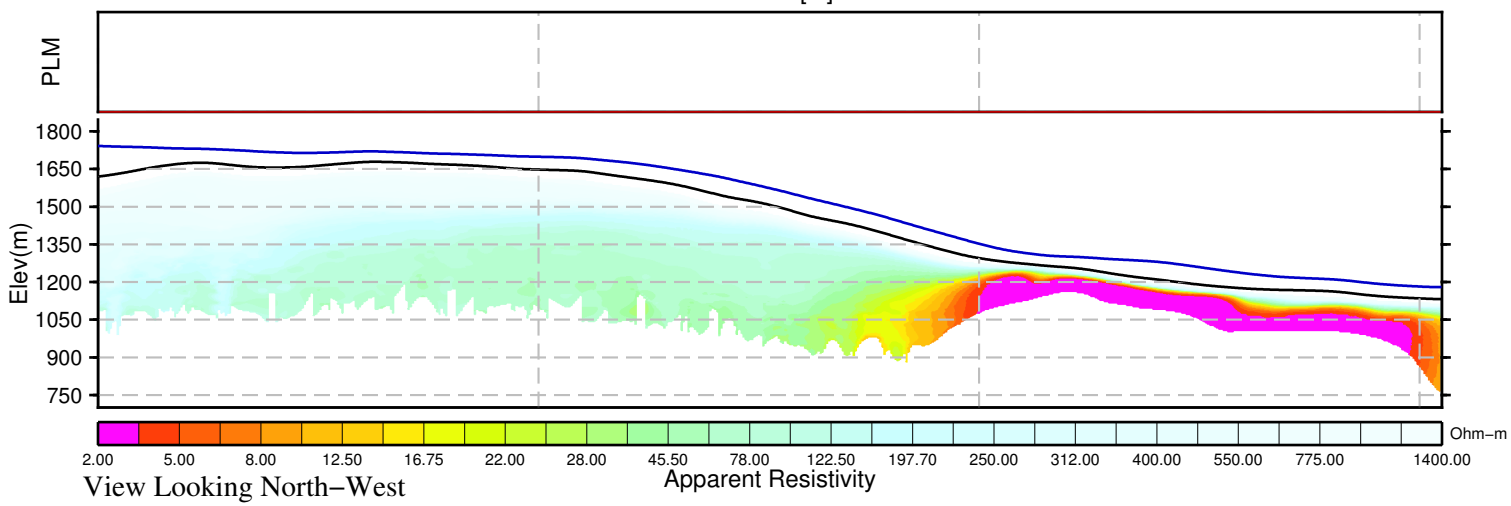
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

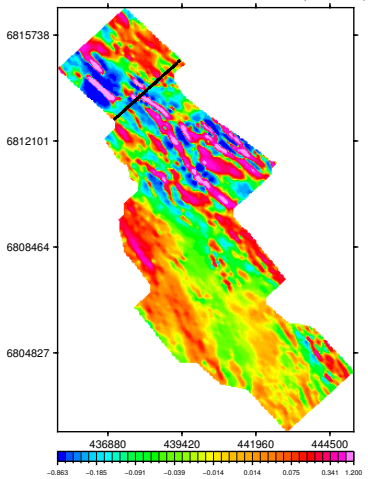
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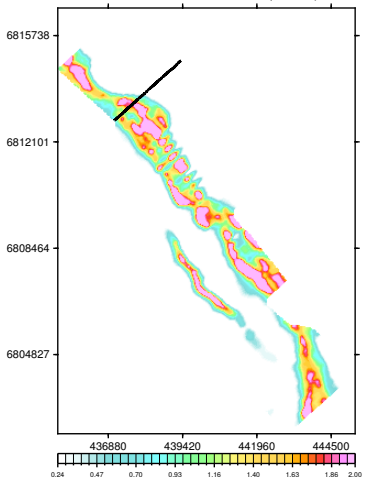
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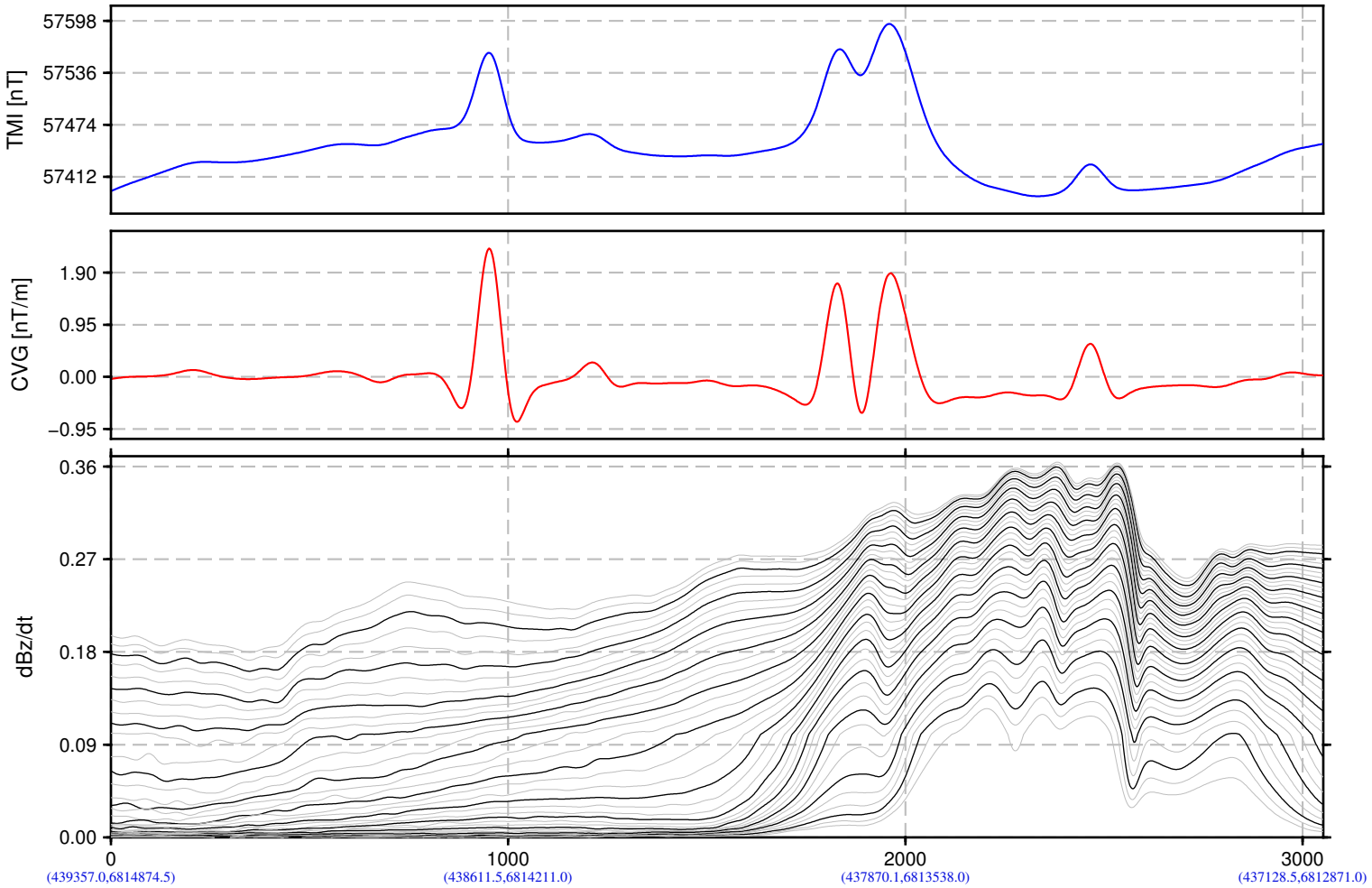
Resistivity Depth Image (RDI) for Line 4170

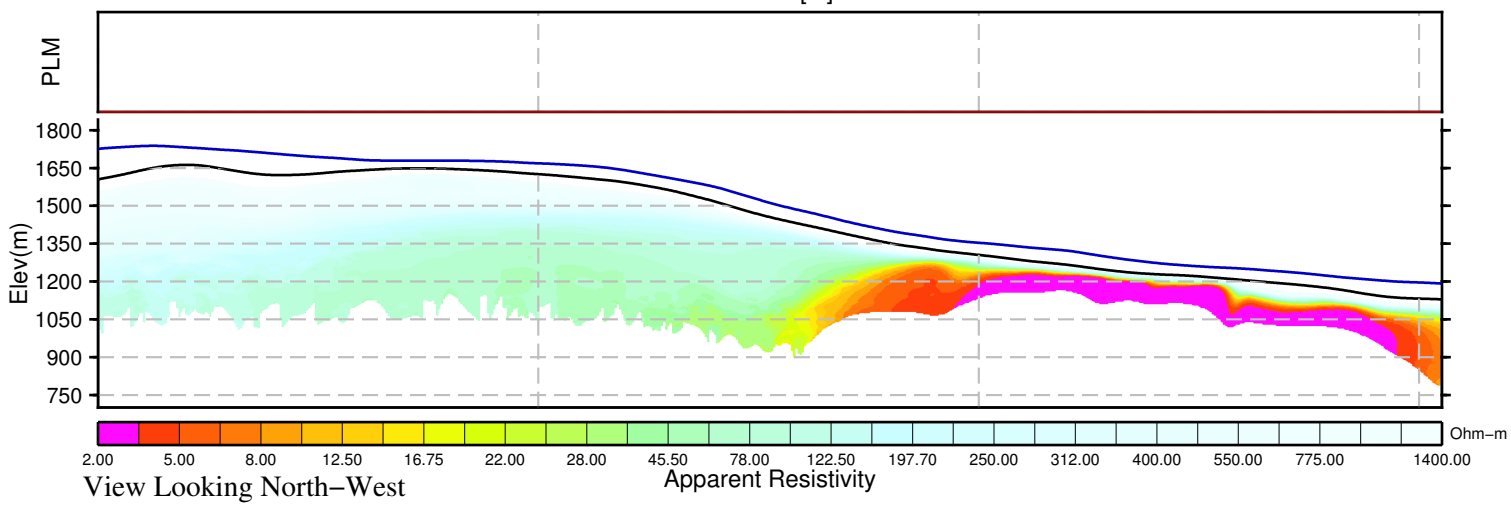
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

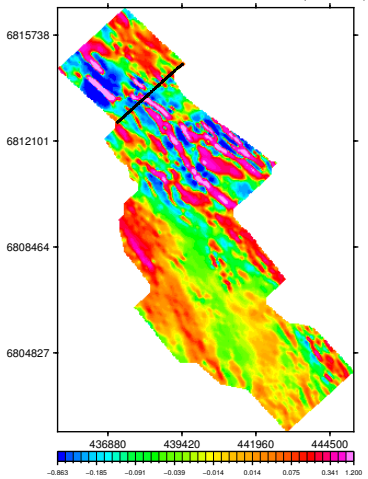
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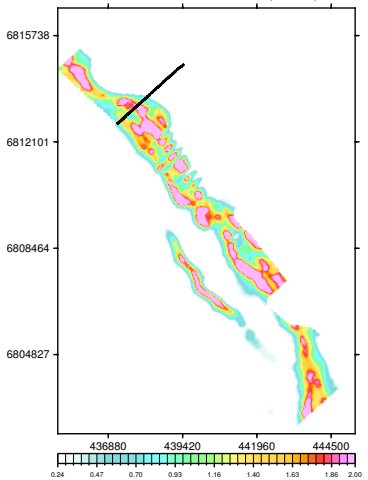
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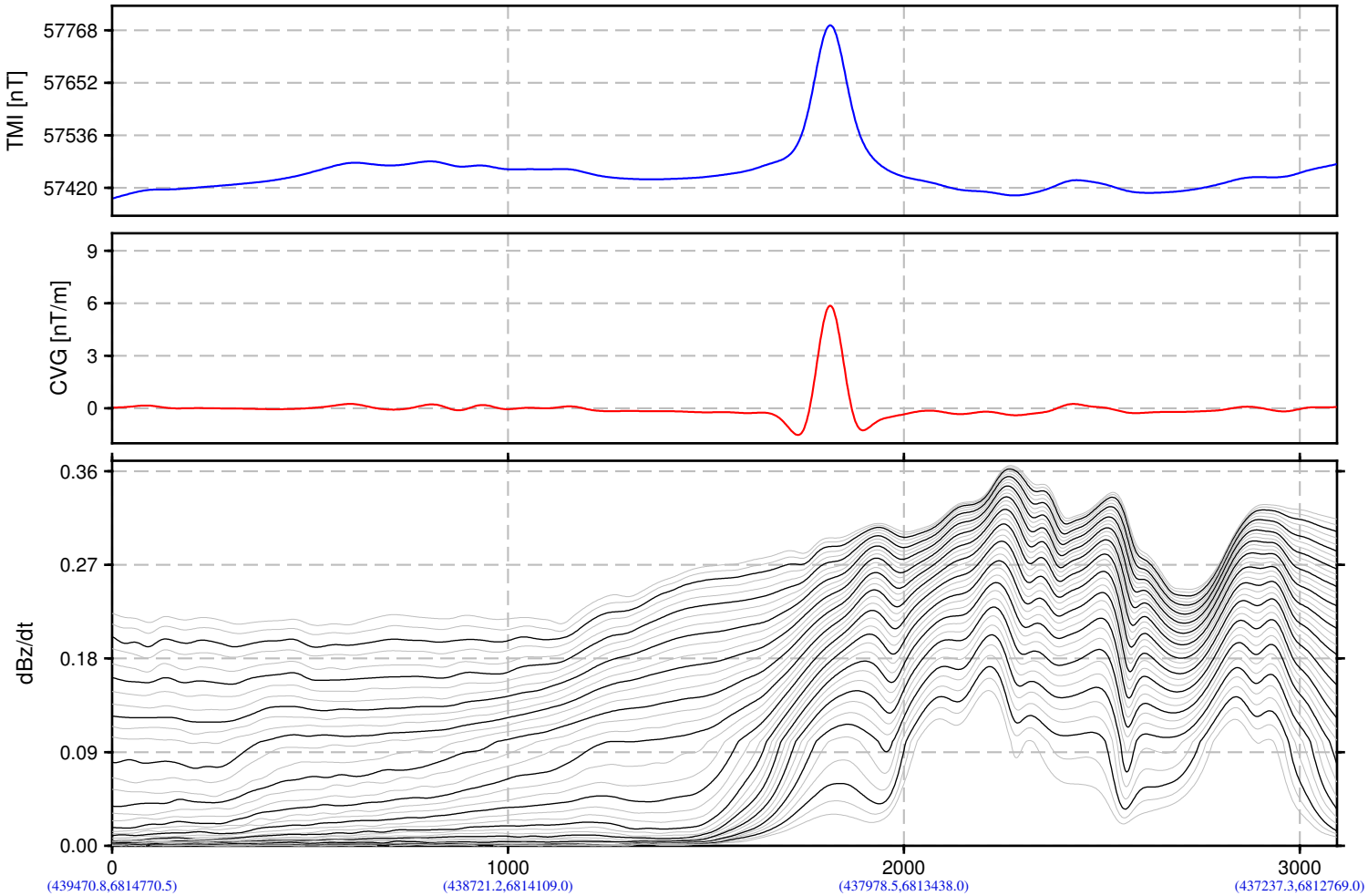
Resistivity Depth Image (RDI) for Line 4180

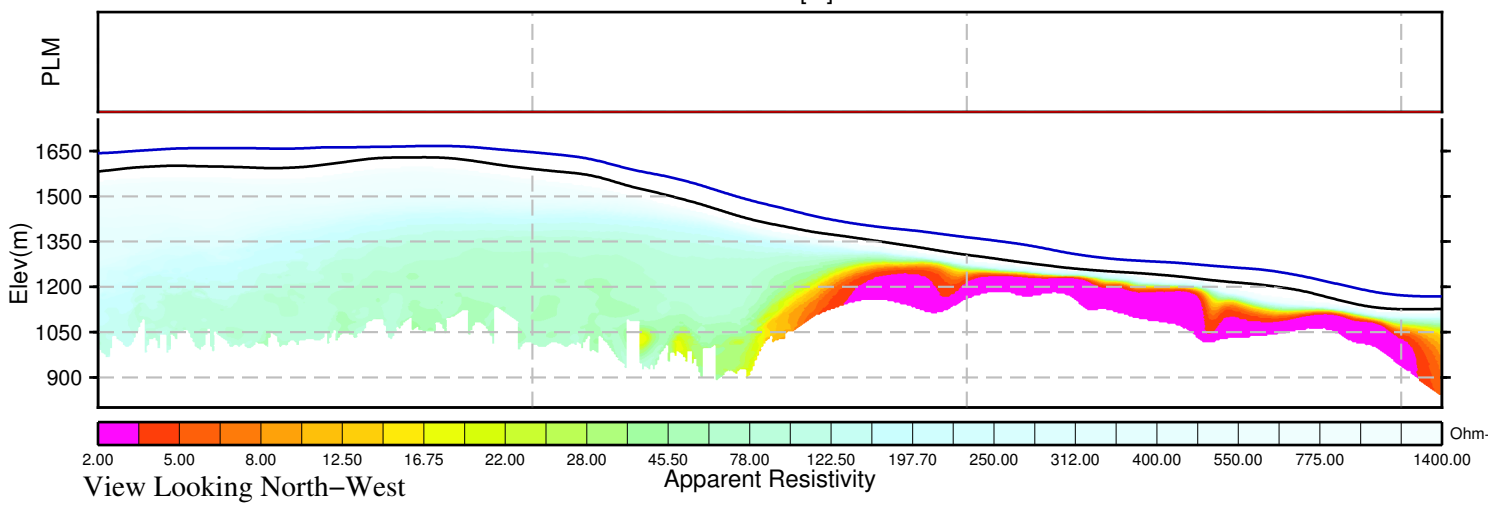
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

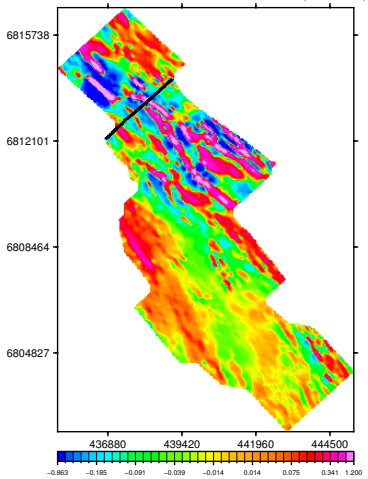
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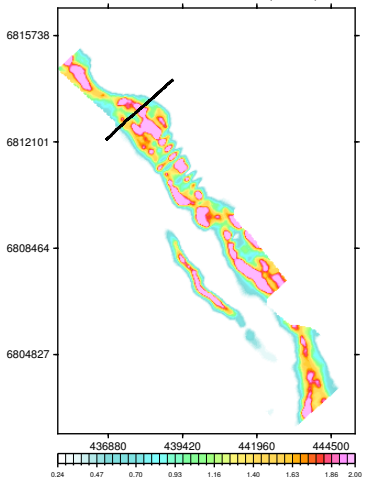
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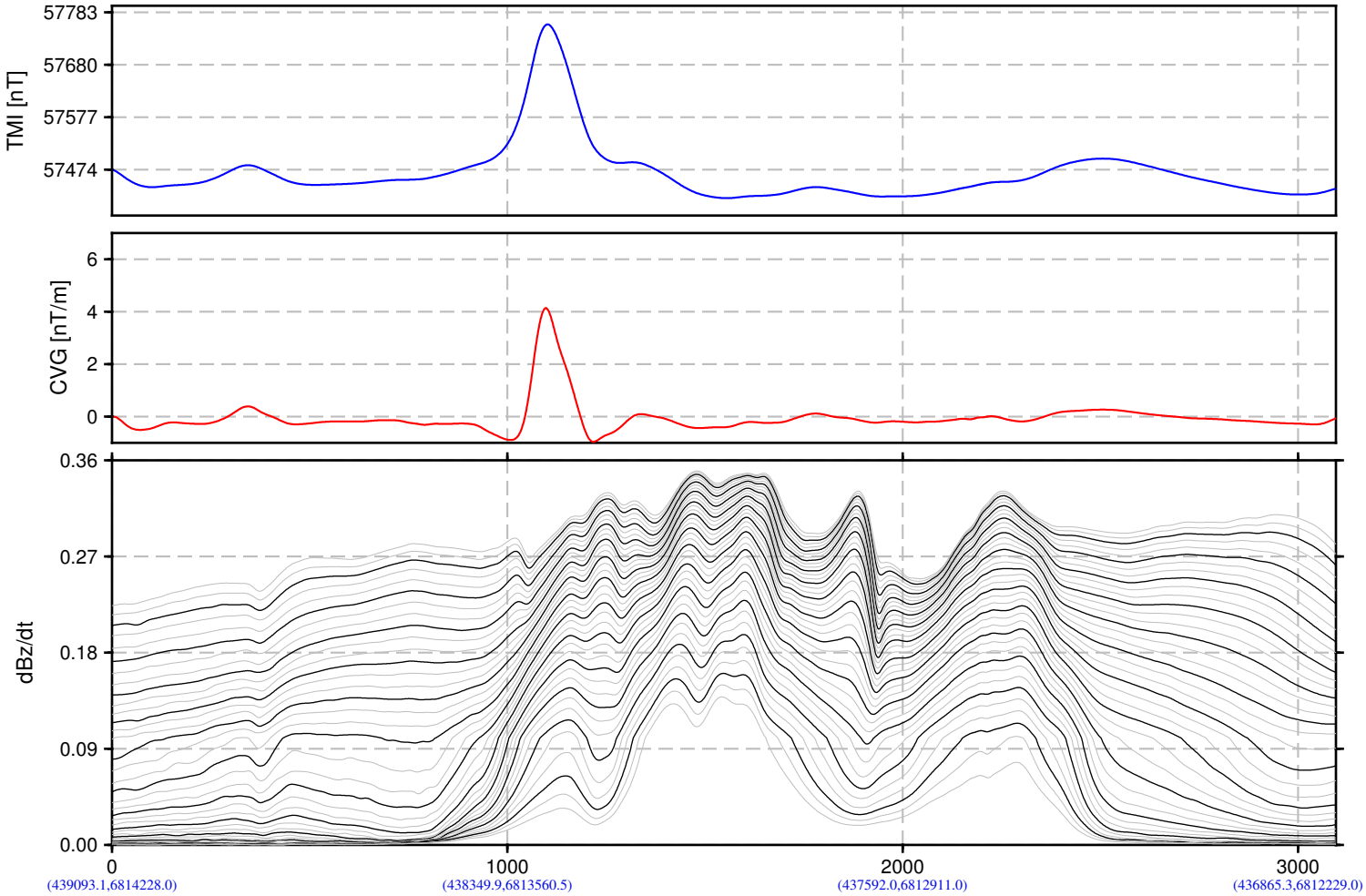
Resistivity Depth Image (RDI) for Line 4190

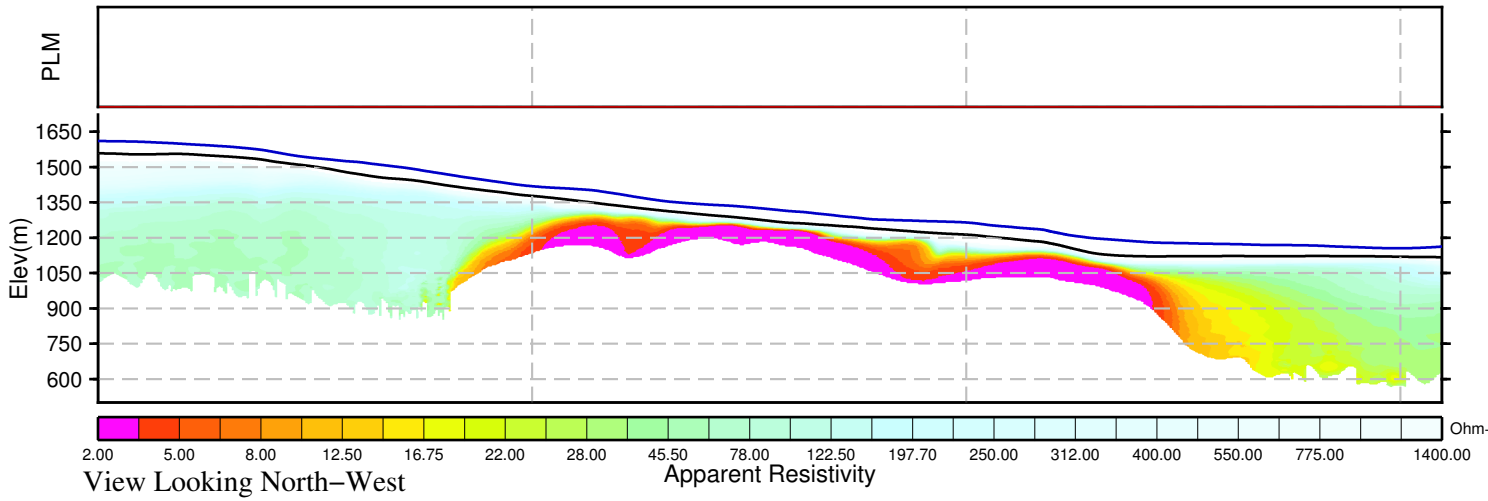
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

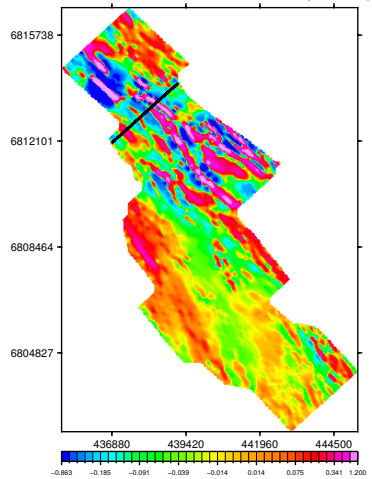
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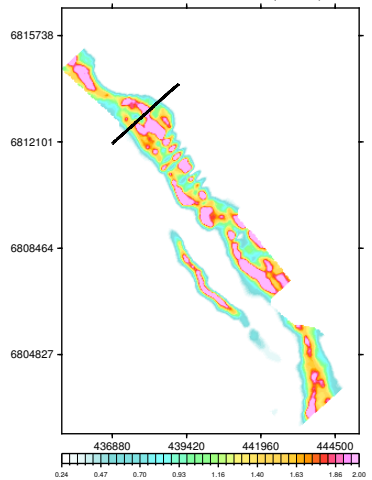
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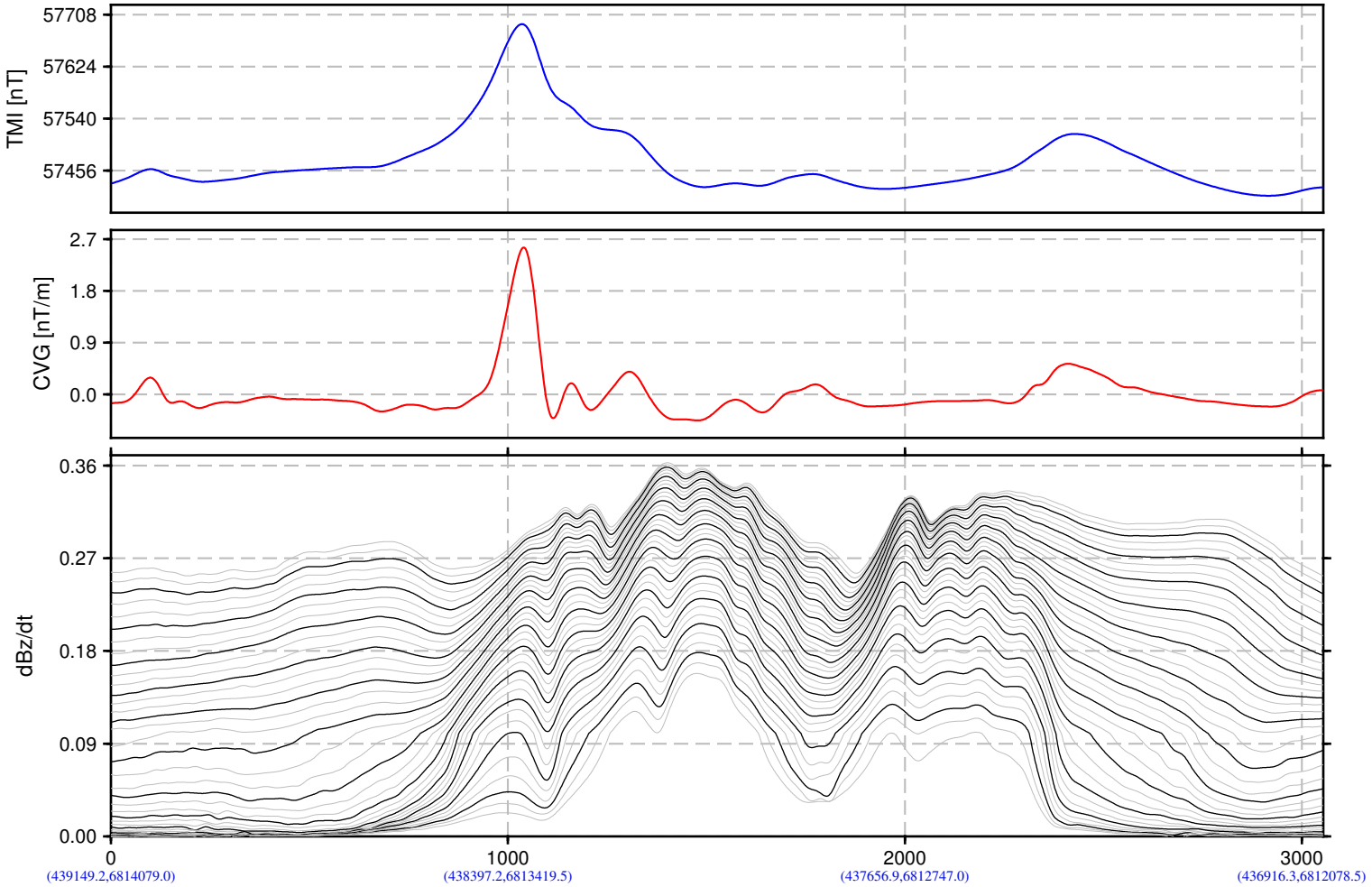
Resistivity Depth Image (RDI) for Line 4200

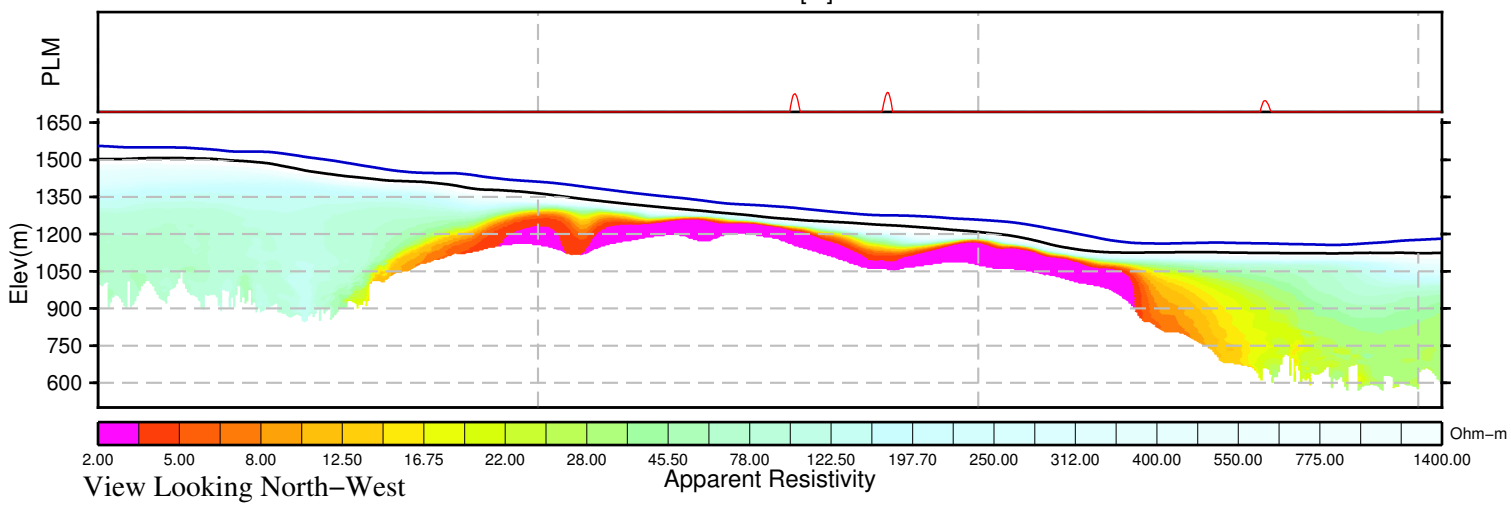
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

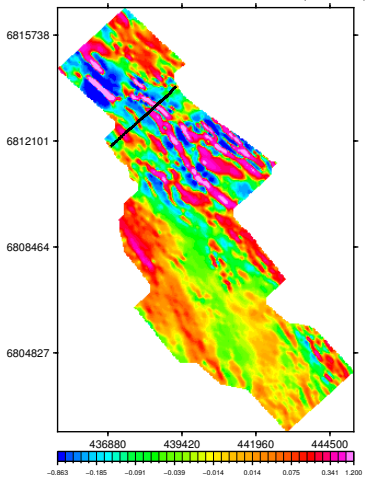
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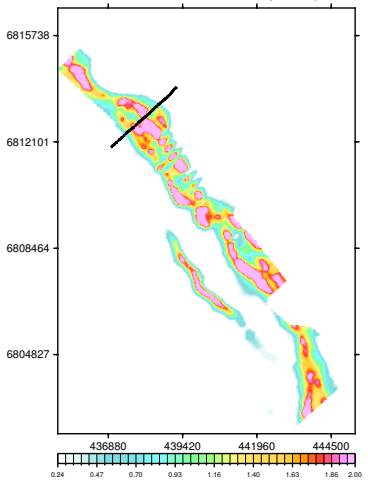
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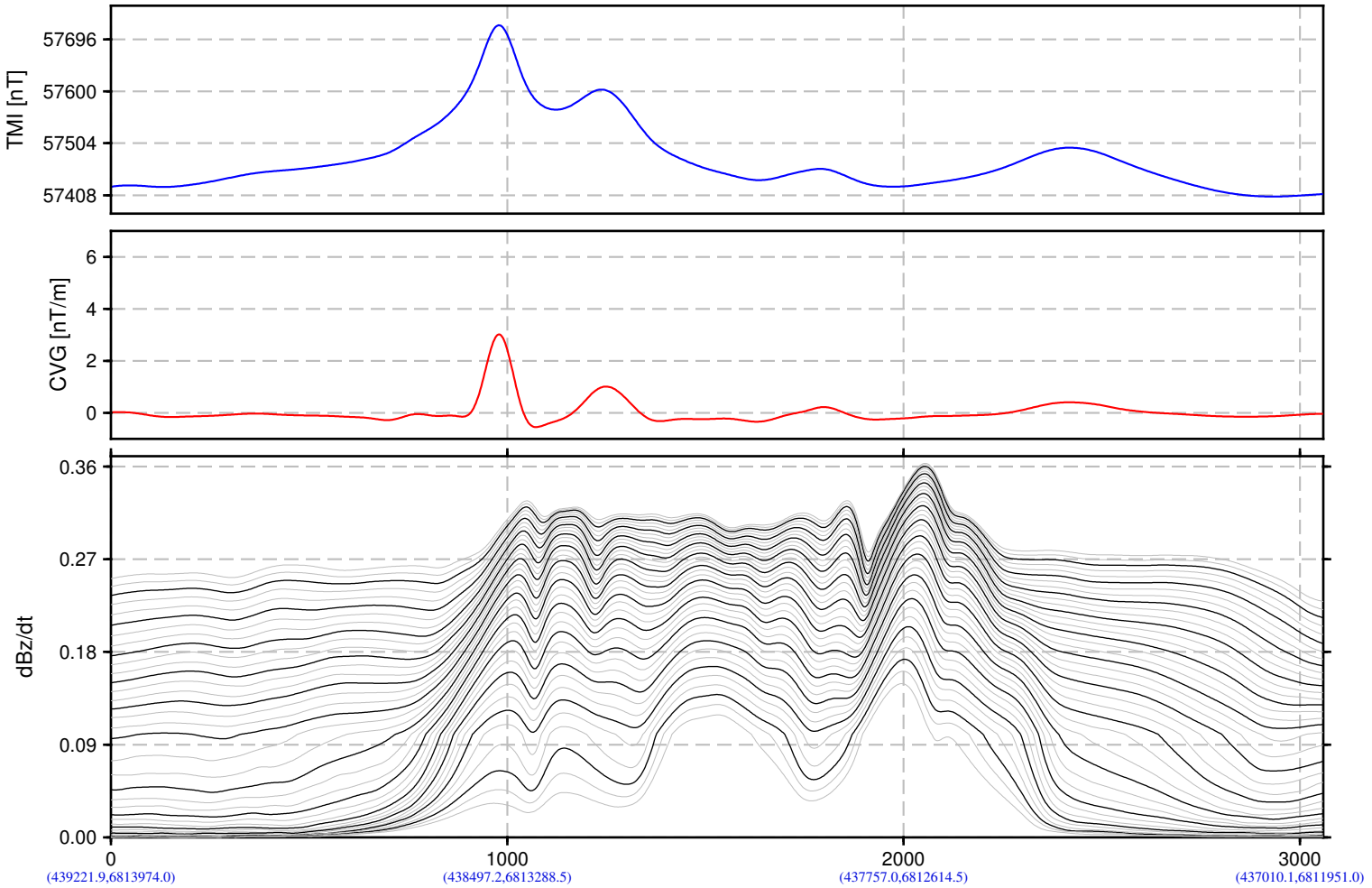
Resistivity Depth Image (RDI) for Line 4210

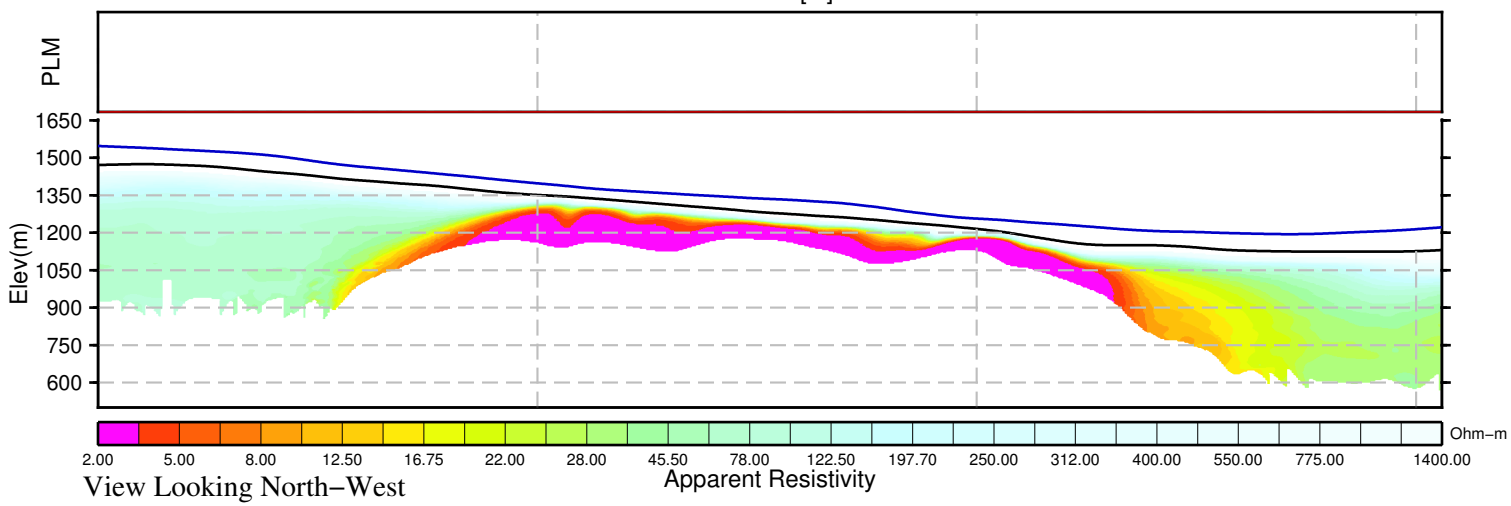
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

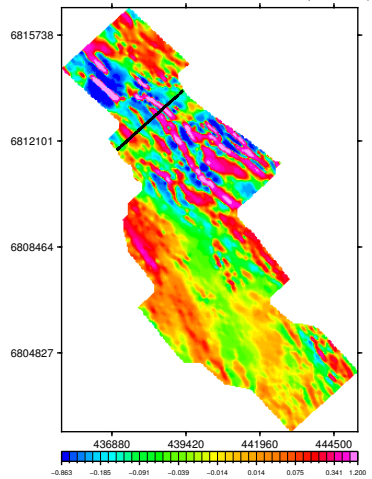
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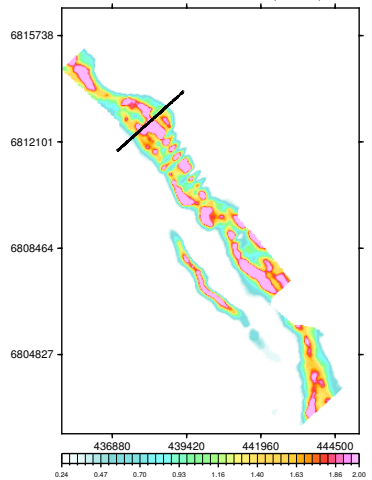
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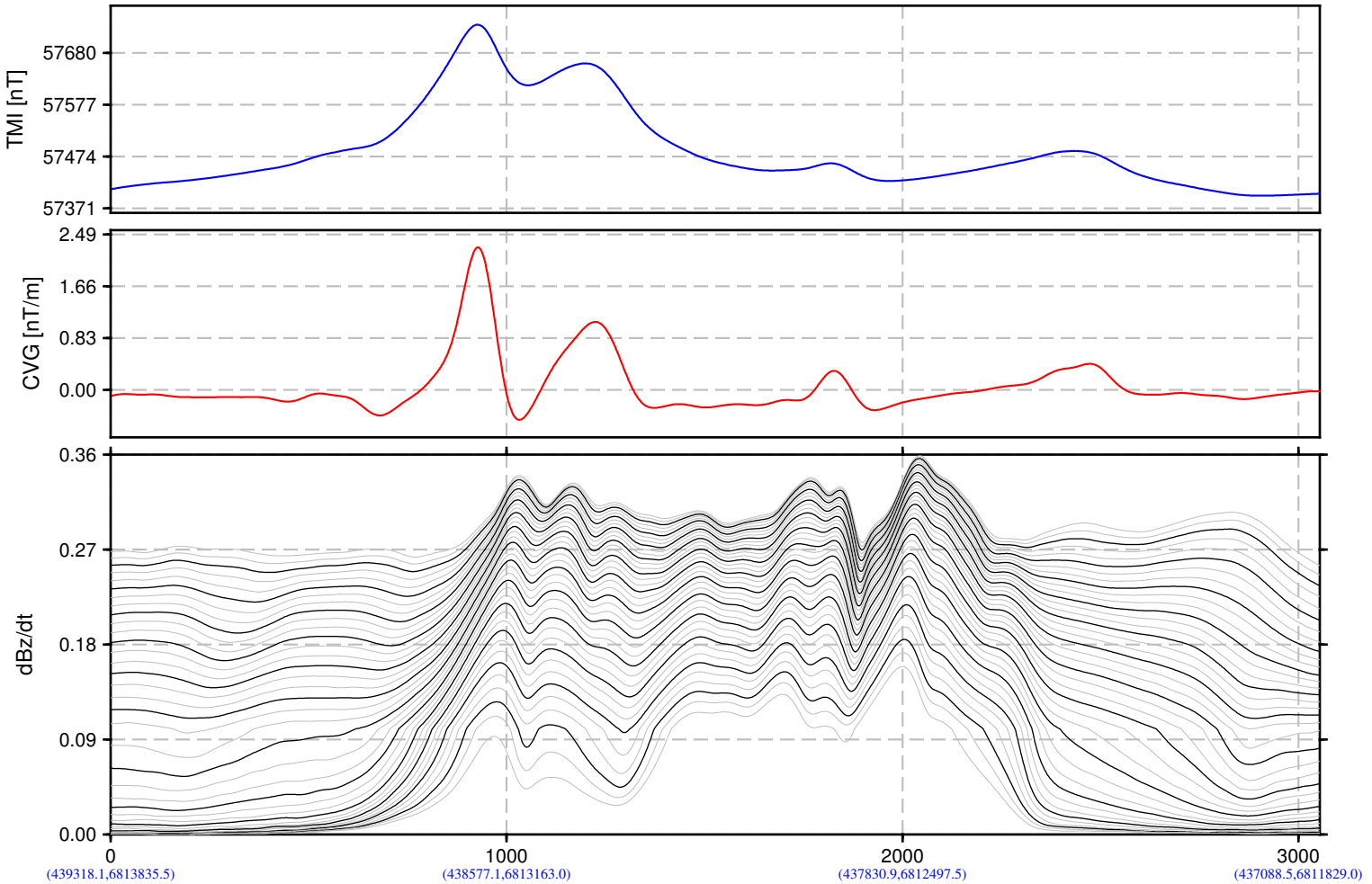
Resistivity Depth Image (RDI) for Line 4220

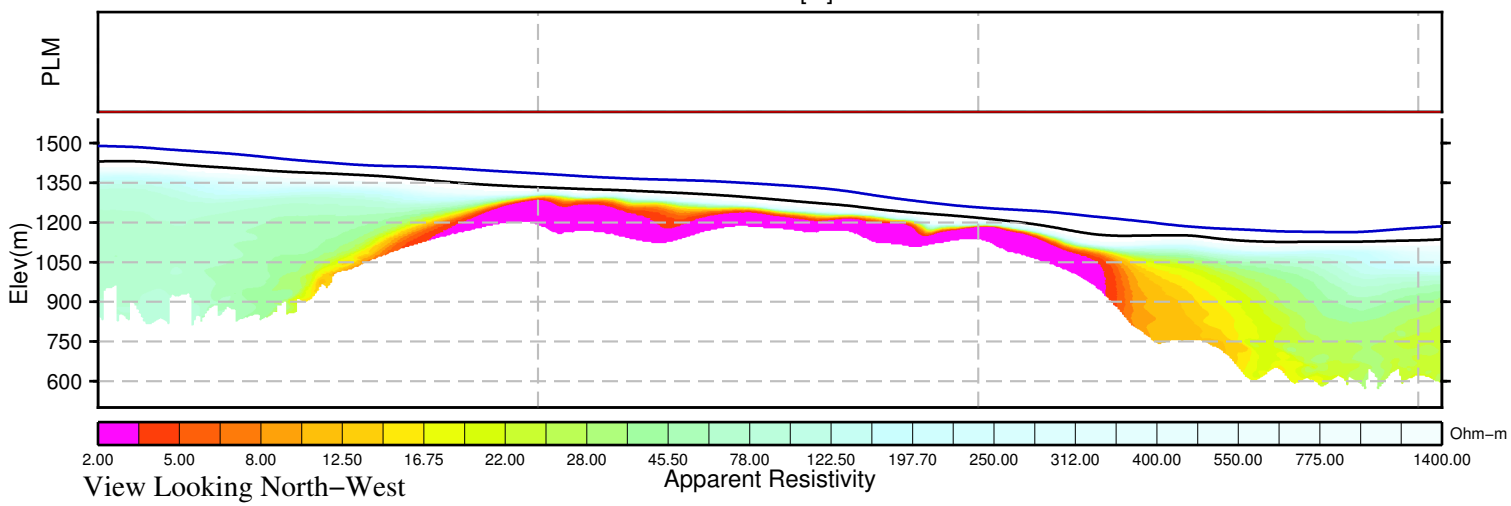
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

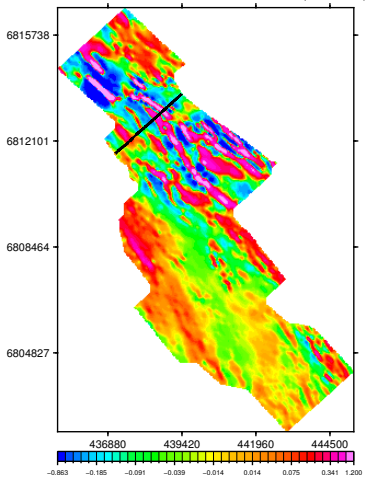
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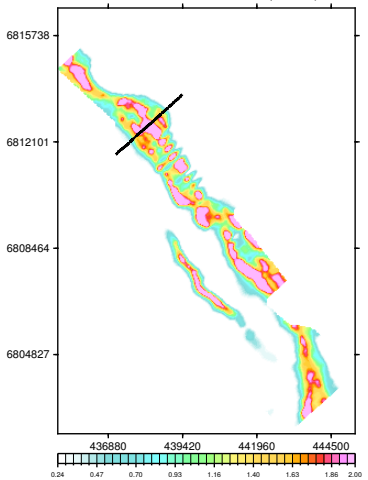
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AIRBORNE GEOPHYSICAL SURVEYS

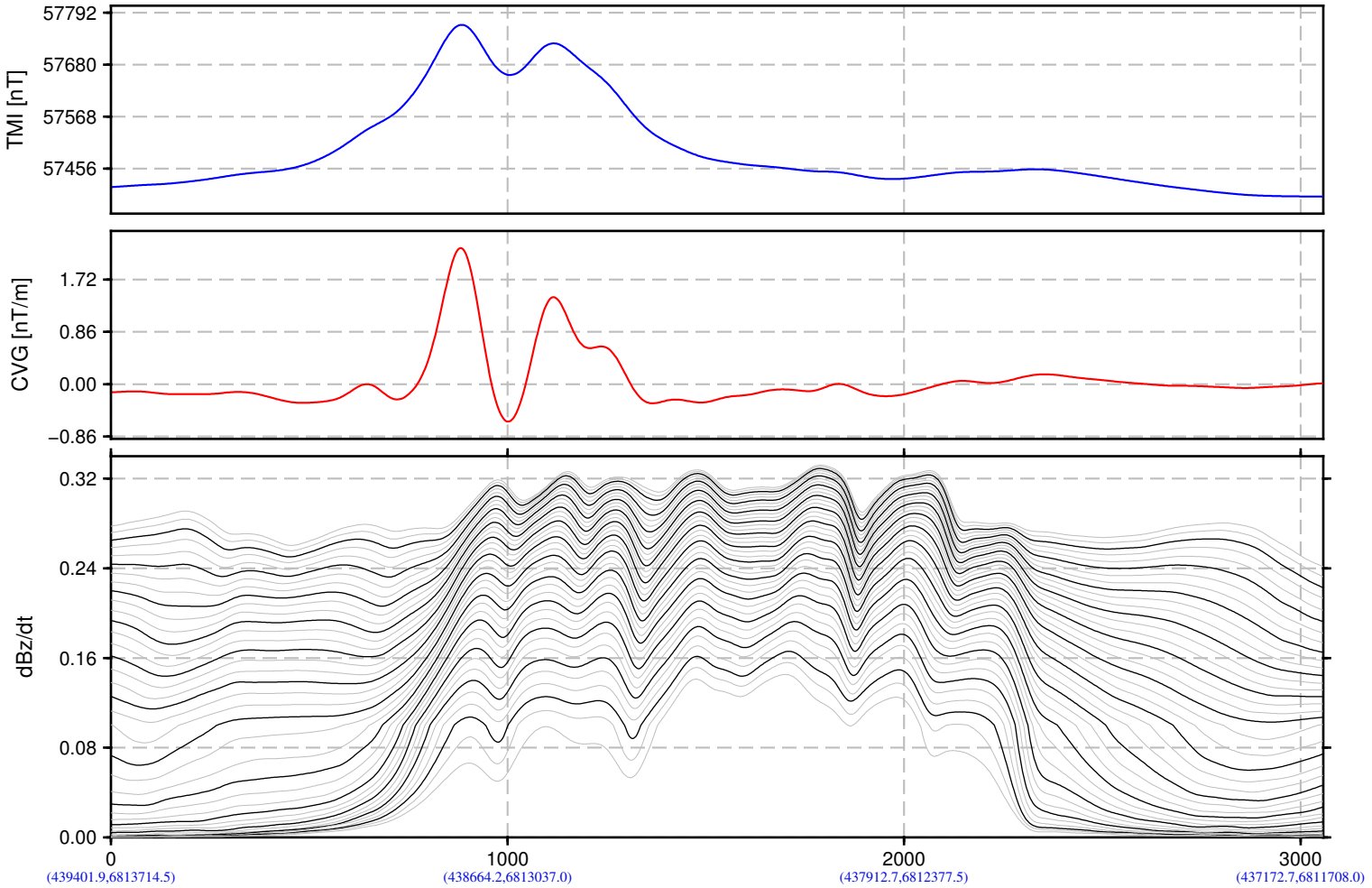
Resistivity Depth Image (RDI) for Line 4230

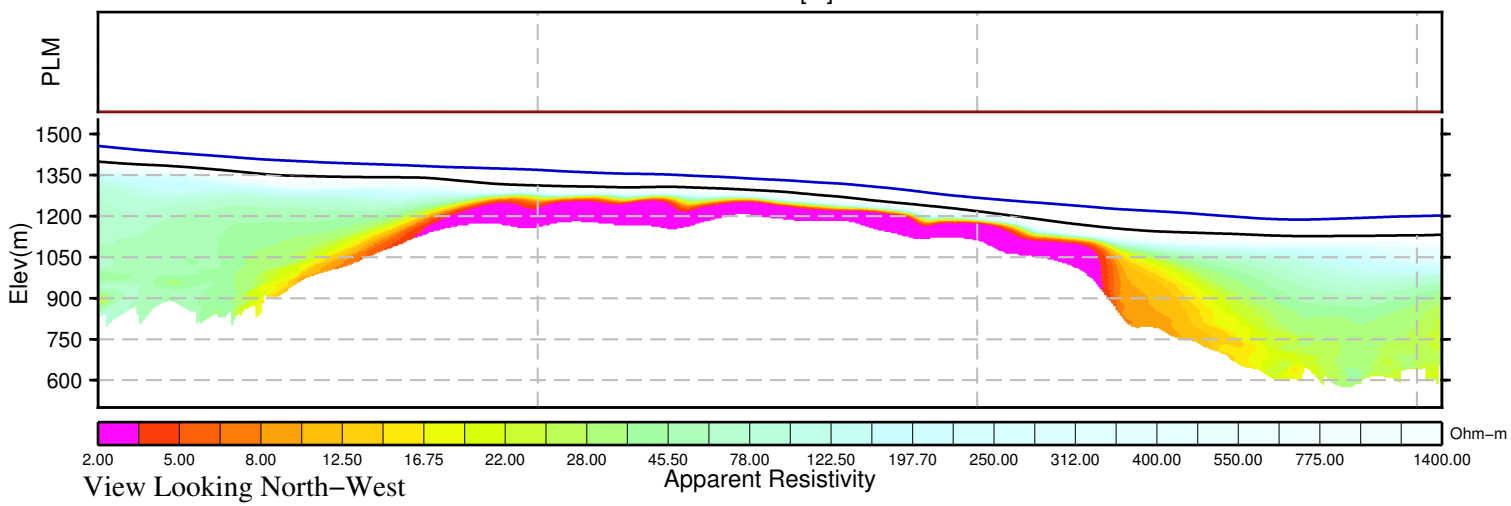
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

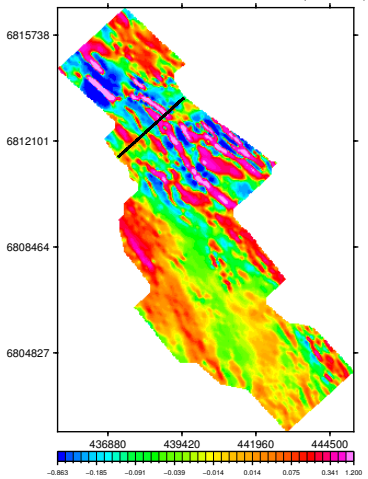
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Job Number:GL160037
Resistivity Depth Image (RDI)
Flown by Geotech Ltd.
Processed by Geotech Ltd.
245 Industrial Parkway North
Aurora, Ontario, Canada L4G 4C4
www.geotech.ca

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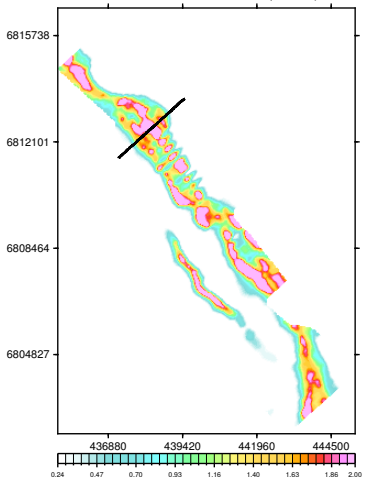
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

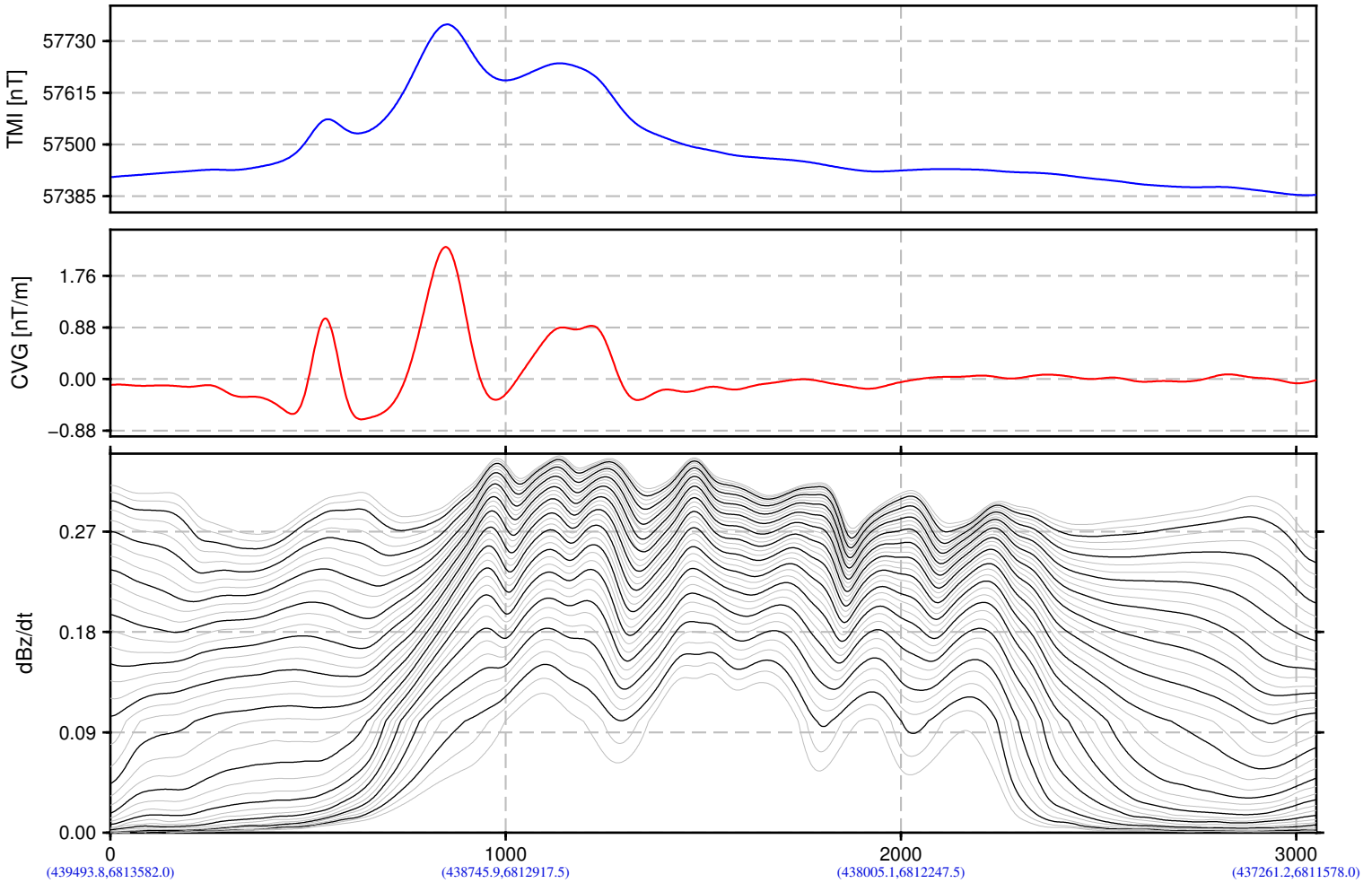
Resistivity Depth Image (RDI) for Line 4240

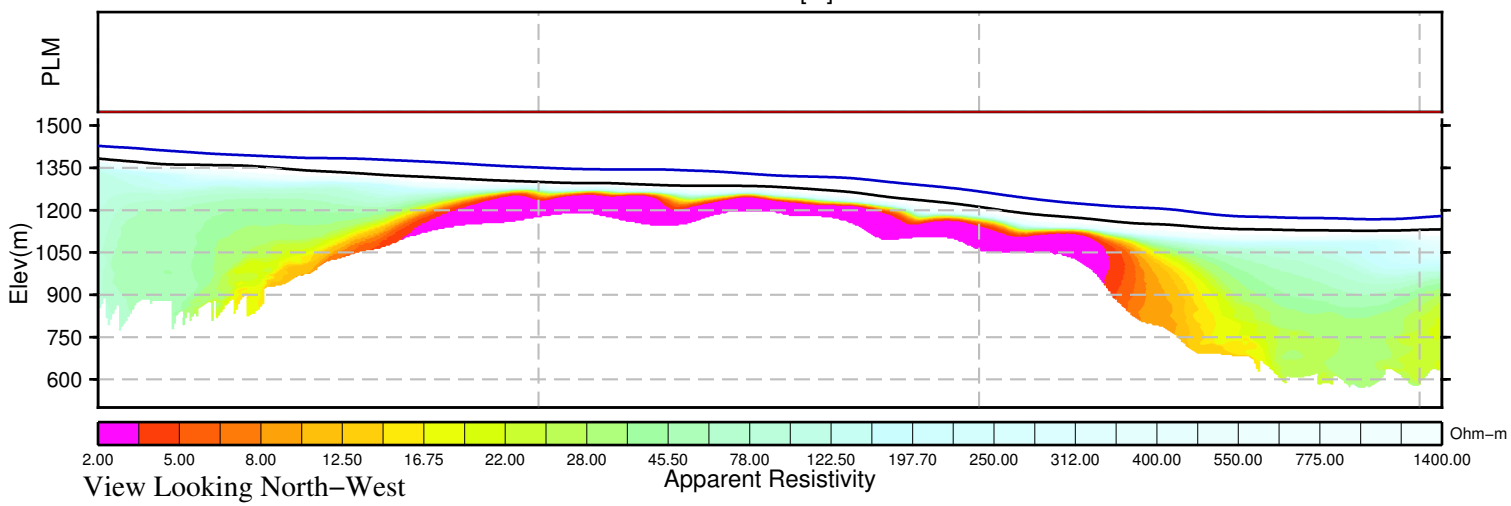
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

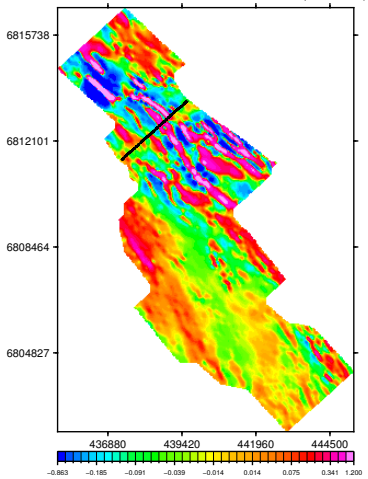
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Job Number:GL160037
Resistivity Depth Image (RDI)
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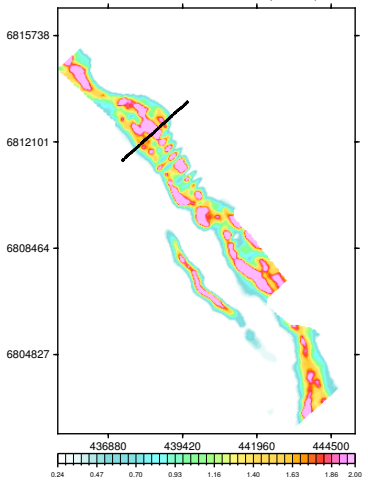
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AIRBORNE GEOPHYSICAL SURVEYS

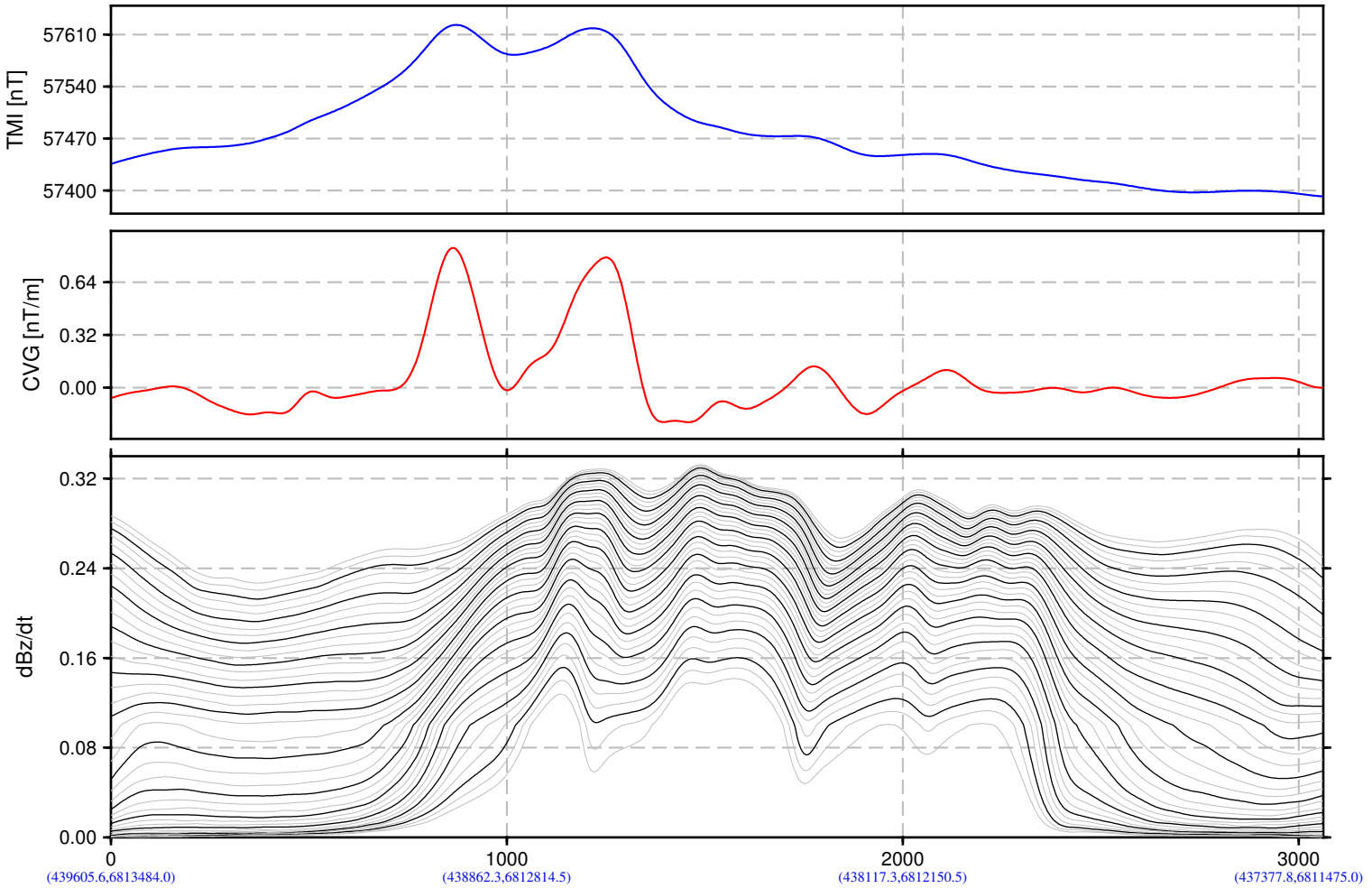
Resistivity Depth Image (RDI) for Line 4250

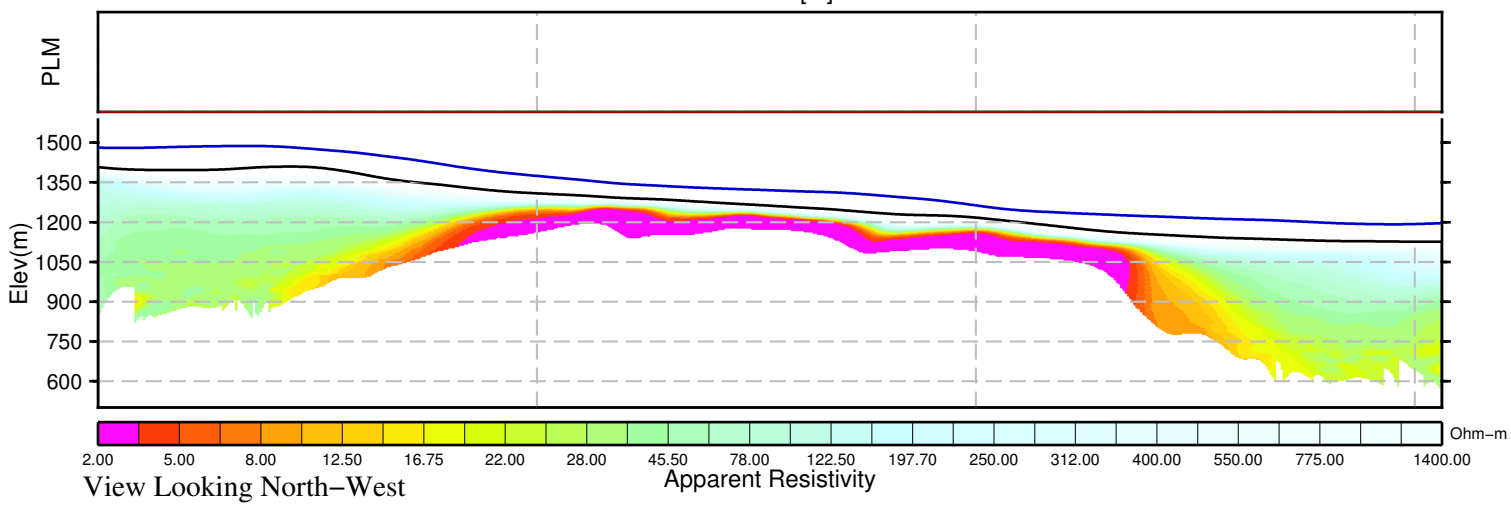
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

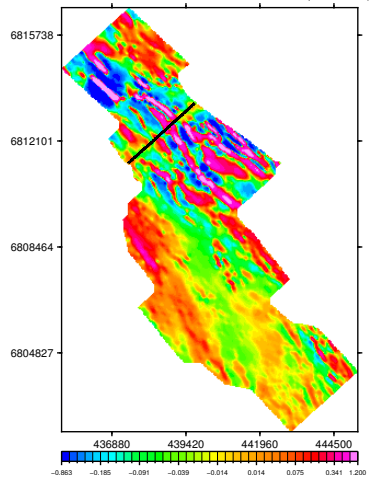
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Job Number:GL160037
Resistivity Depth Image (RDI)
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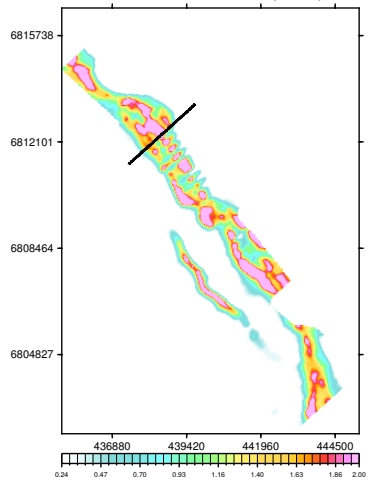
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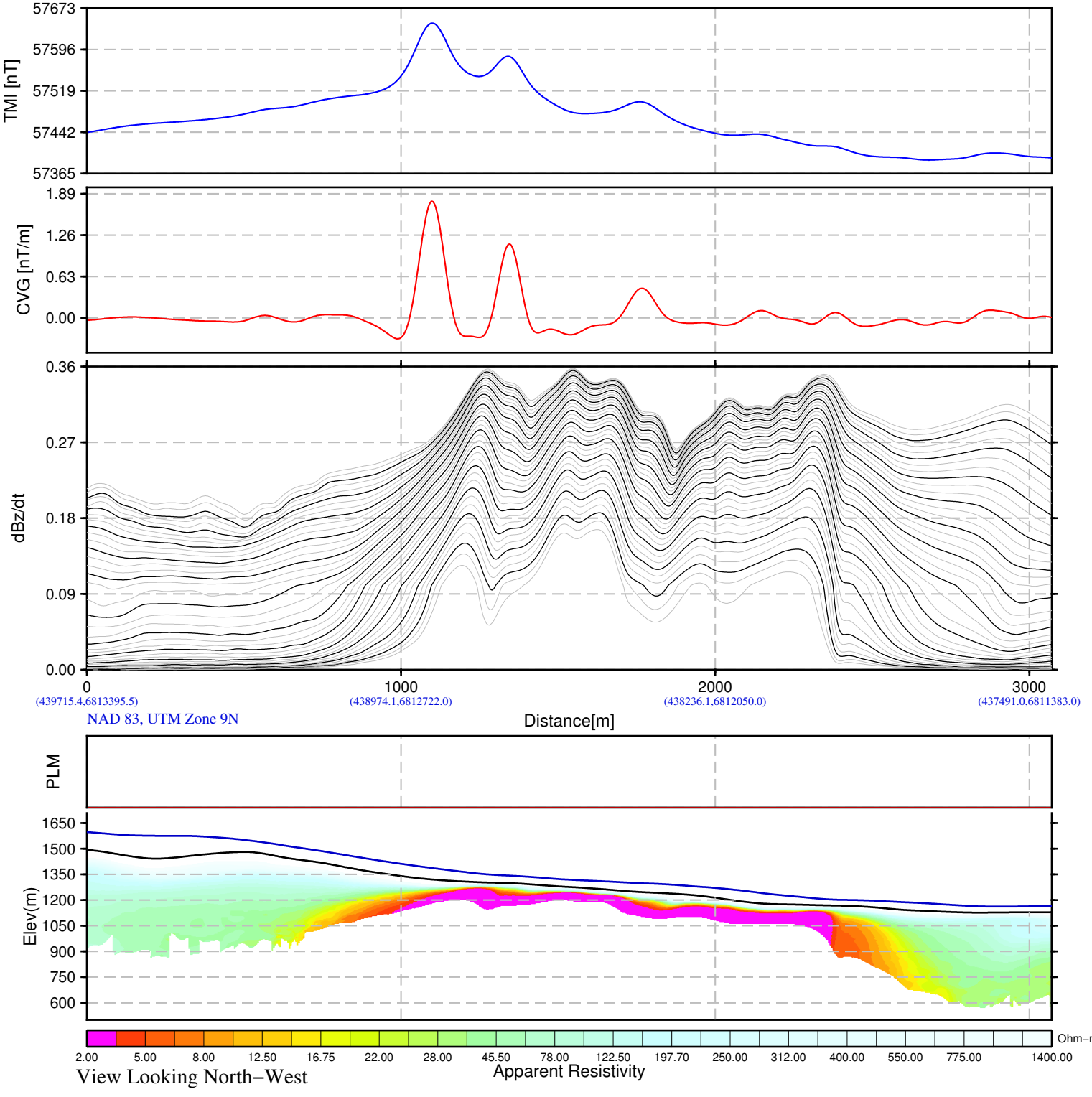
Resistivity Depth Image (RDI) for Line 4260

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

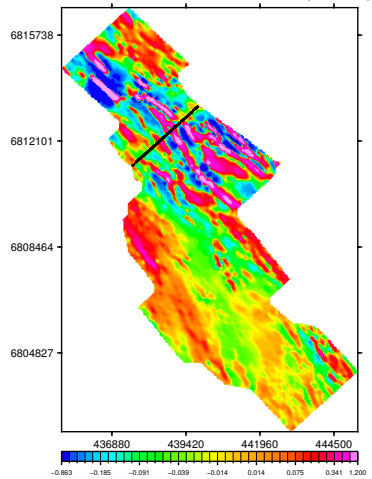
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Job Number:GL160037
Resistivity Depth Image (RDI)
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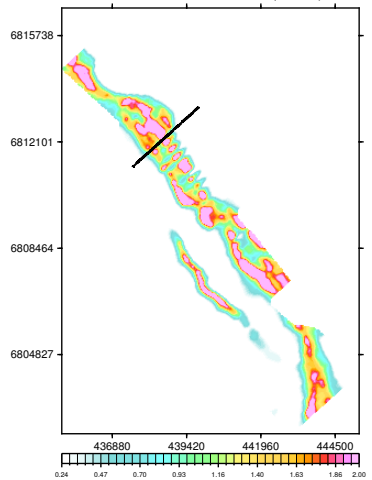
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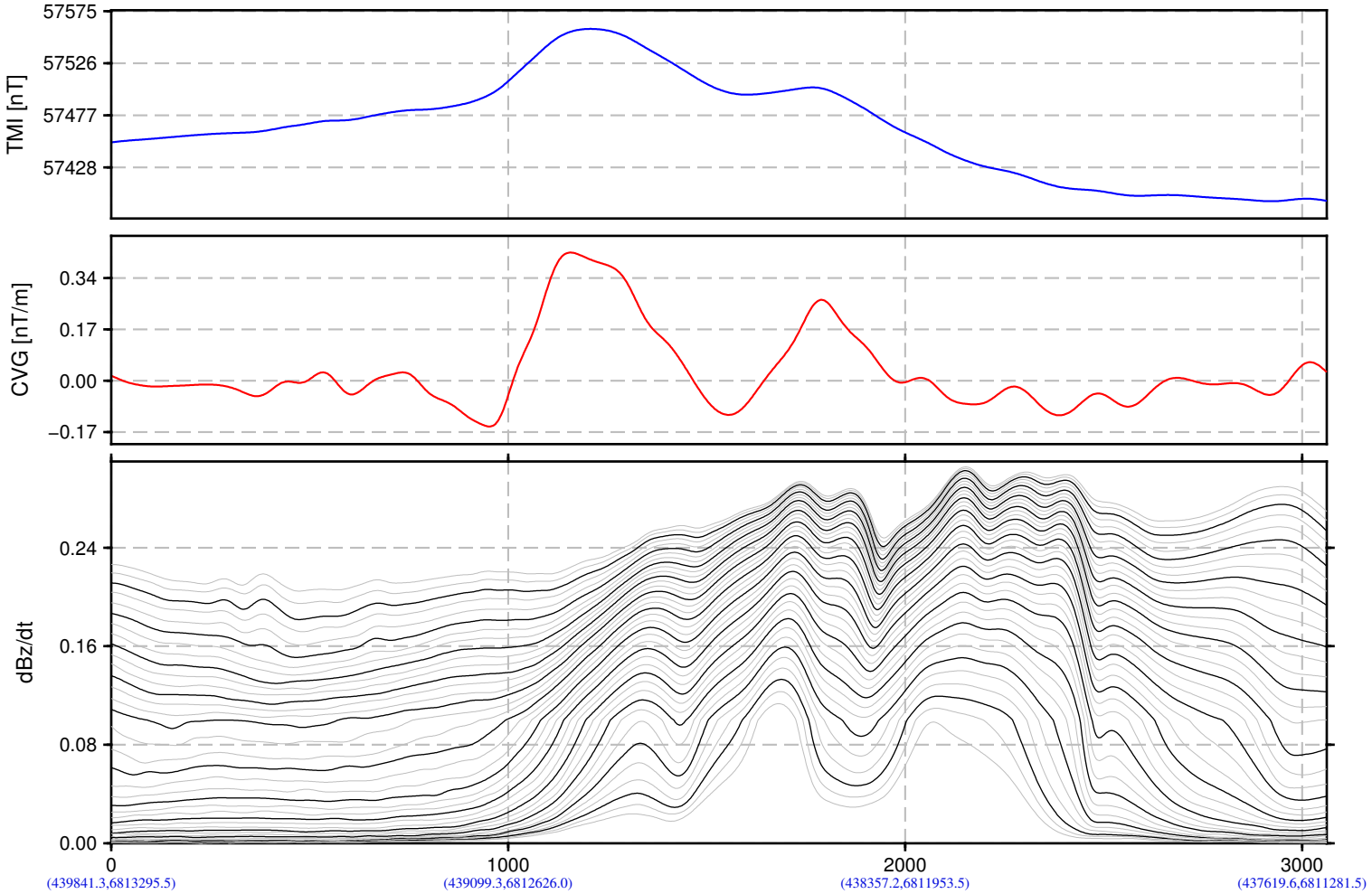
Resistivity Depth Image (RDI) for Line 4270

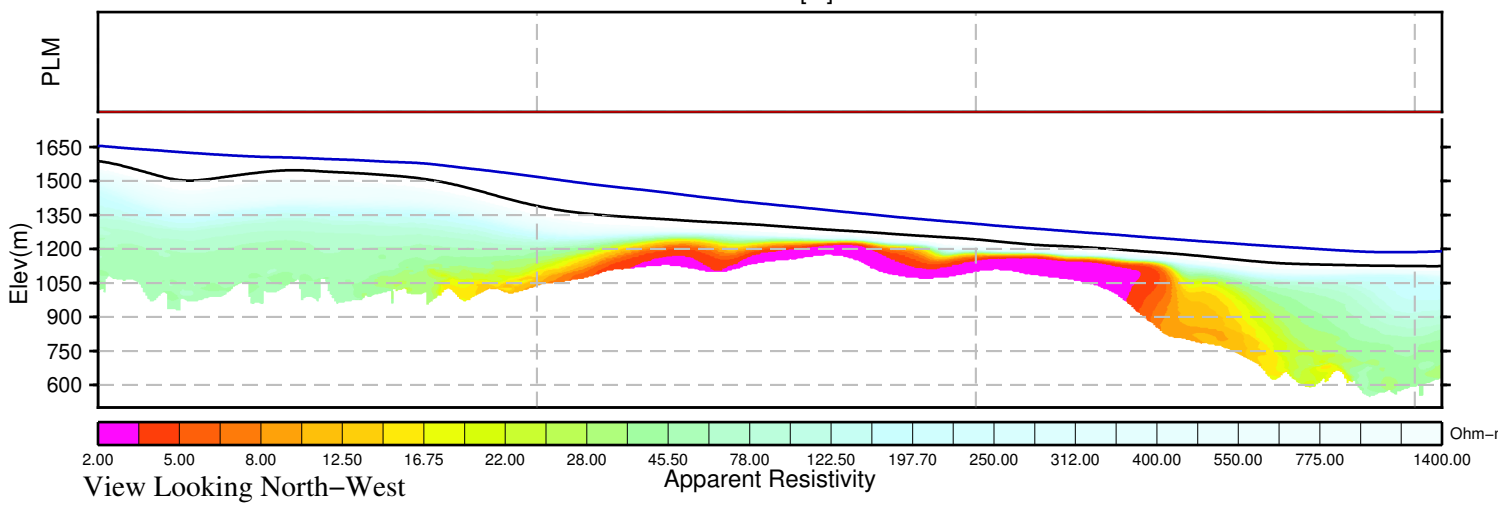
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

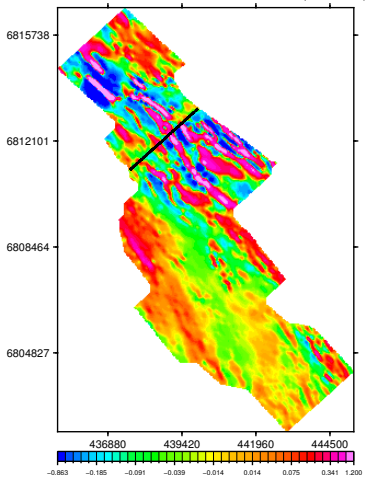
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Job Number:GL160037
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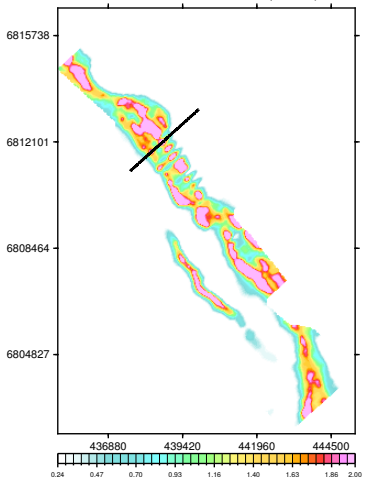
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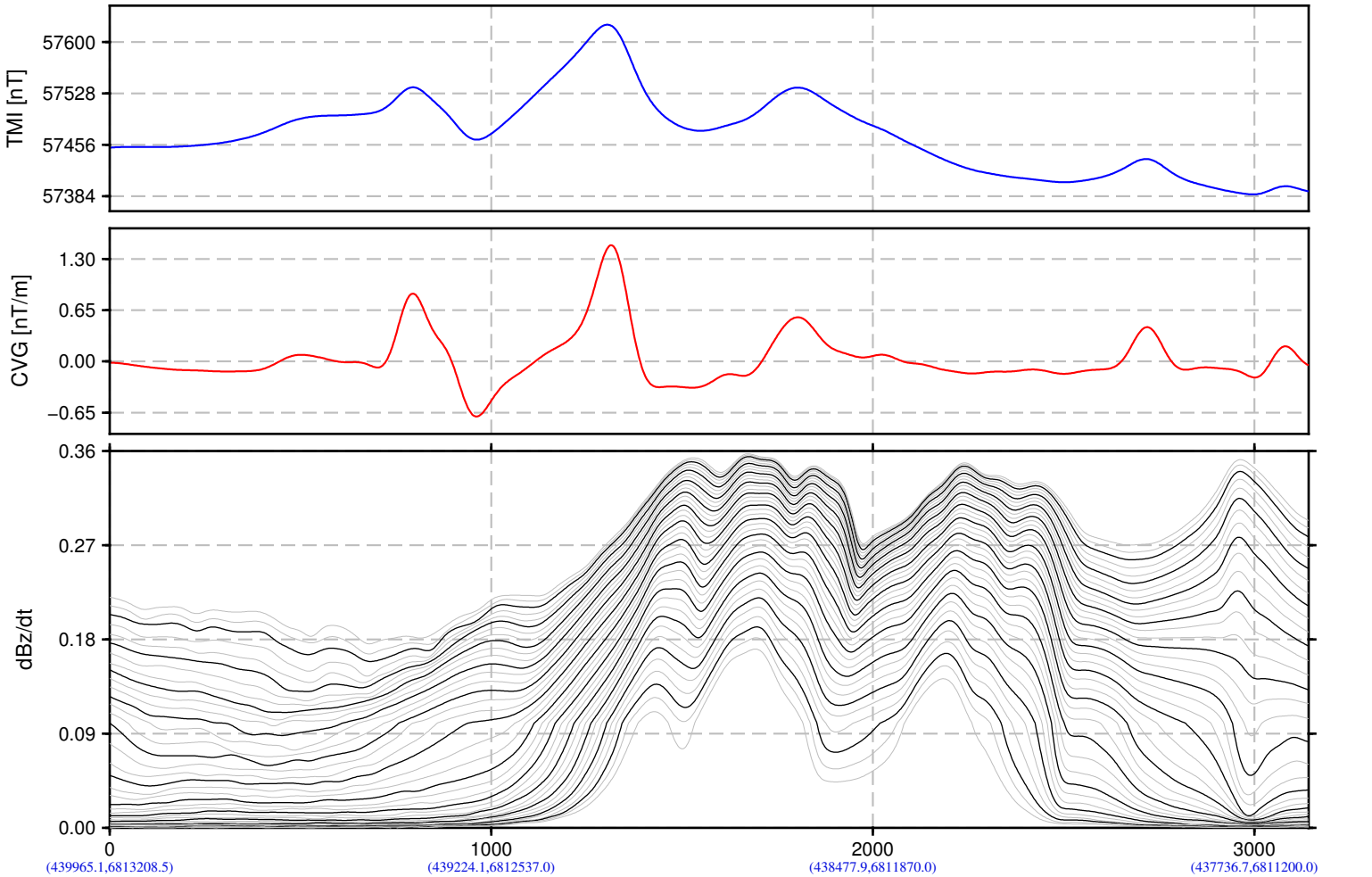
Resistivity Depth Image (RDI) for Line 4280

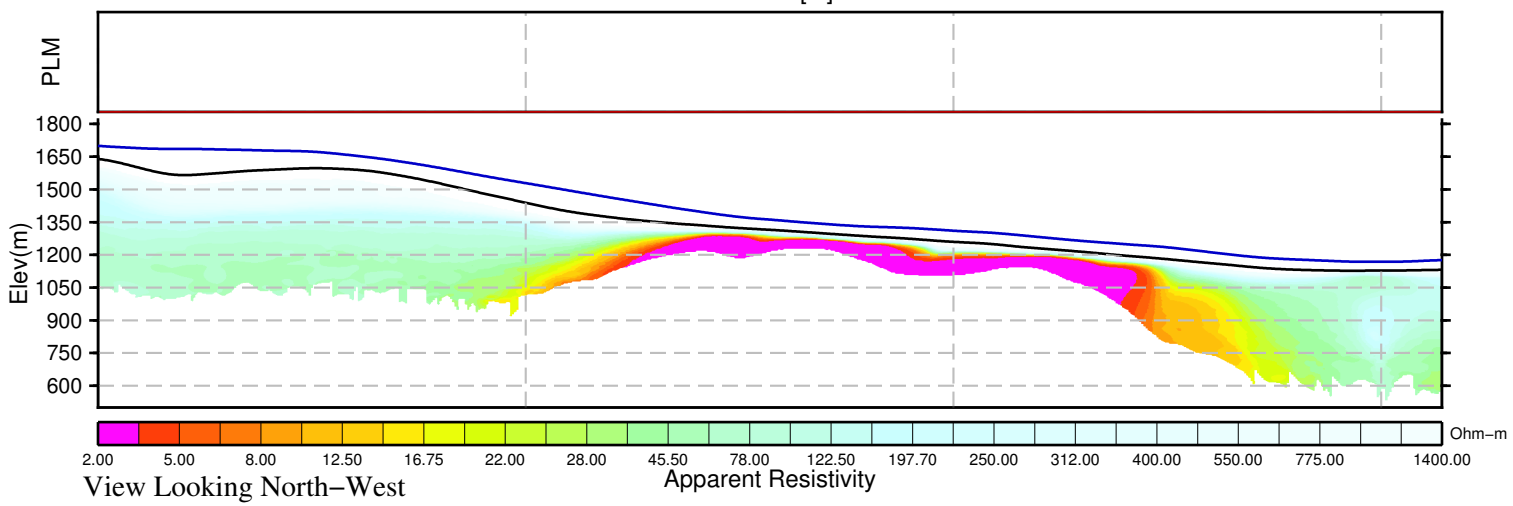
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







View Looking North−West

BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

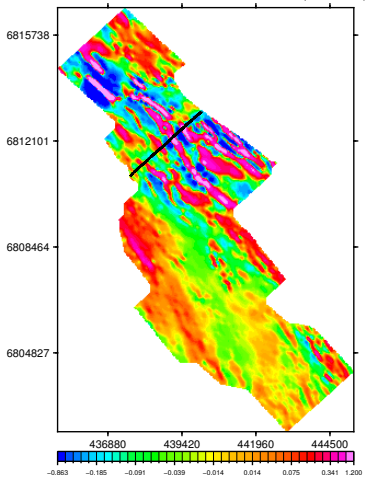
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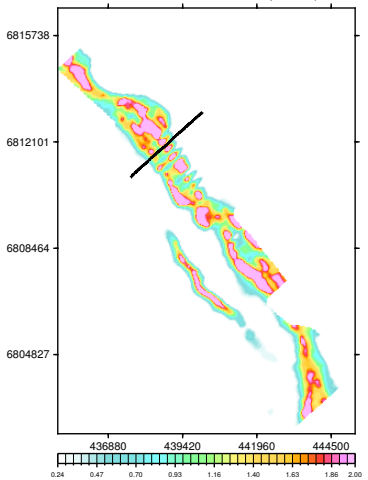
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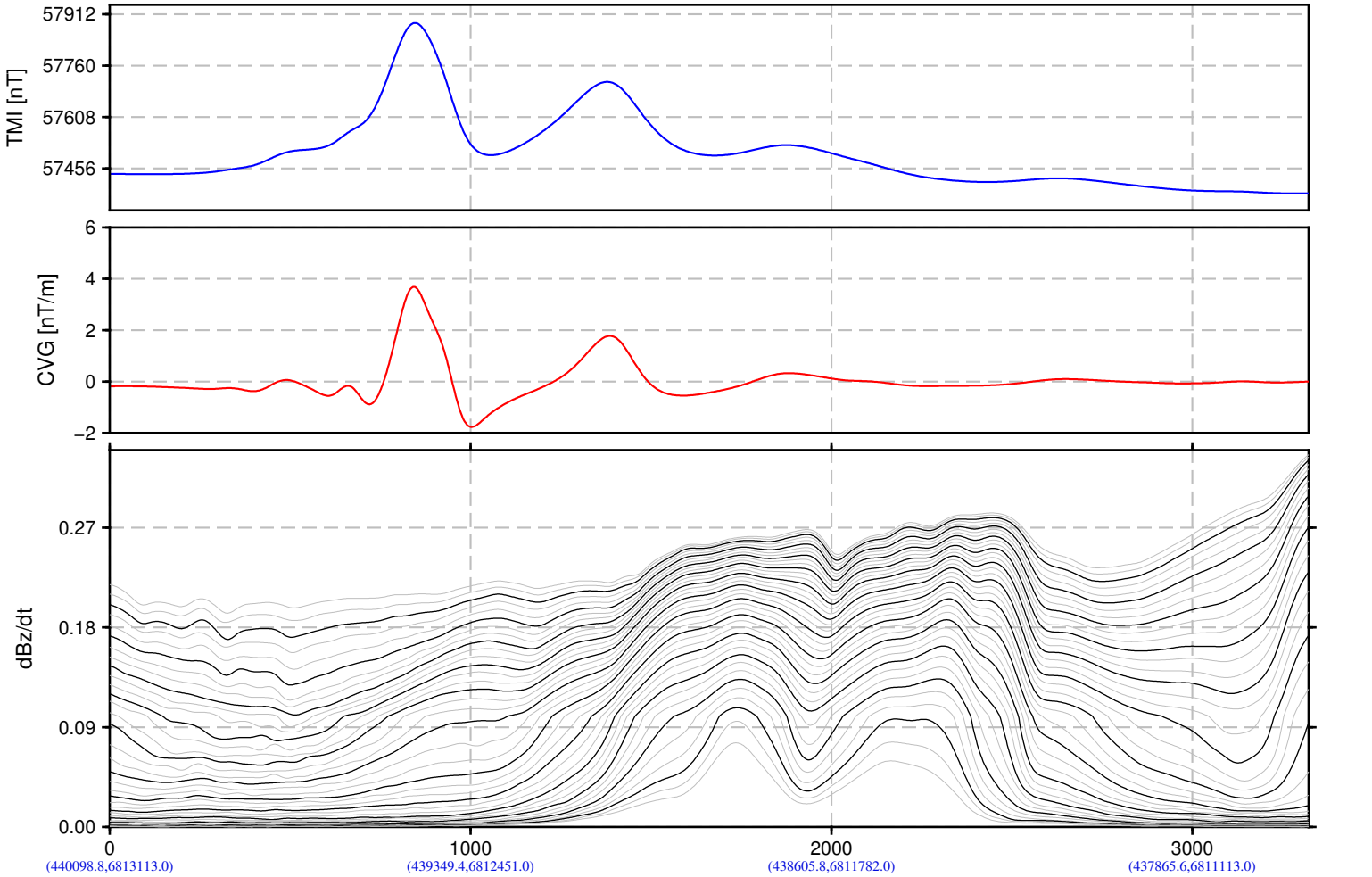
Resistivity Depth Image (RDI) for Line 4290

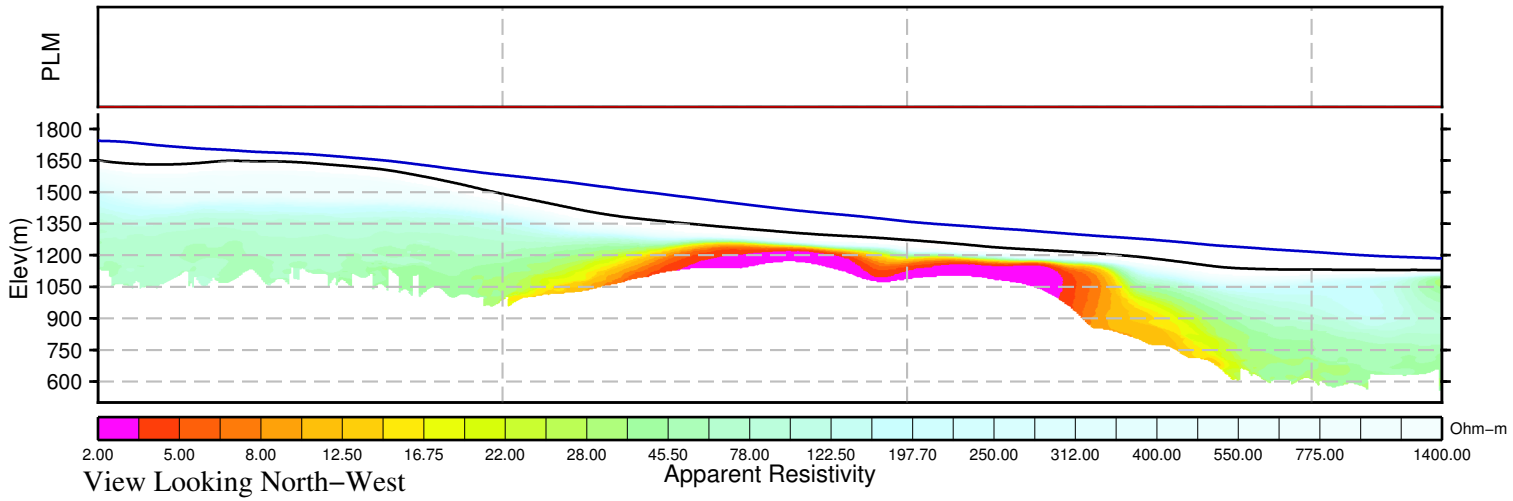
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

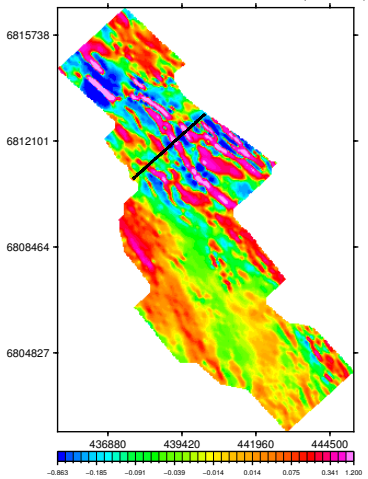
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Job Number:GL160037
Resistivity Depth Image (RDI)
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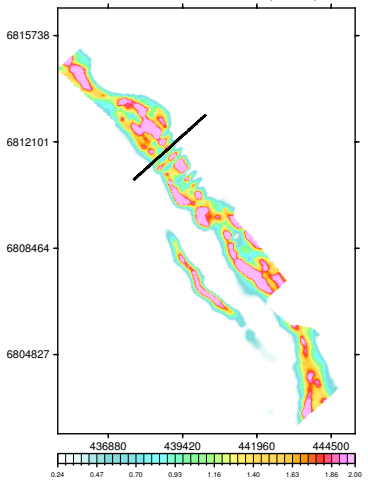
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AIRBORNE GEOPHYSICAL SURVEYS

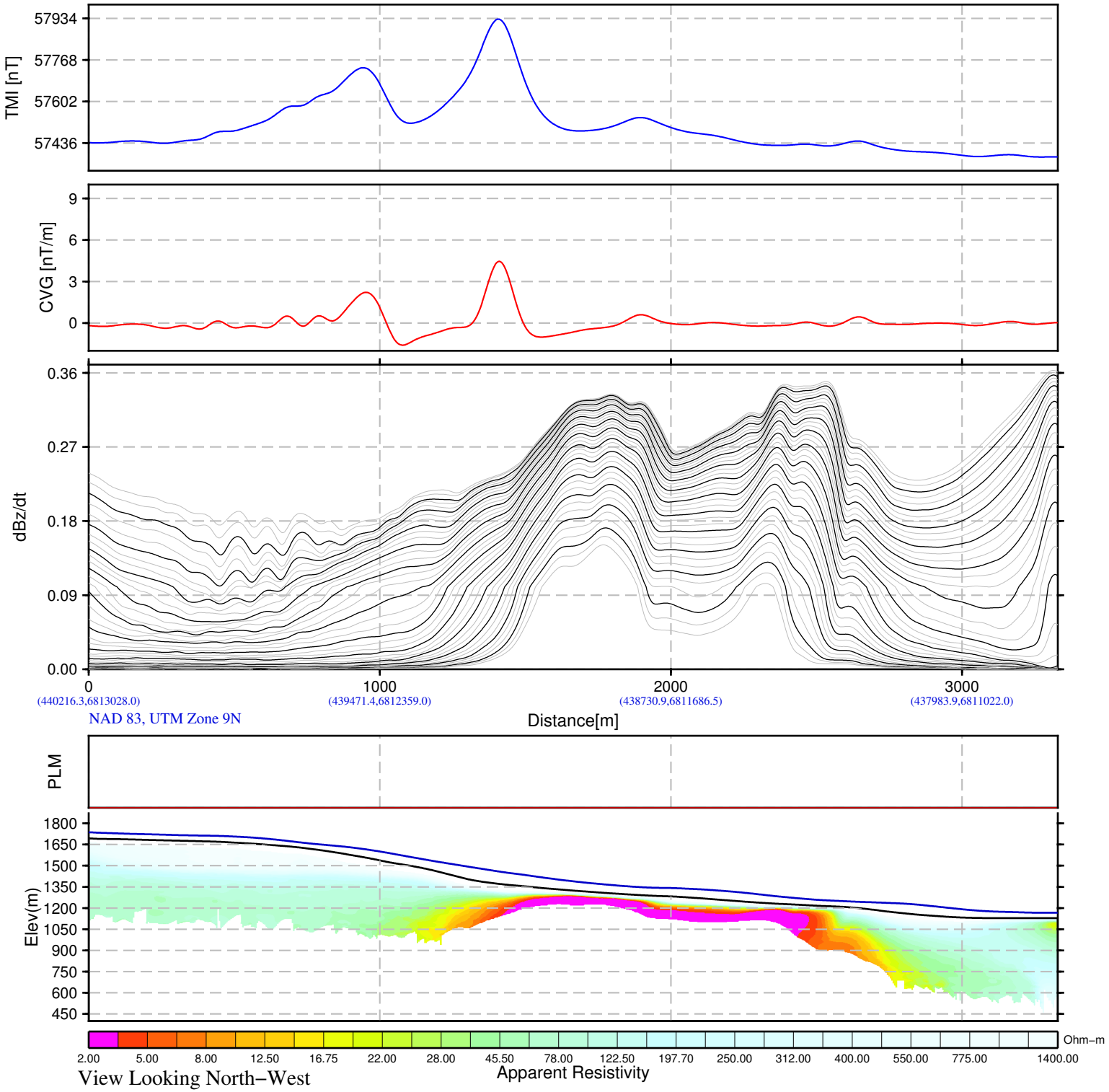
Resistivity Depth Image (RDI) for Line 4300

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

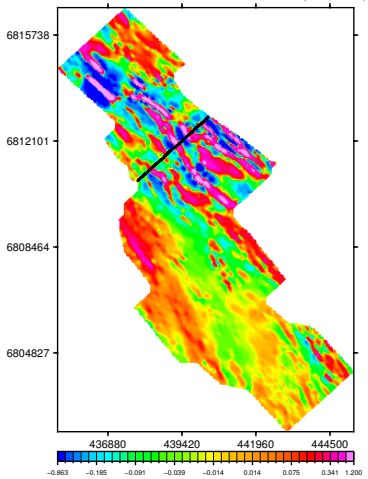
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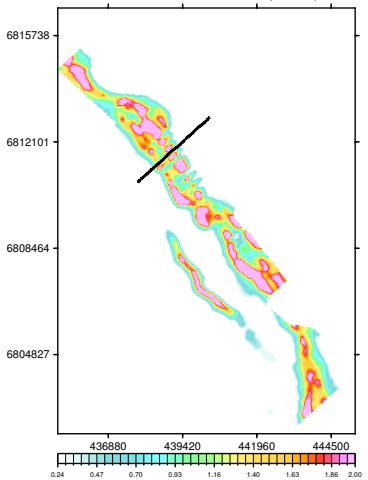
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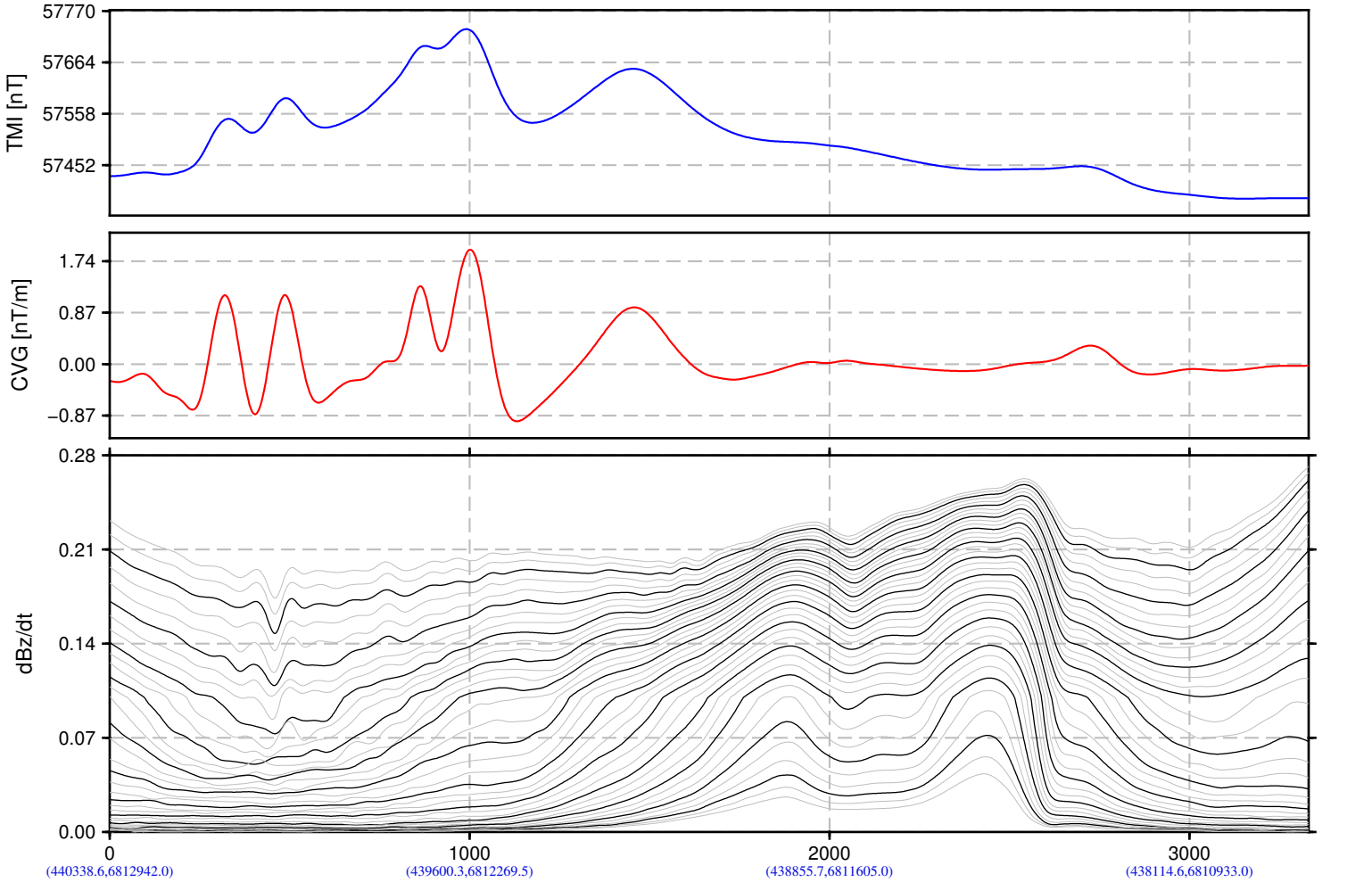
Resistivity Depth Image (RDI) for Line 4310

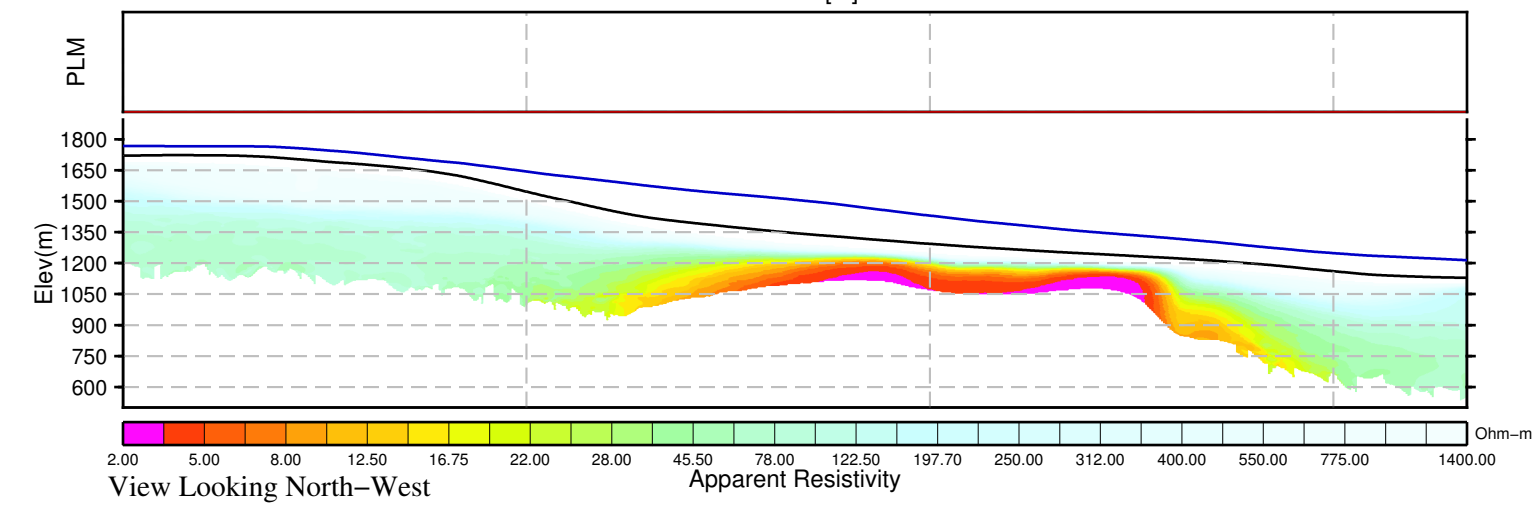
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

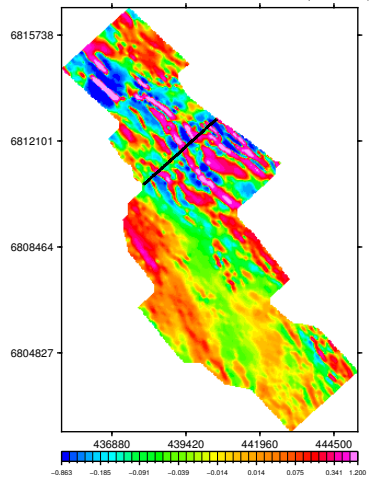
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Job Number:GL160037
Resistivity Depth Image (RDI)
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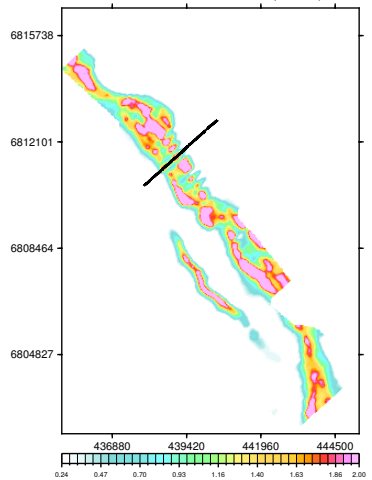
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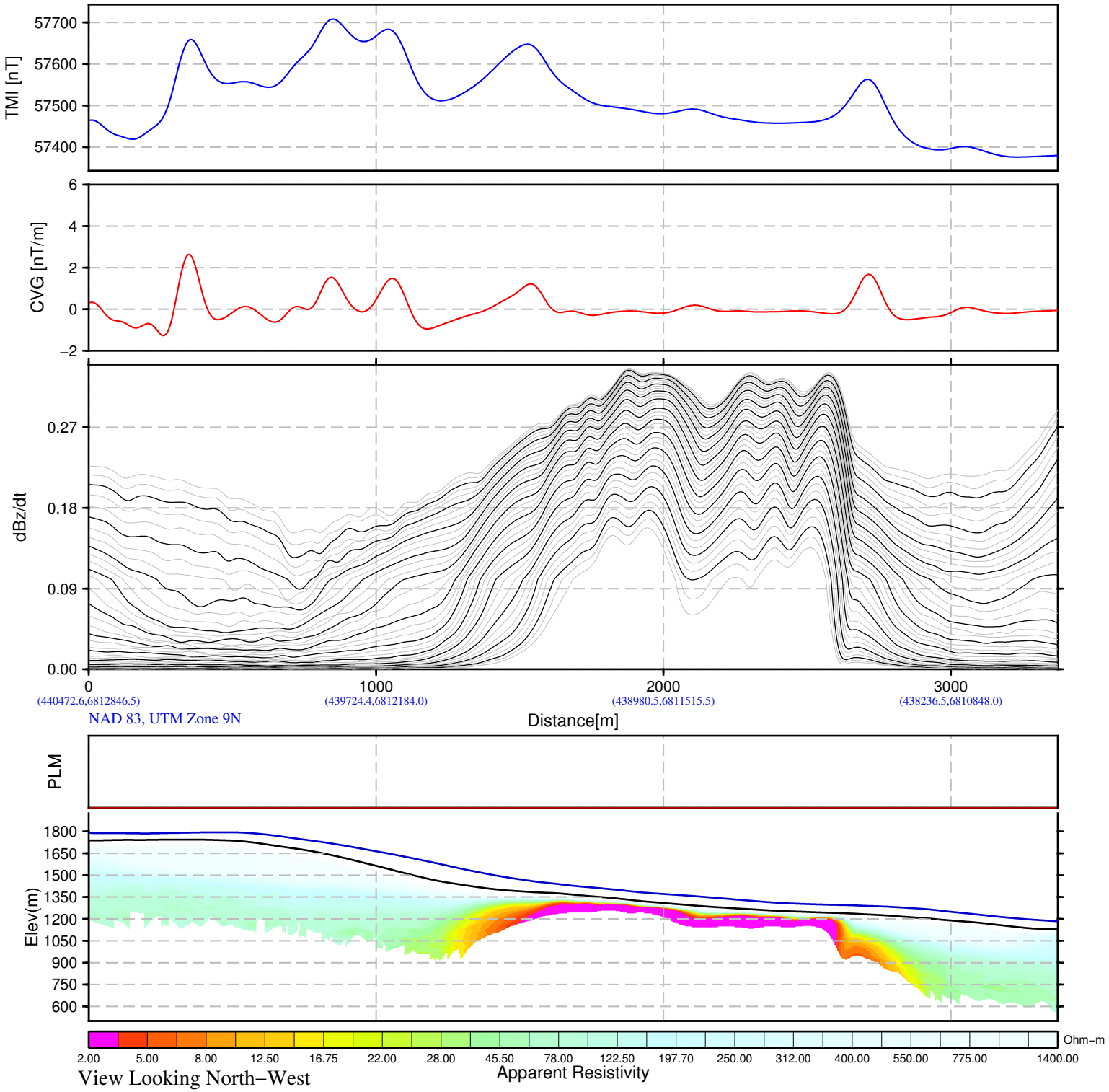
Resistivity Depth Image (RDI) for Line 4320

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

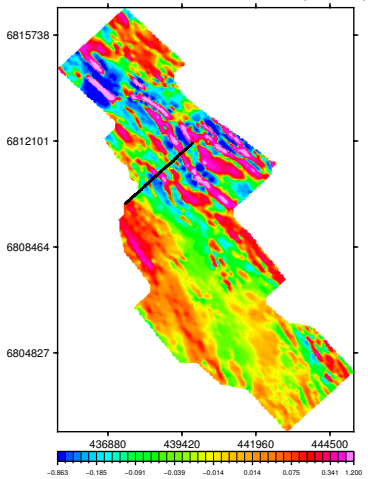
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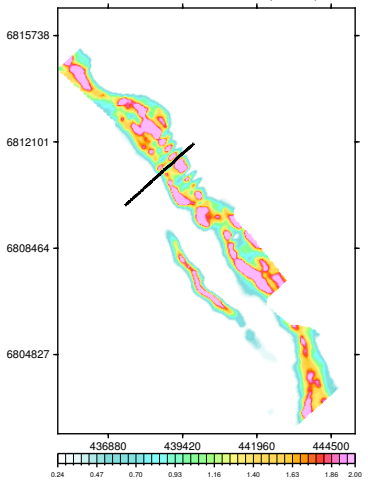
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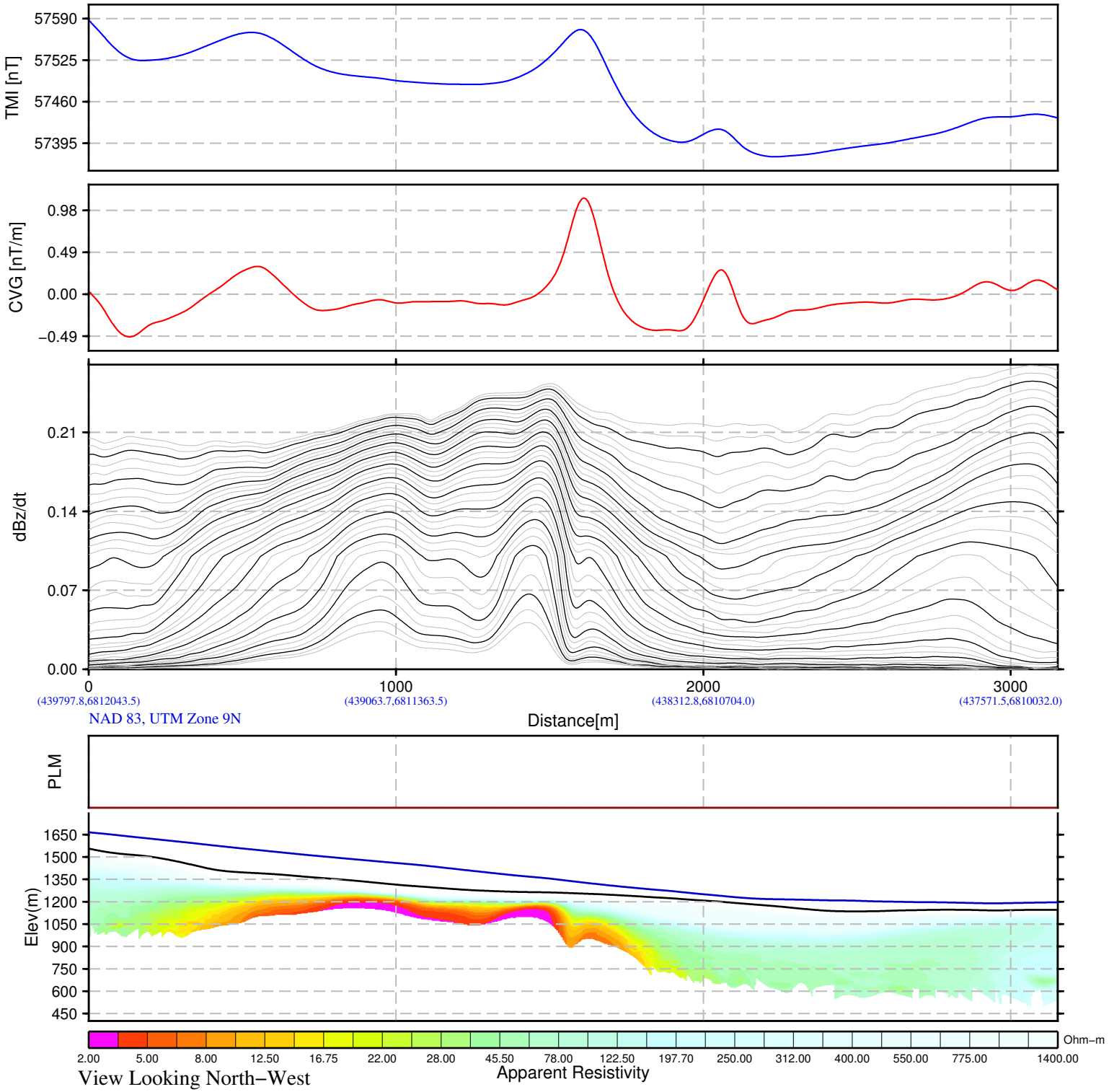
Resistivity Depth Image (RDI) for Line 4330

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

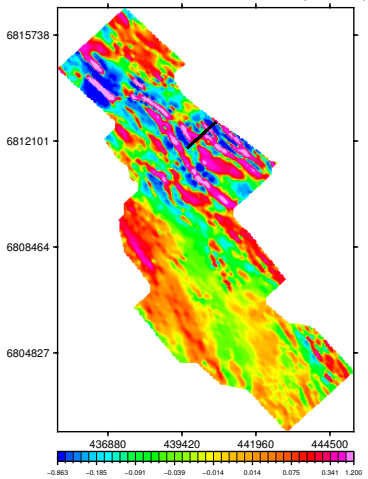
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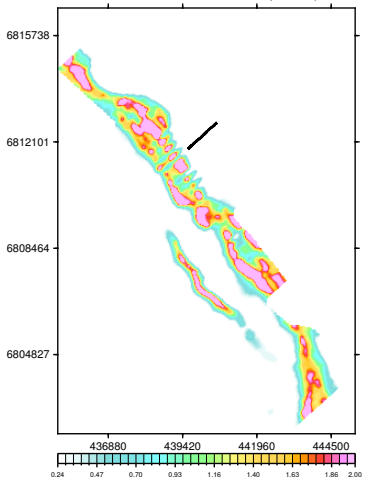
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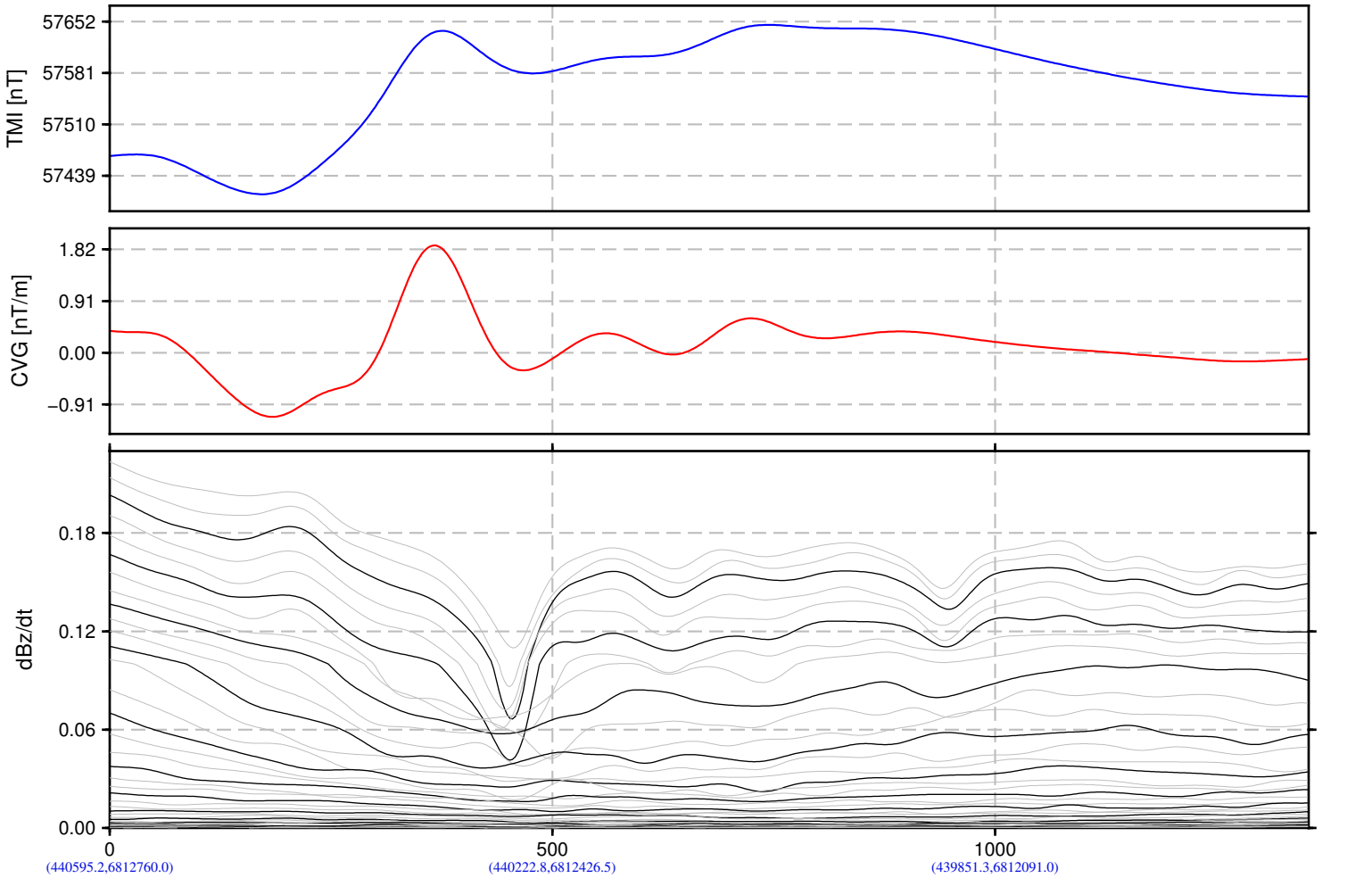
Resistivity Depth Image (RDI) for Line 4331

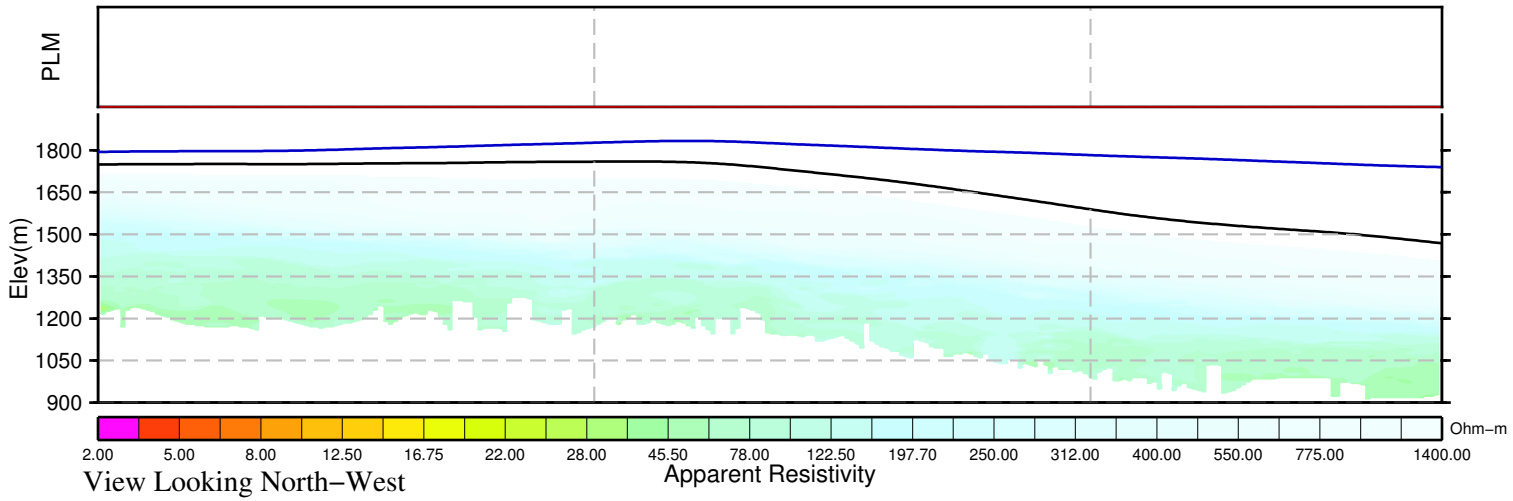
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

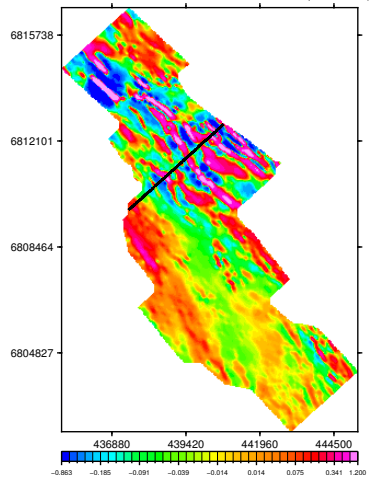
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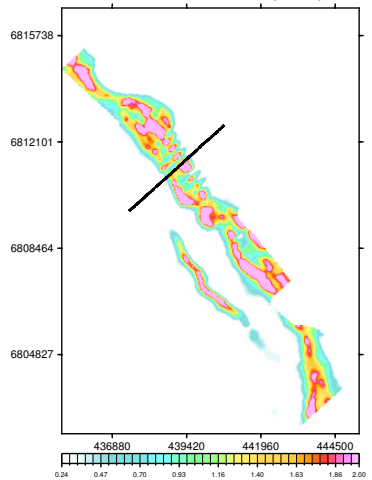
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AIRBORNE GEOPHYSICAL SURVEYS

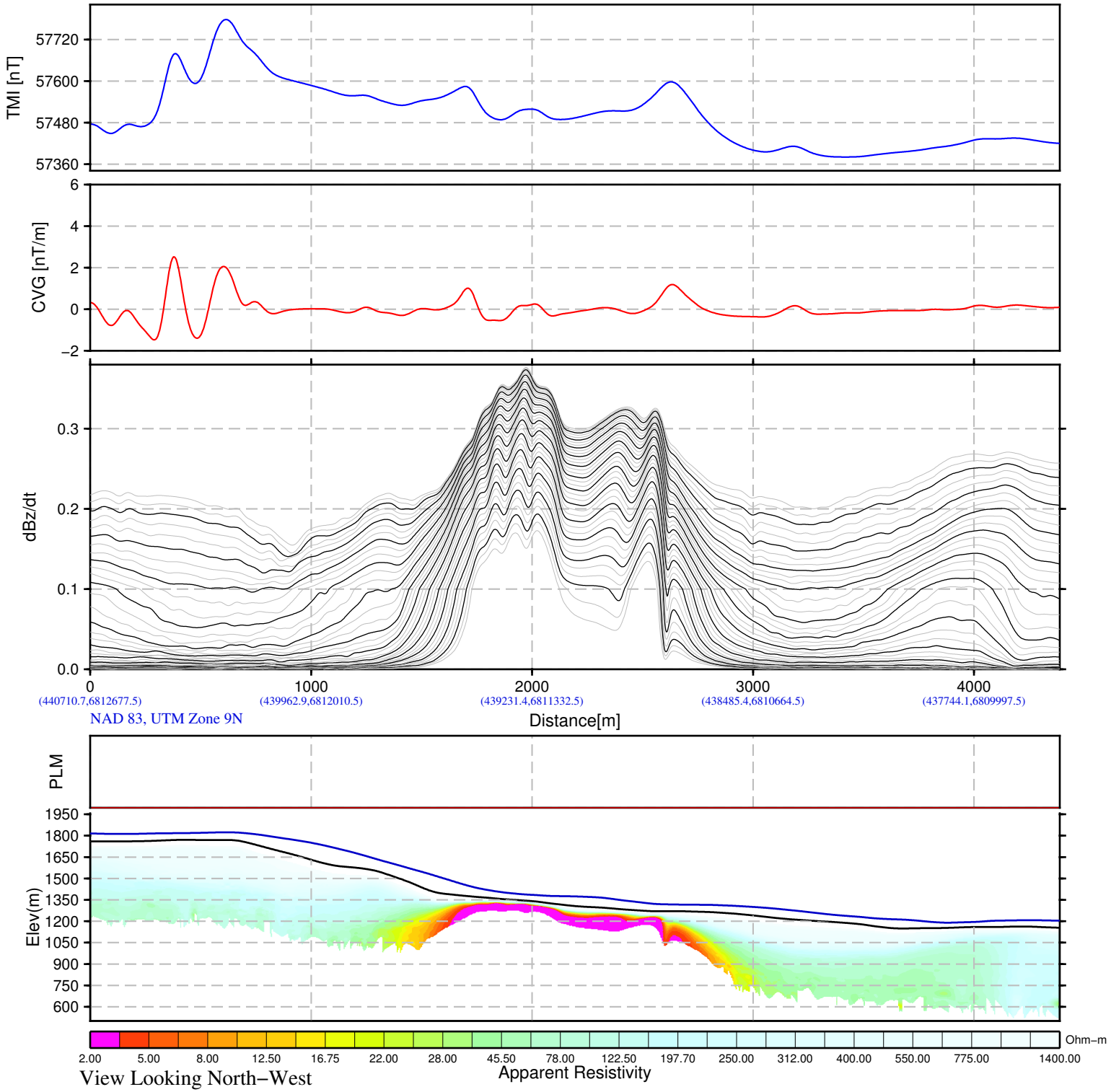
Resistivity Depth Image (RDI) for Line 4340

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

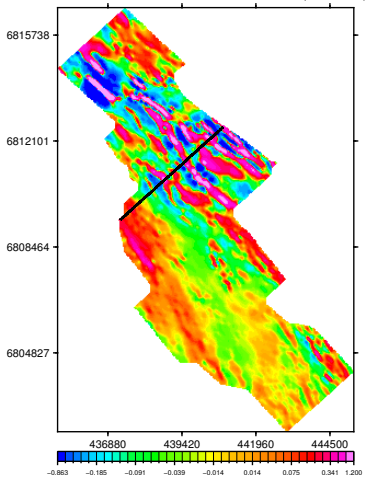
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Job Number:GL160037
Resistivity Depth Image (RDI)
Flown by Geotech Ltd.
Processed by Geotech Ltd.
245 Industrial Parkway North
Aurora, Ontario, Canada L4G 4C4
www.geotech.ca

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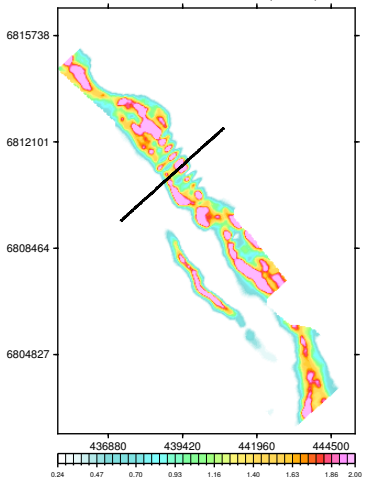
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

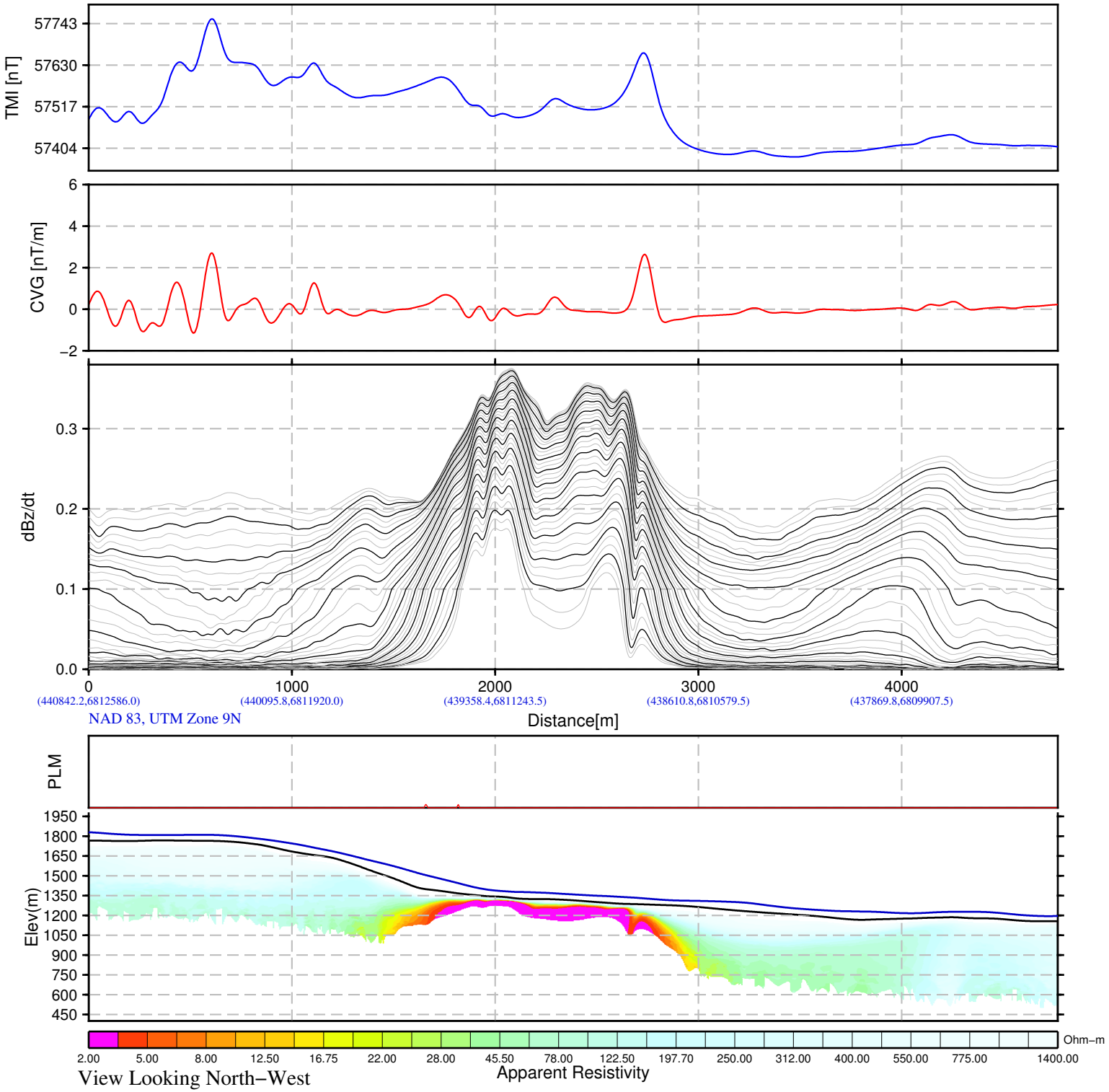
Resistivity Depth Image (RDI) for Line 4355

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

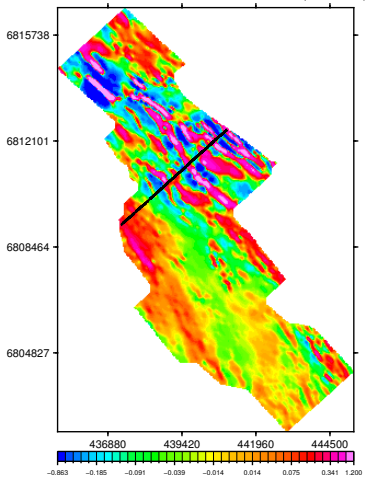
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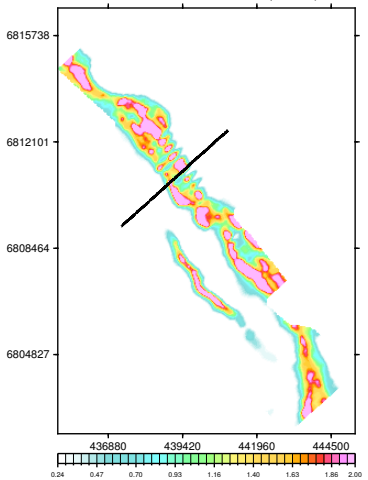
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AIRBORNE GEOPHYSICAL SURVEYS

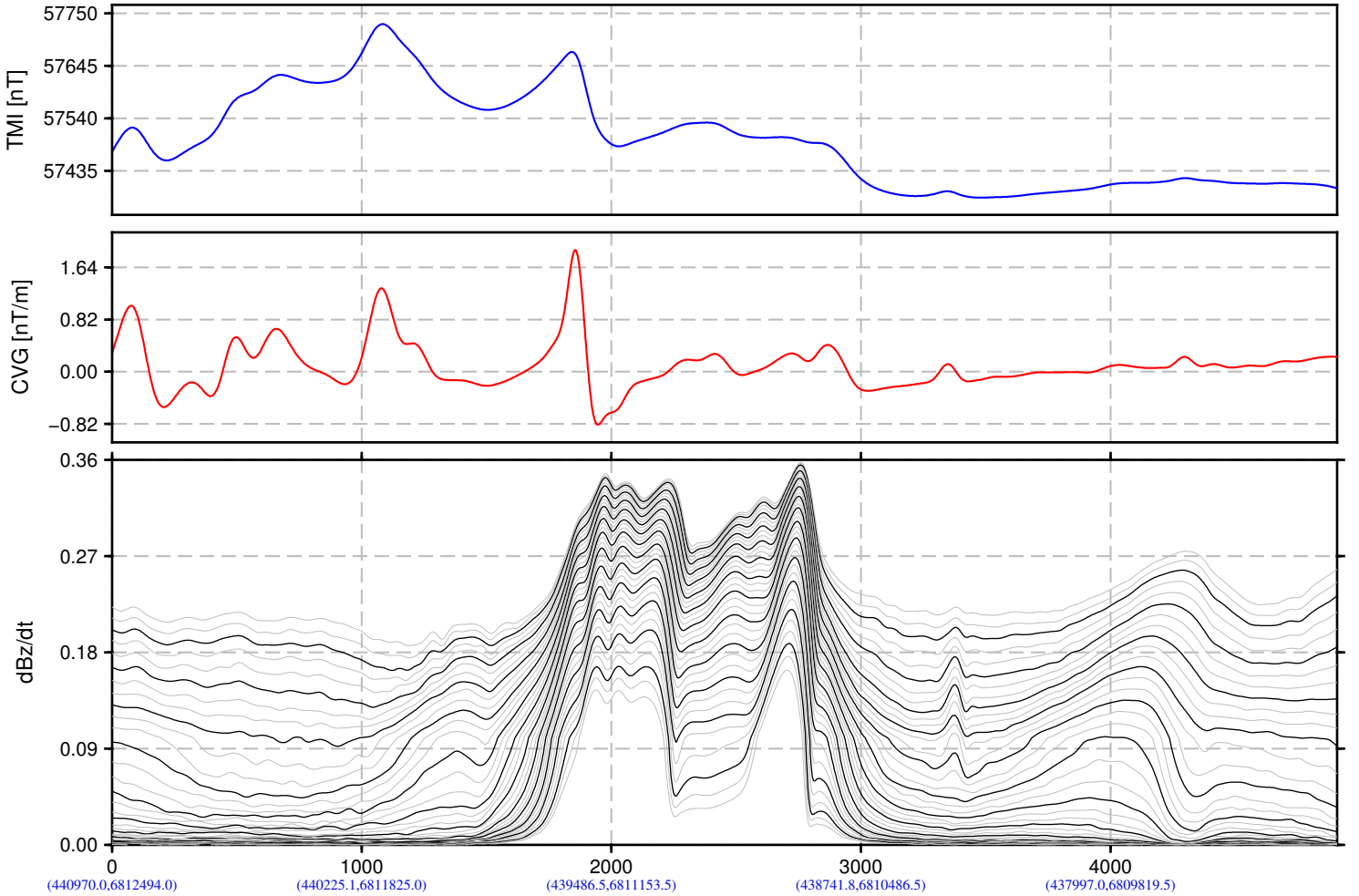
Resistivity Depth Image (RDI) for Line 4360

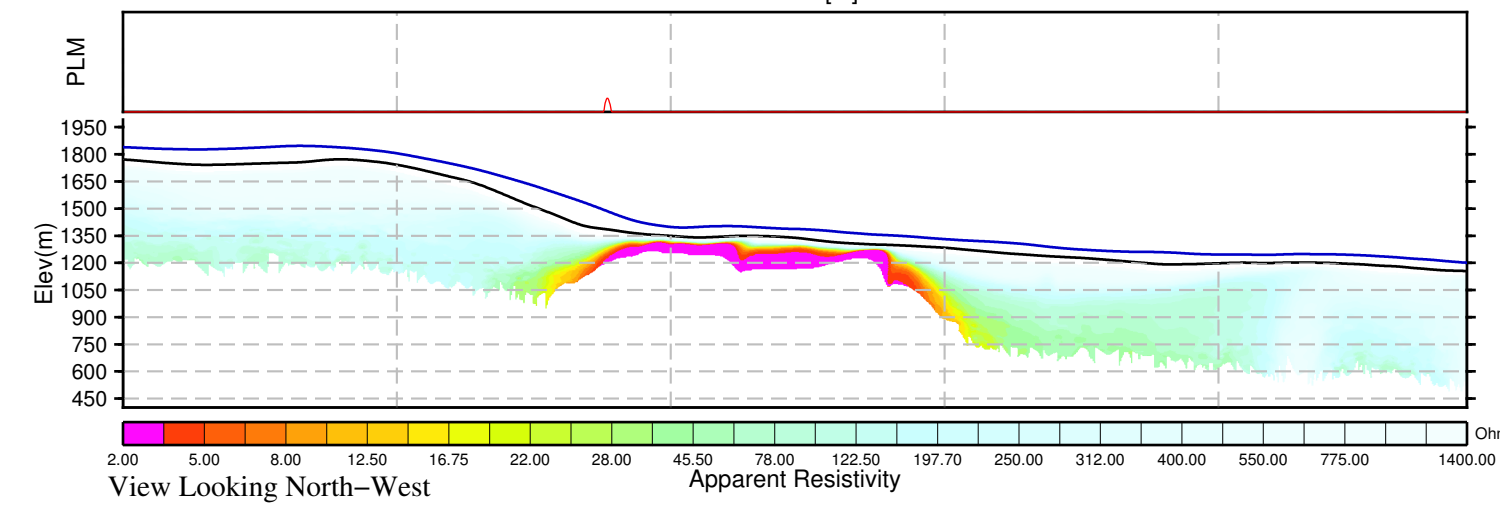
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

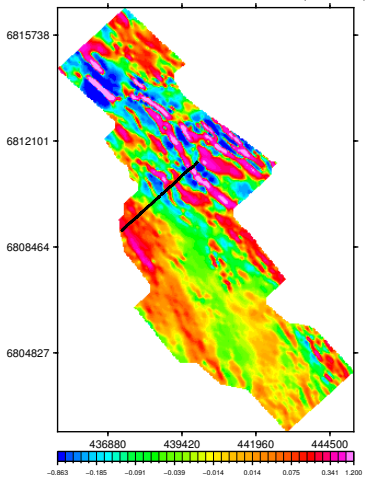
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Job Number:GL160037
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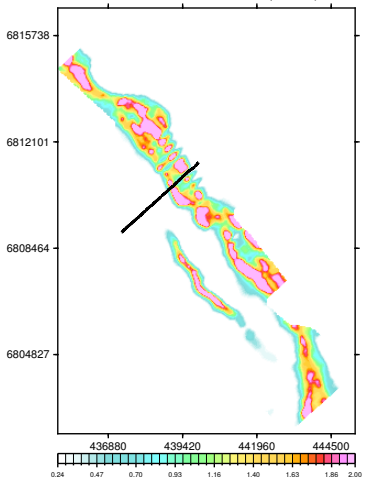
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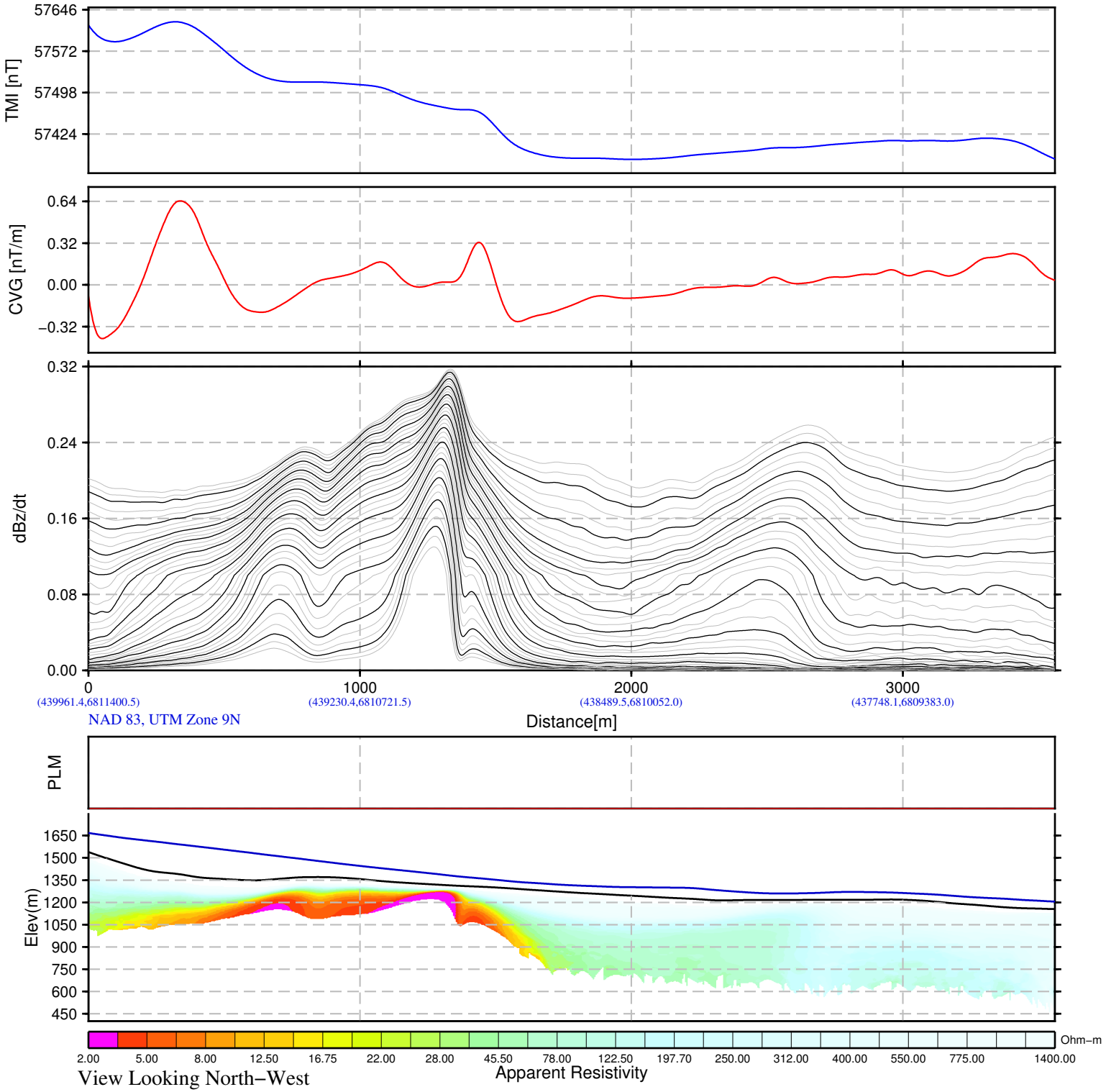
Resistivity Depth Image (RDI) for Line 4370

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

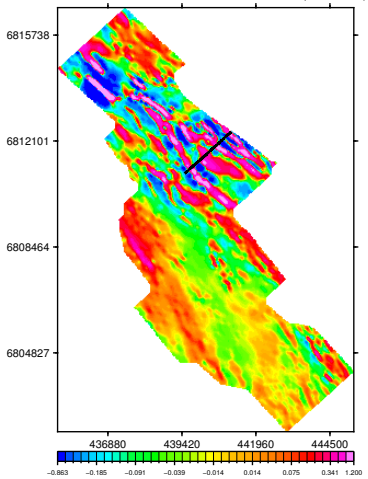
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Job Number:GL160037
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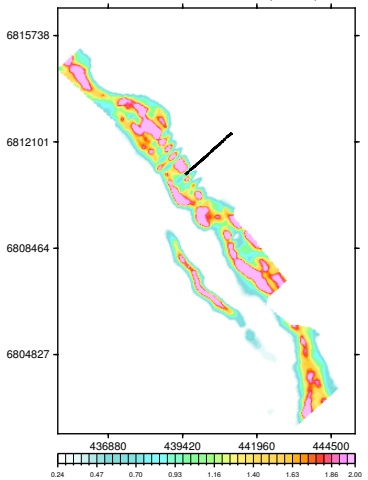
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AIRBORNE GEOPHYSICAL SURVEYS

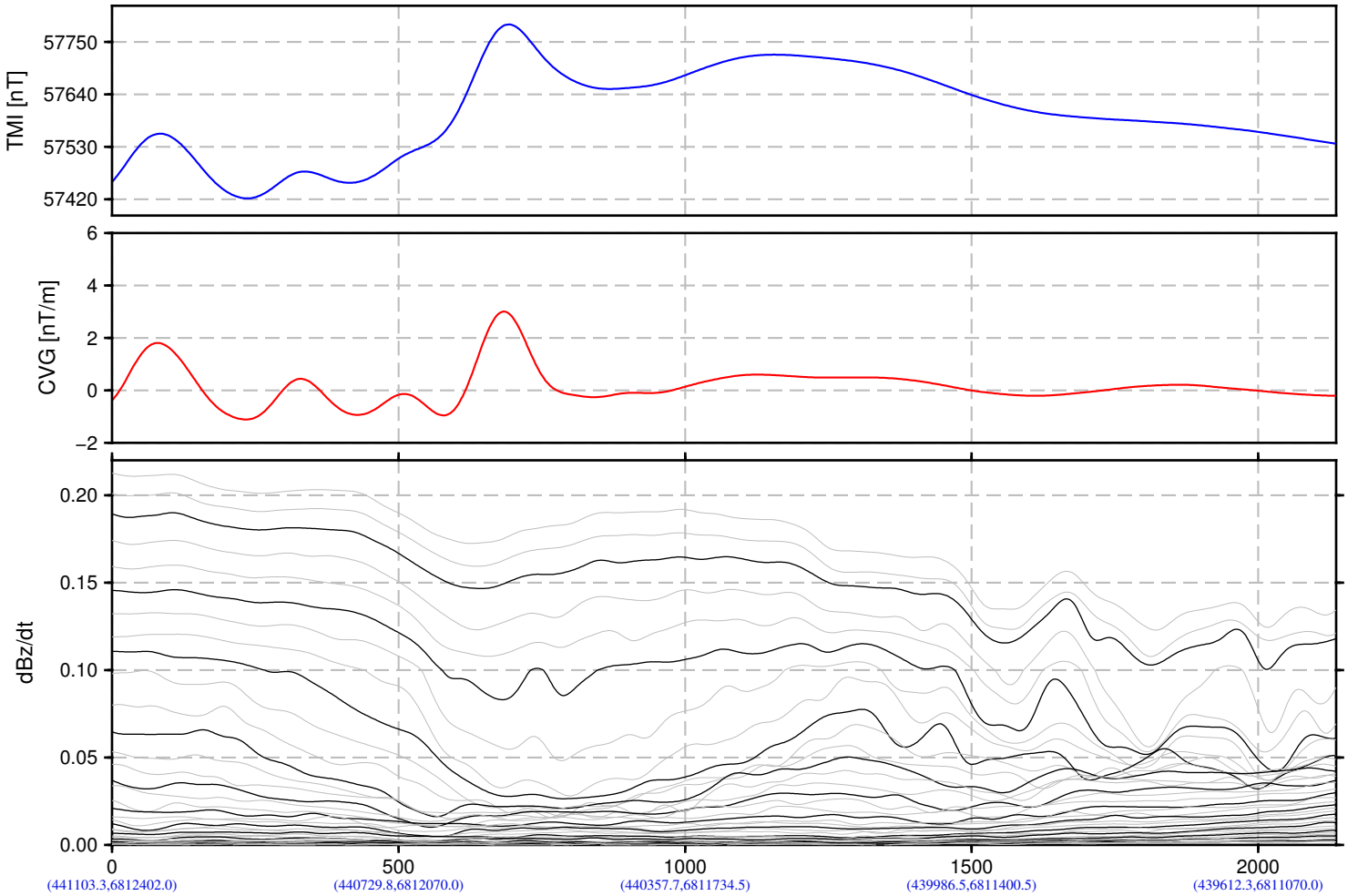
Resistivity Depth Image (RDI) for Line 4371

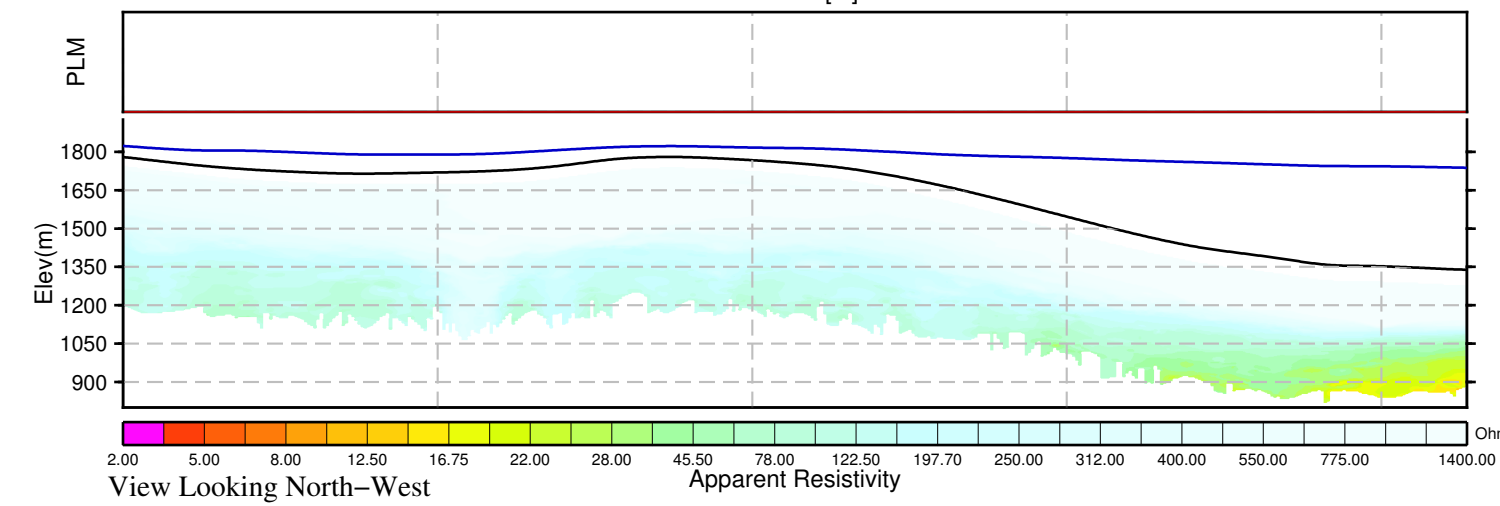
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

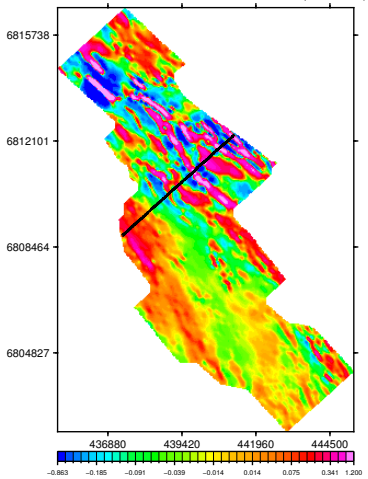
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Job Number:GL160037
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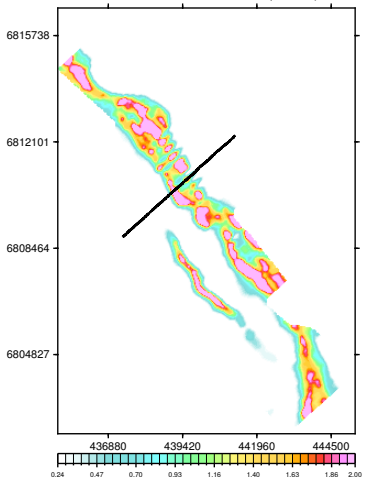
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AIRBORNE GEOPHYSICAL SURVEYS

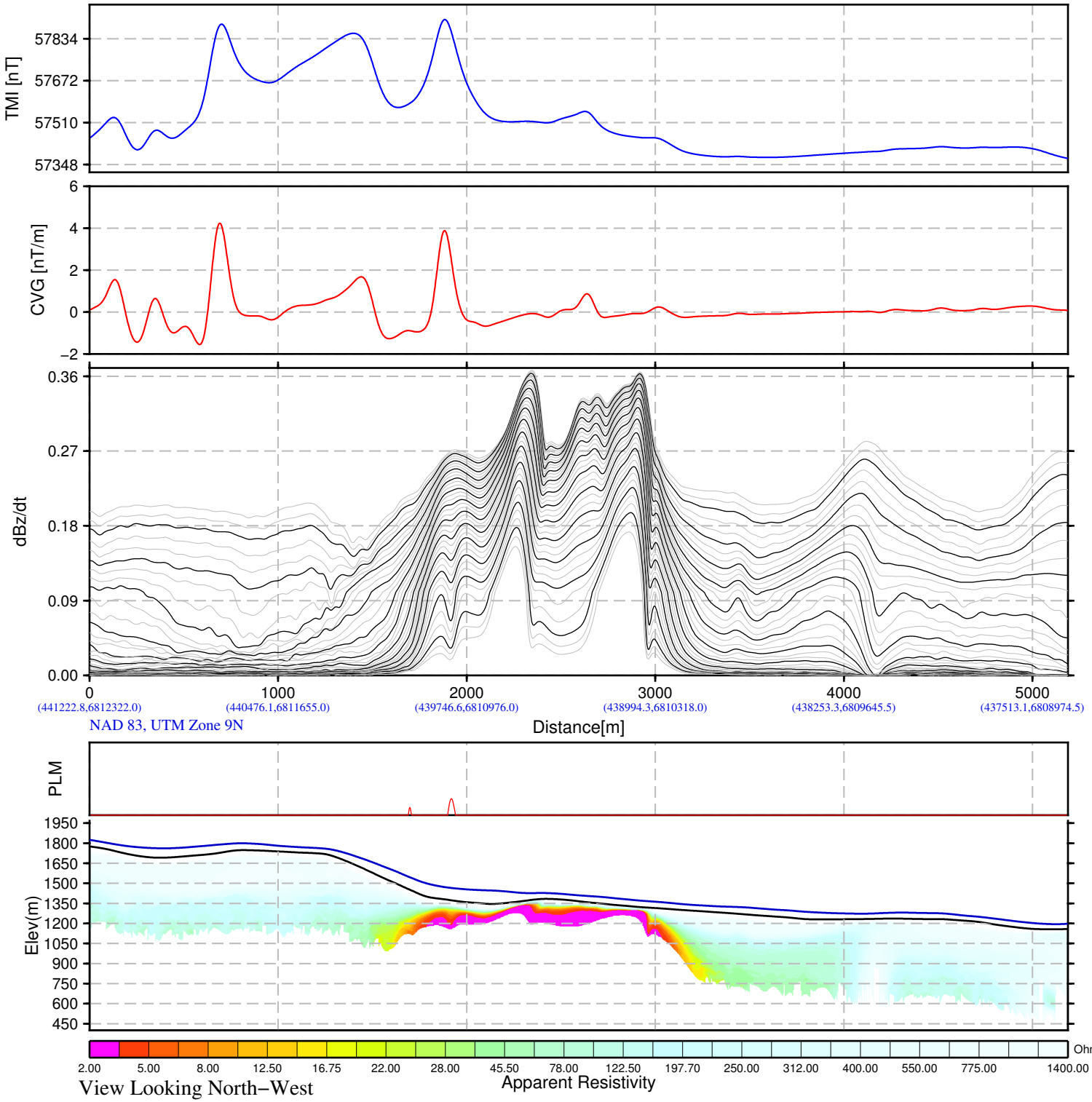
Resistivity Depth Image (RDI) for Line 4380

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

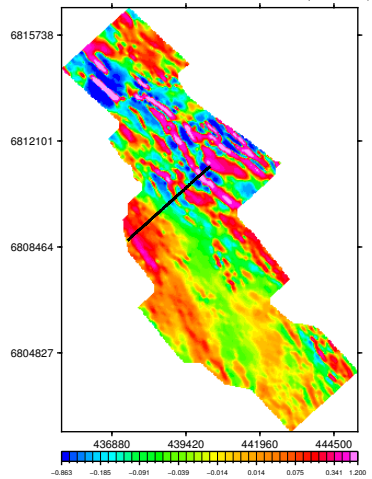
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Job Number:GL160037
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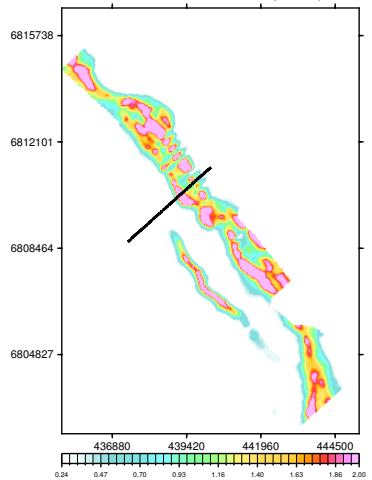
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AIRBORNE GEOPHYSICAL SURVEYS

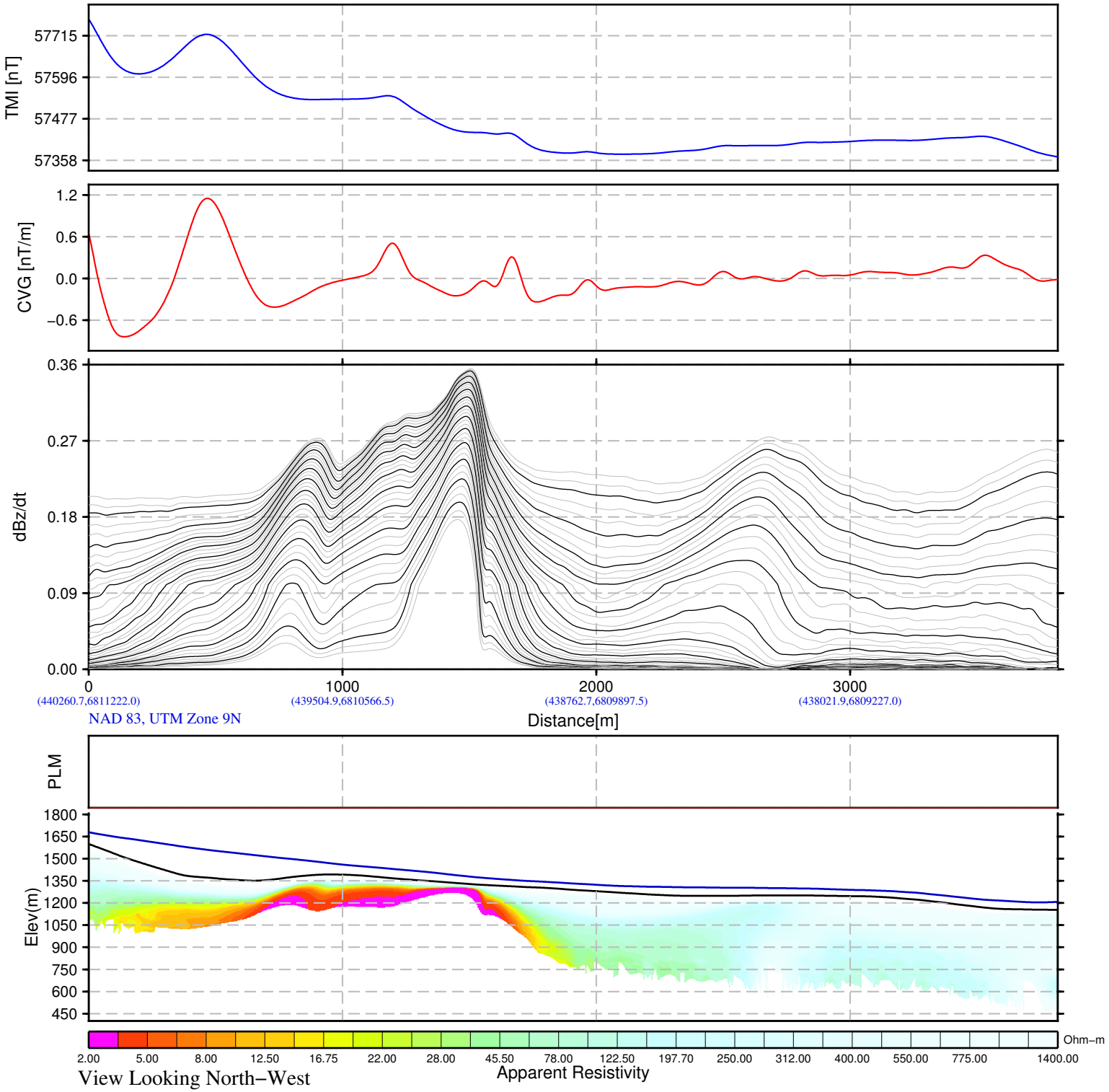
Resistivity Depth Image (RDI) for Line 4390

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

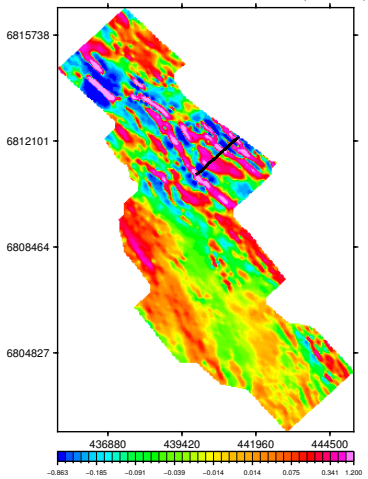
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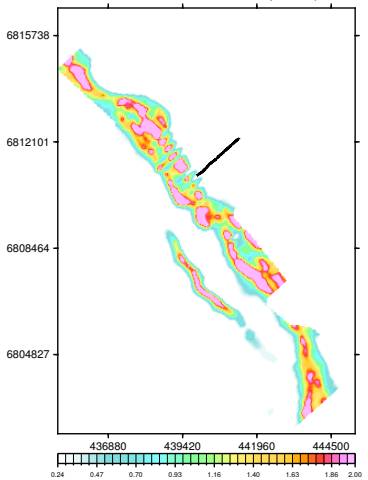
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AIRBORNE GEOPHYSICAL SURVEYS

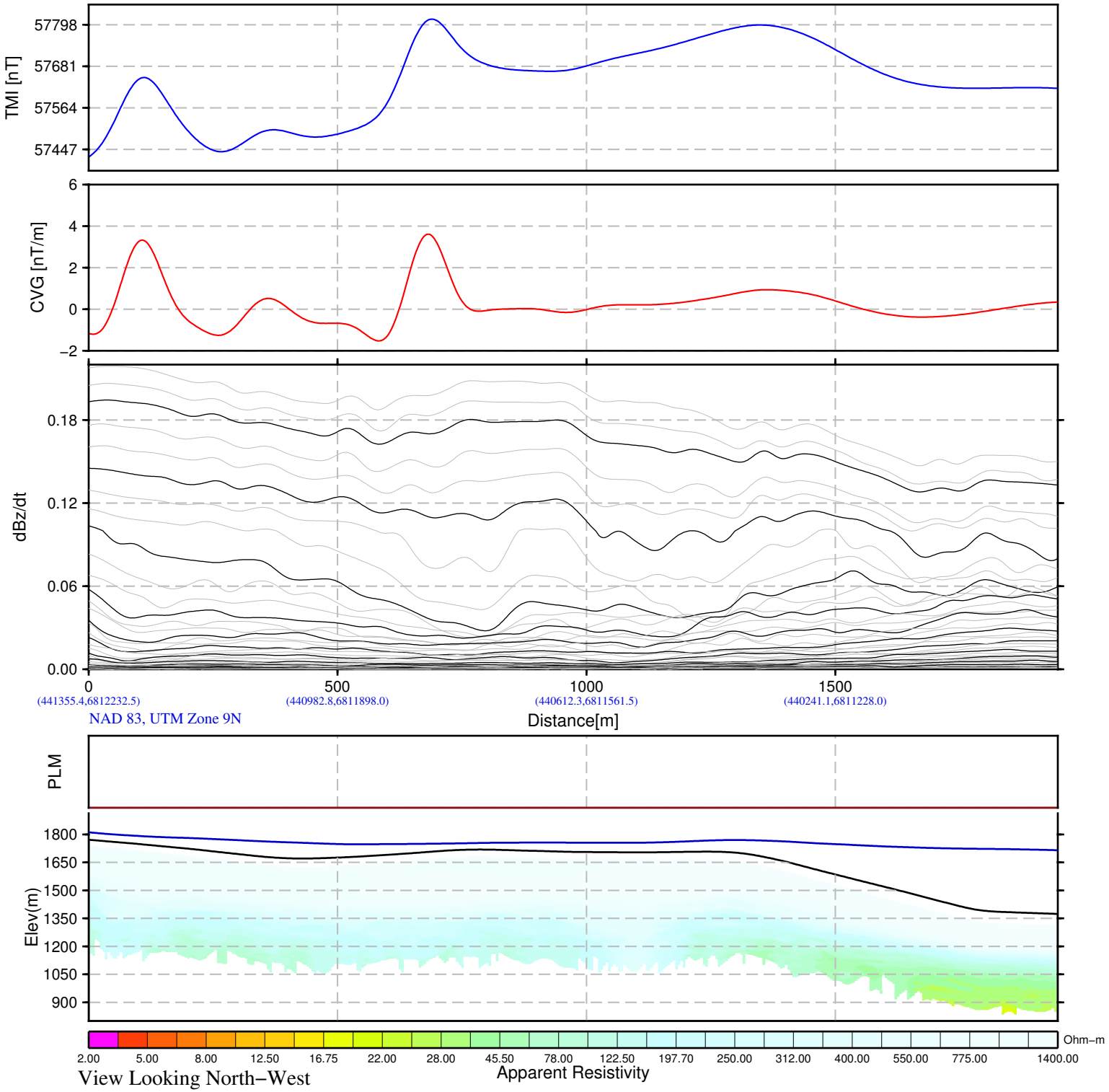
Resistivity Depth Image (RDI) for Line 4391

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

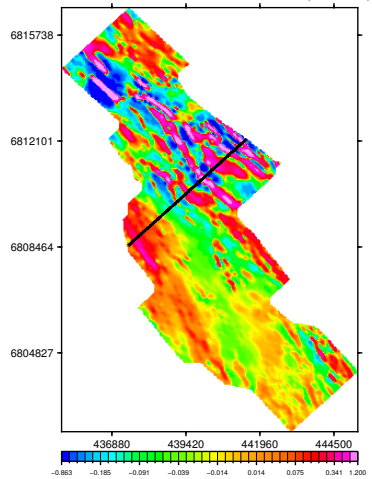
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Processed by Geotech Ltd.
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Aurora, Ontario, Canada L4G 4C4
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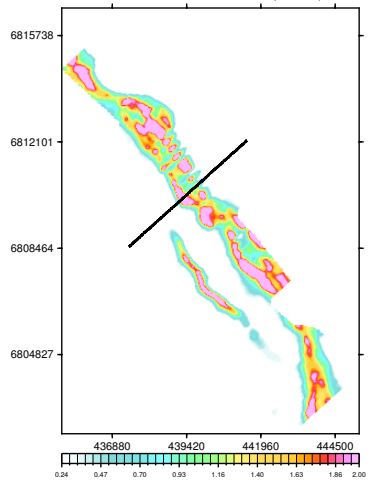
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AIRBORNE GEOPHYSICAL SURVEYS

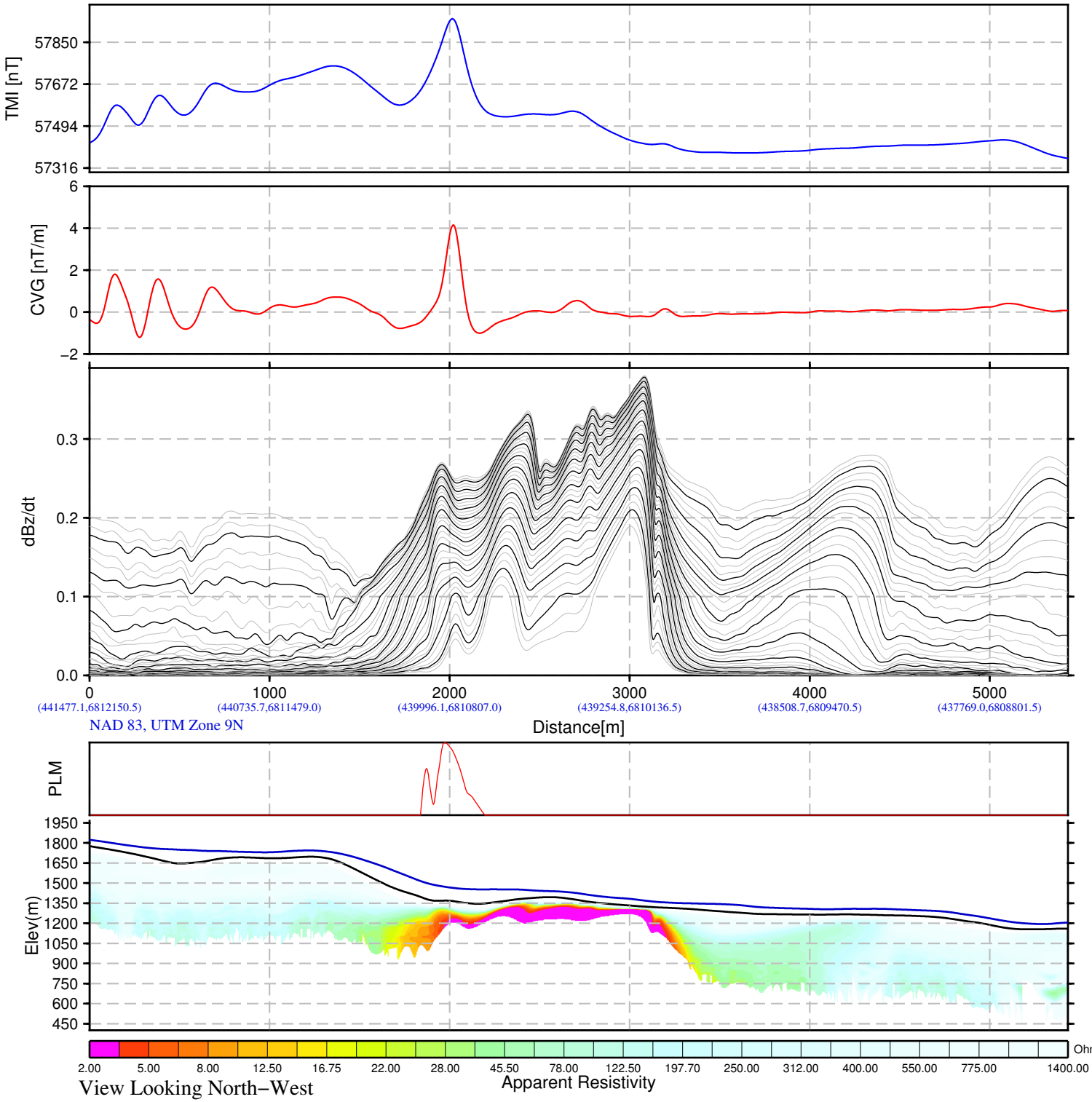
Resistivity Depth Image (RDI) for Line 4400

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

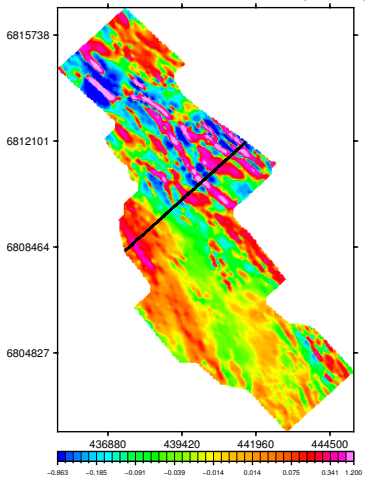
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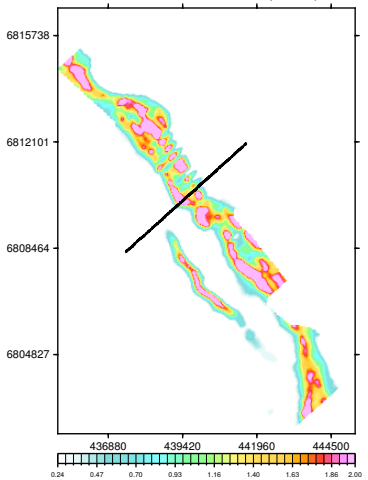
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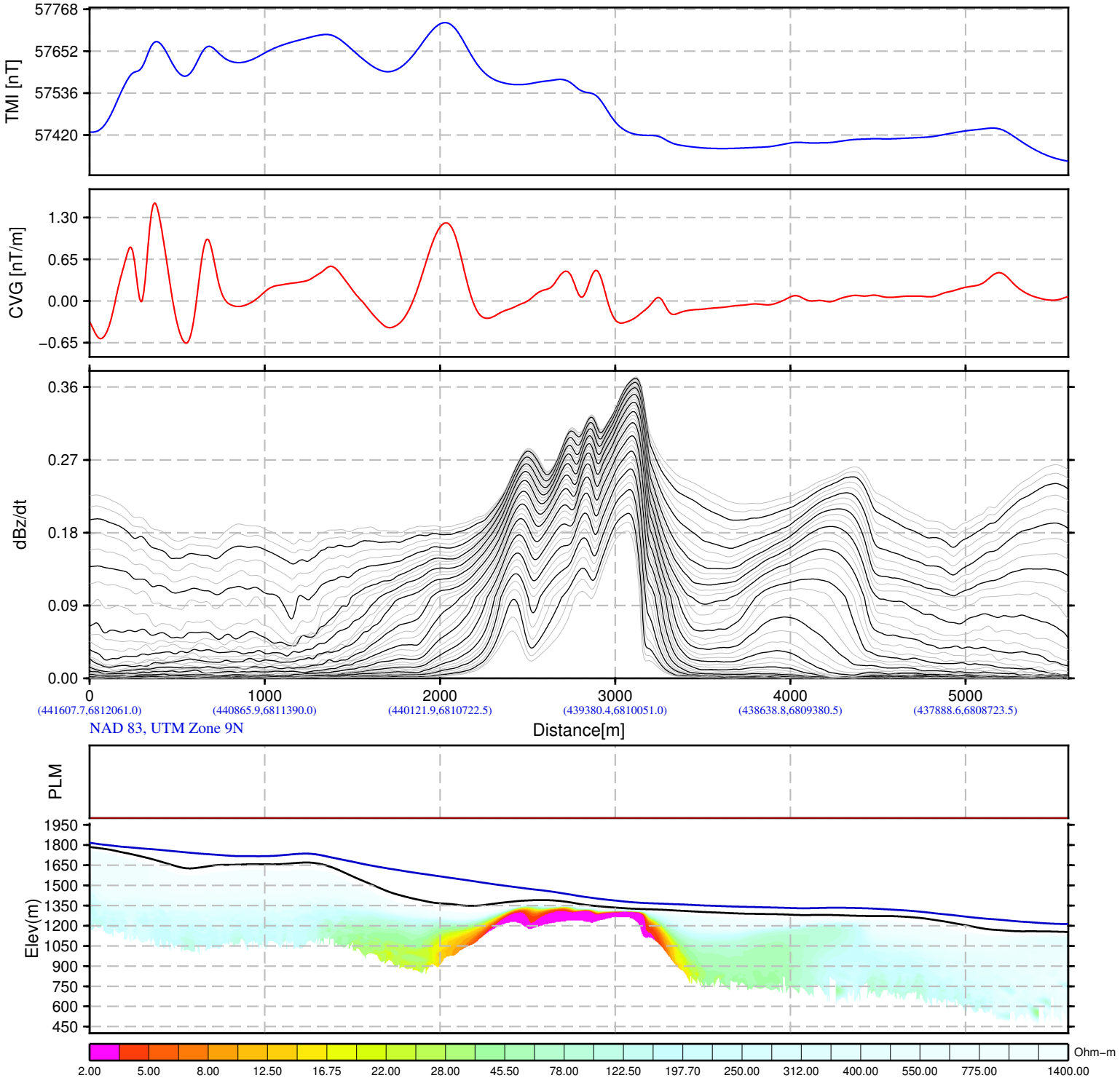
Resistivity Depth Image (RDI) for Line 4410

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

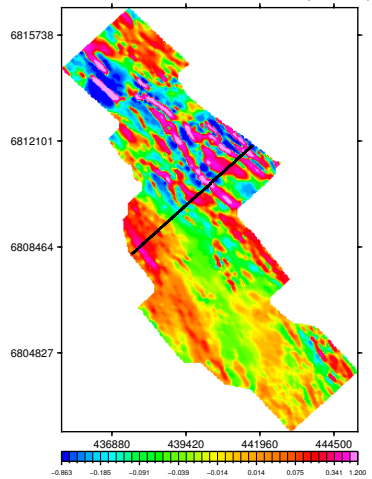
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Job Number:GL160037
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Processed by Geotech Ltd.
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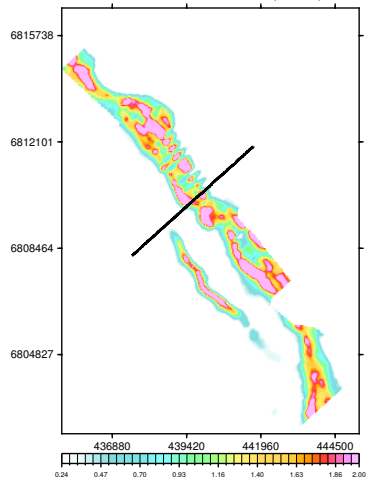
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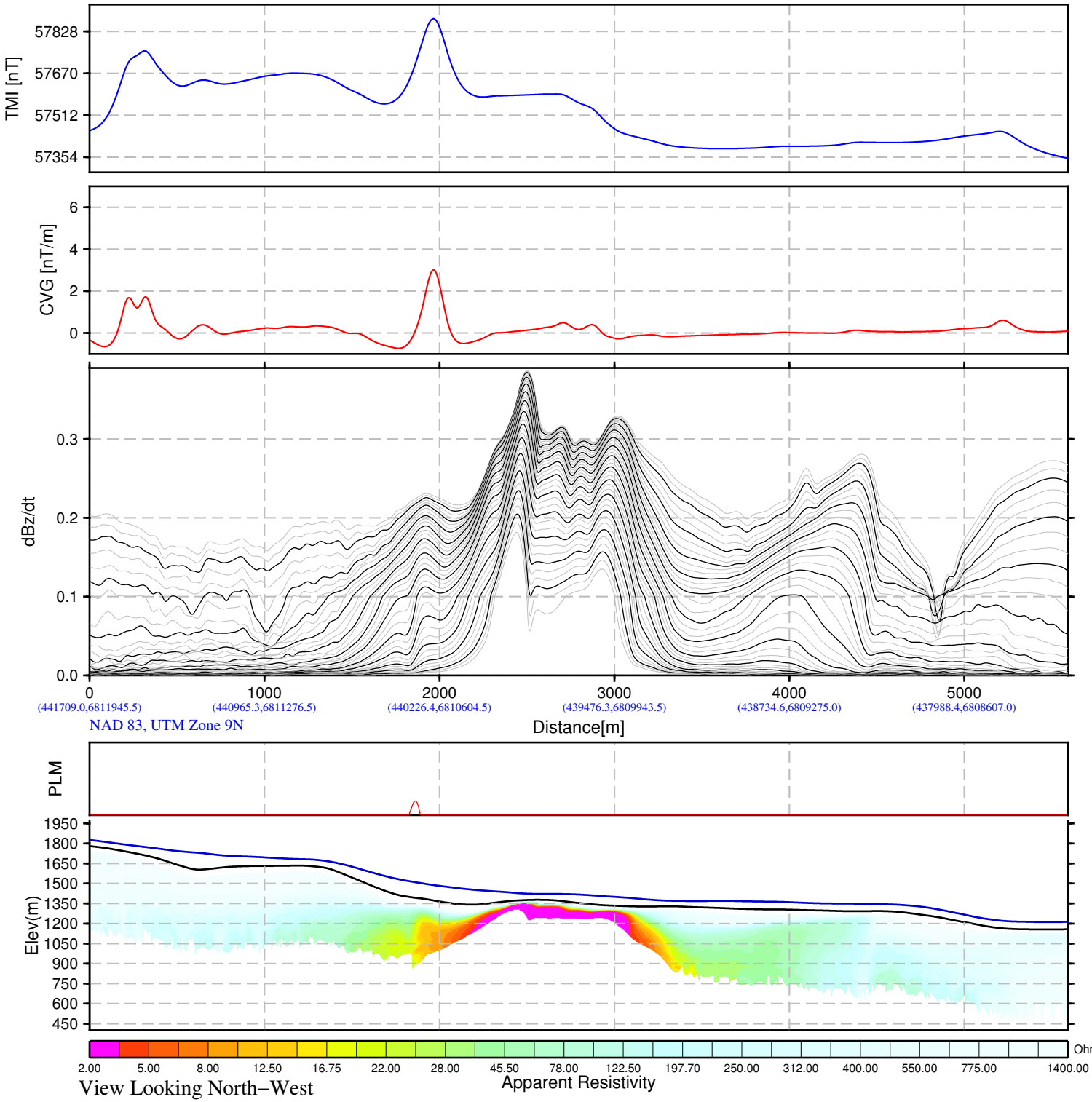
Resistivity Depth Image (RDI) for Line 4420

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

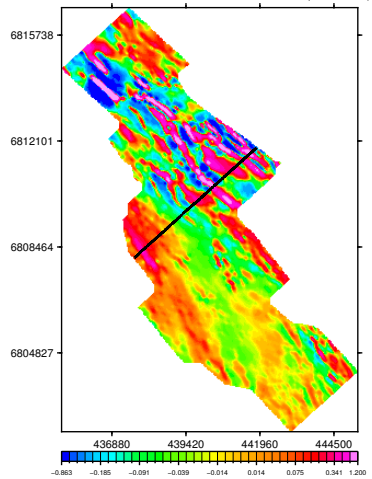
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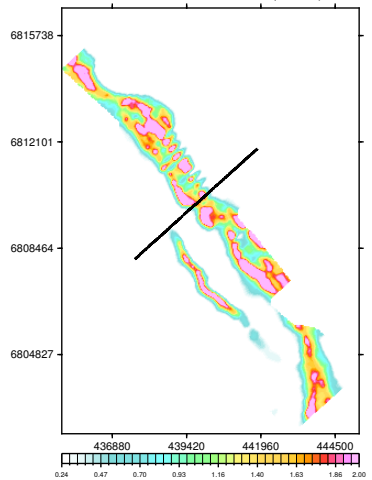
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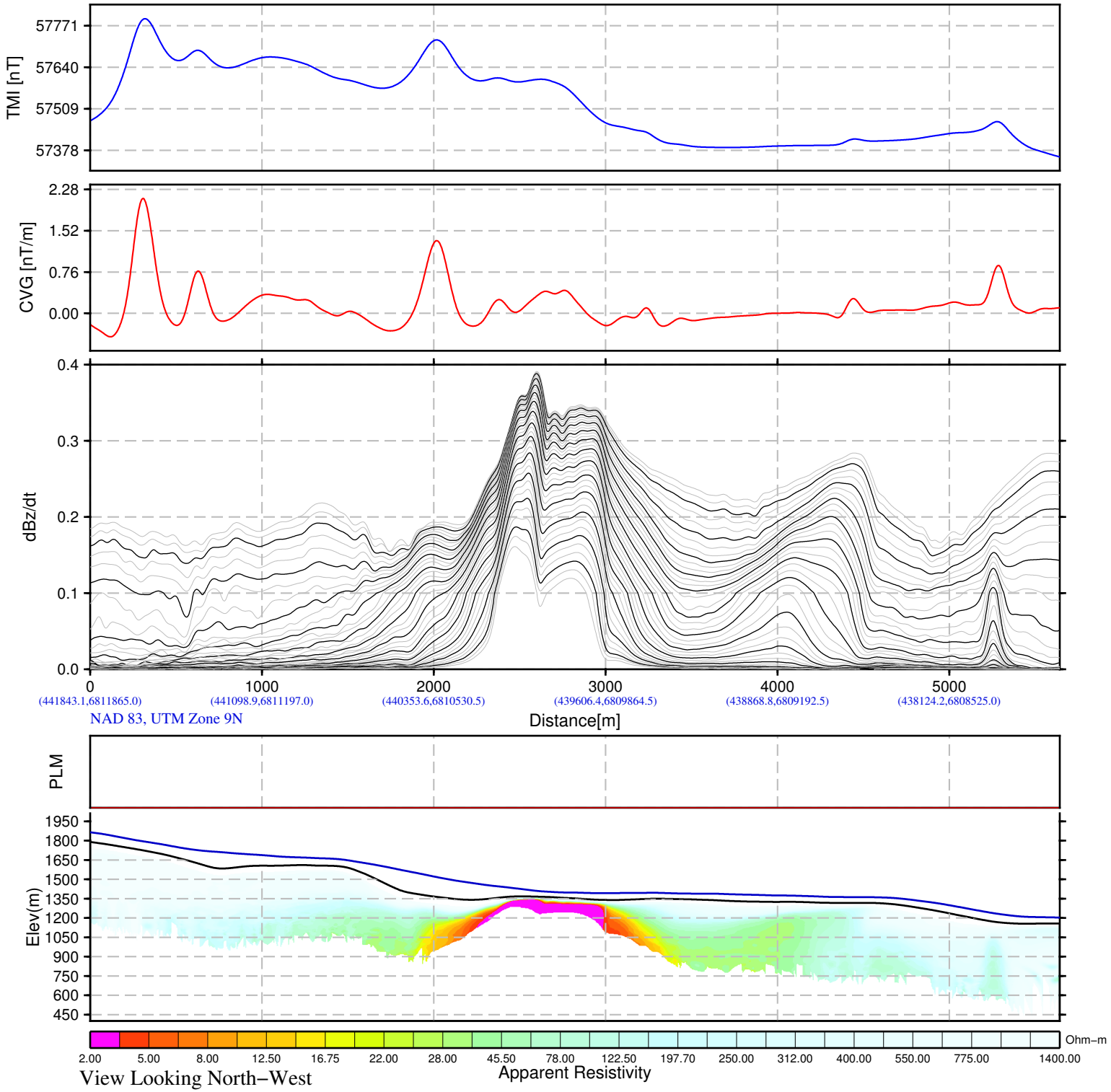
Resistivity Depth Image (RDI) for Line 4430

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

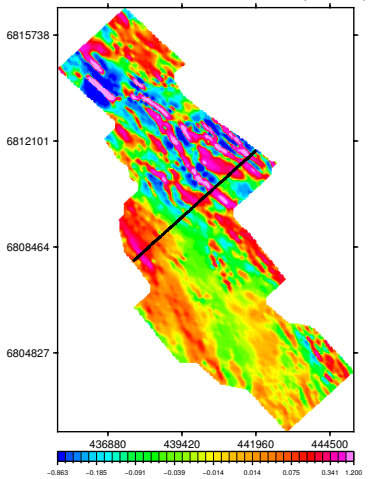
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Resistivity Depth Image (RDI)
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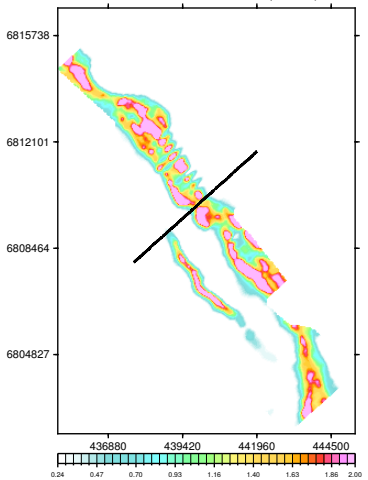
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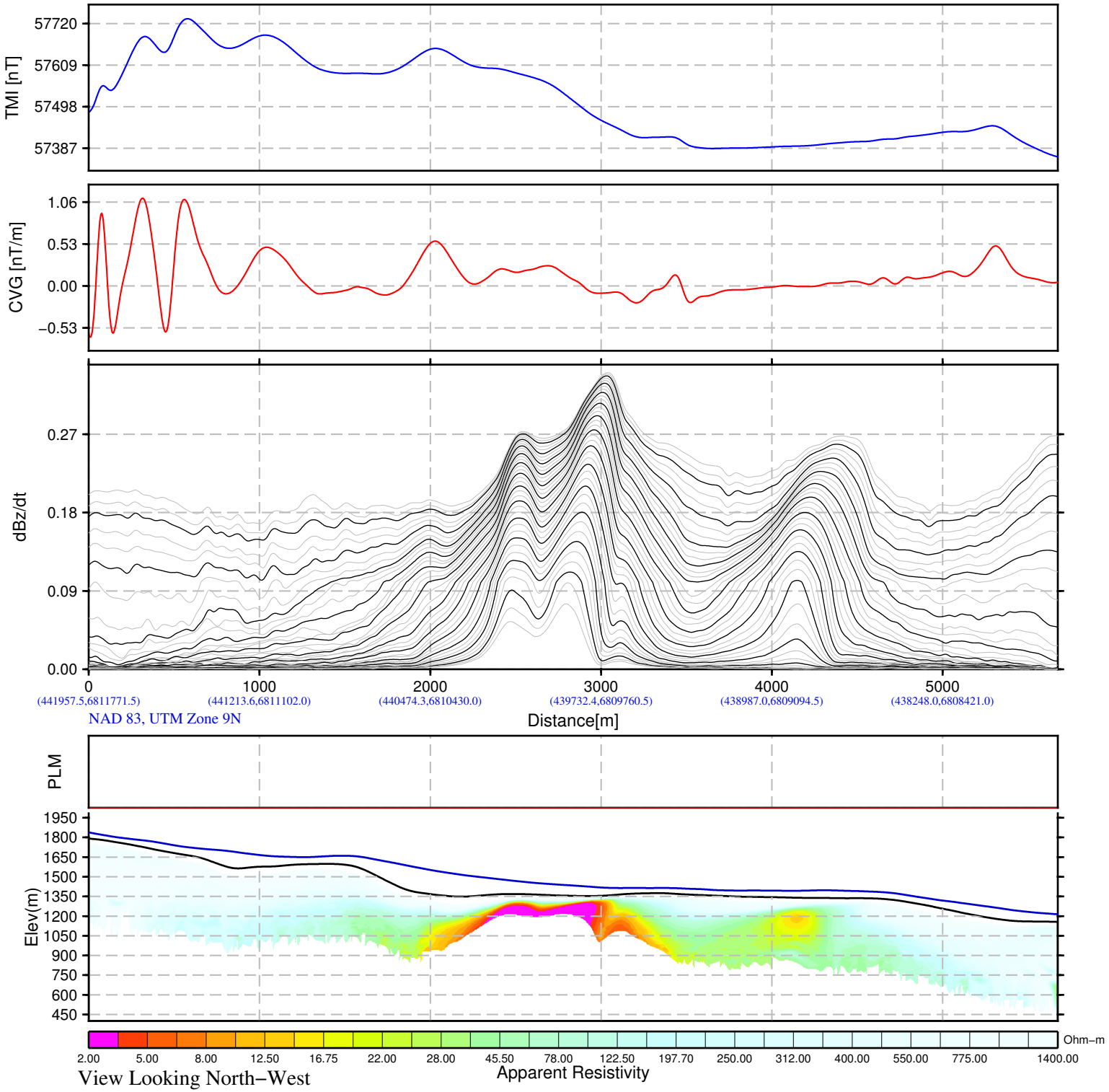
Resistivity Depth Image (RDI) for Line 4440

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

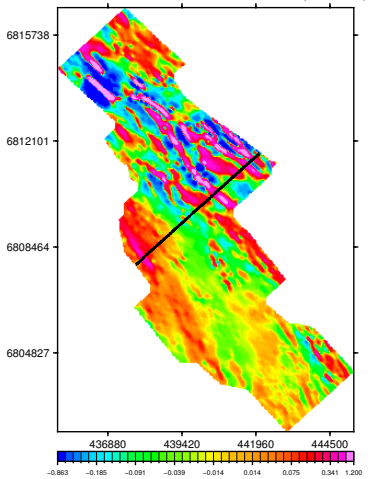
VTEM System:VTEM31−Plus
Job Number:GL160037
Resistivity Depth Image (RDI)
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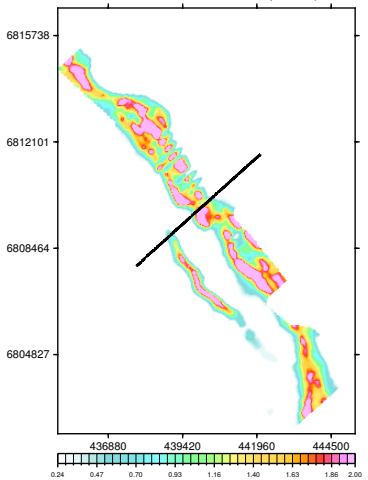
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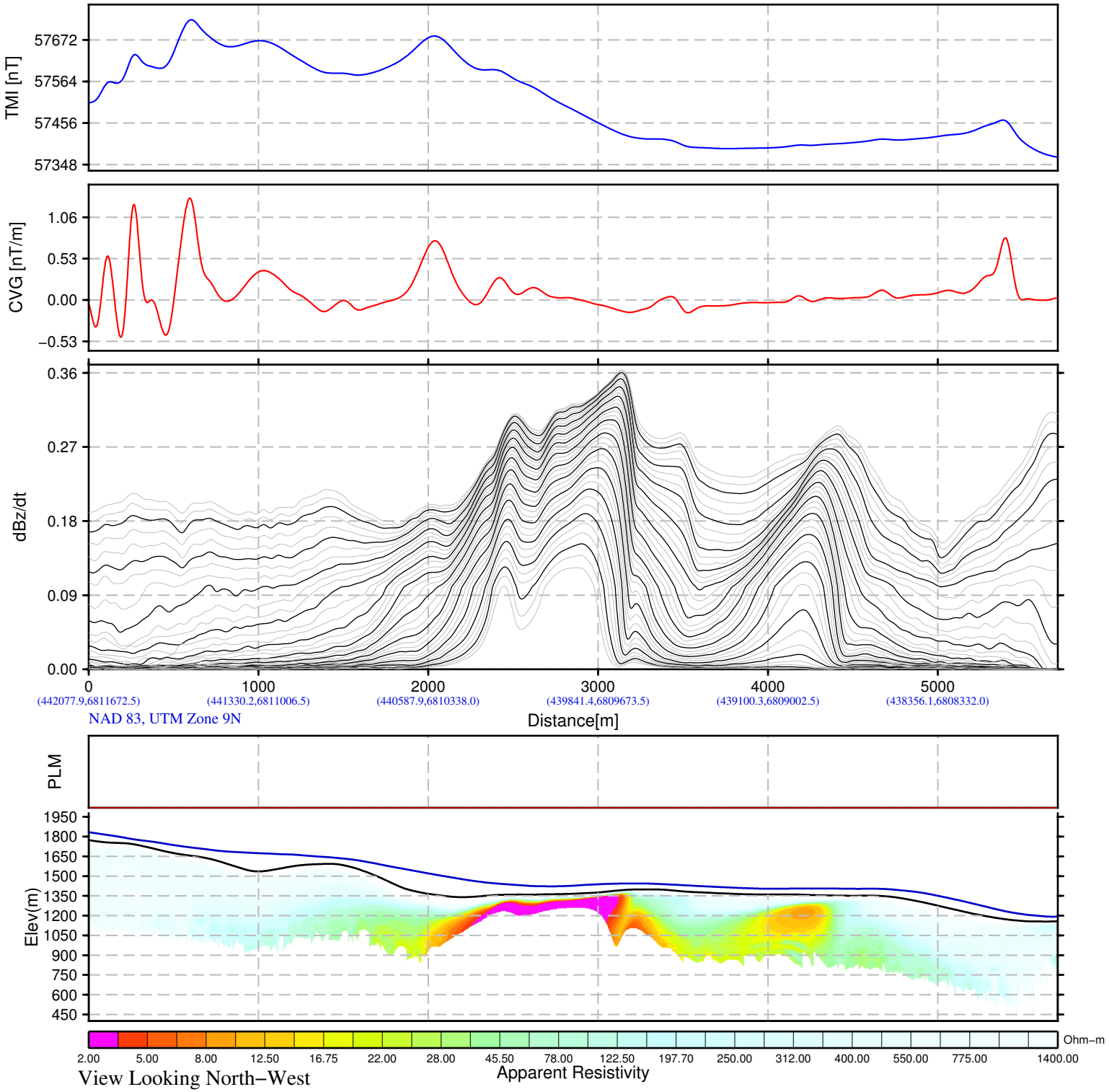
Resistivity Depth Image (RDI) for Line 4450

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

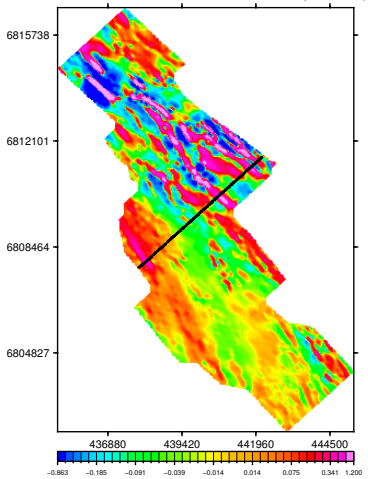
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Job Number:GL160037
Resistivity Depth Image (RDI)
Flown by Geotech Ltd.
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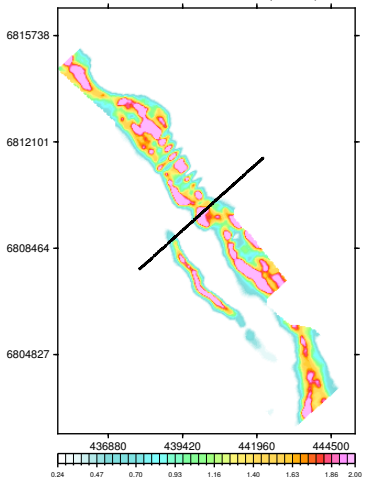
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

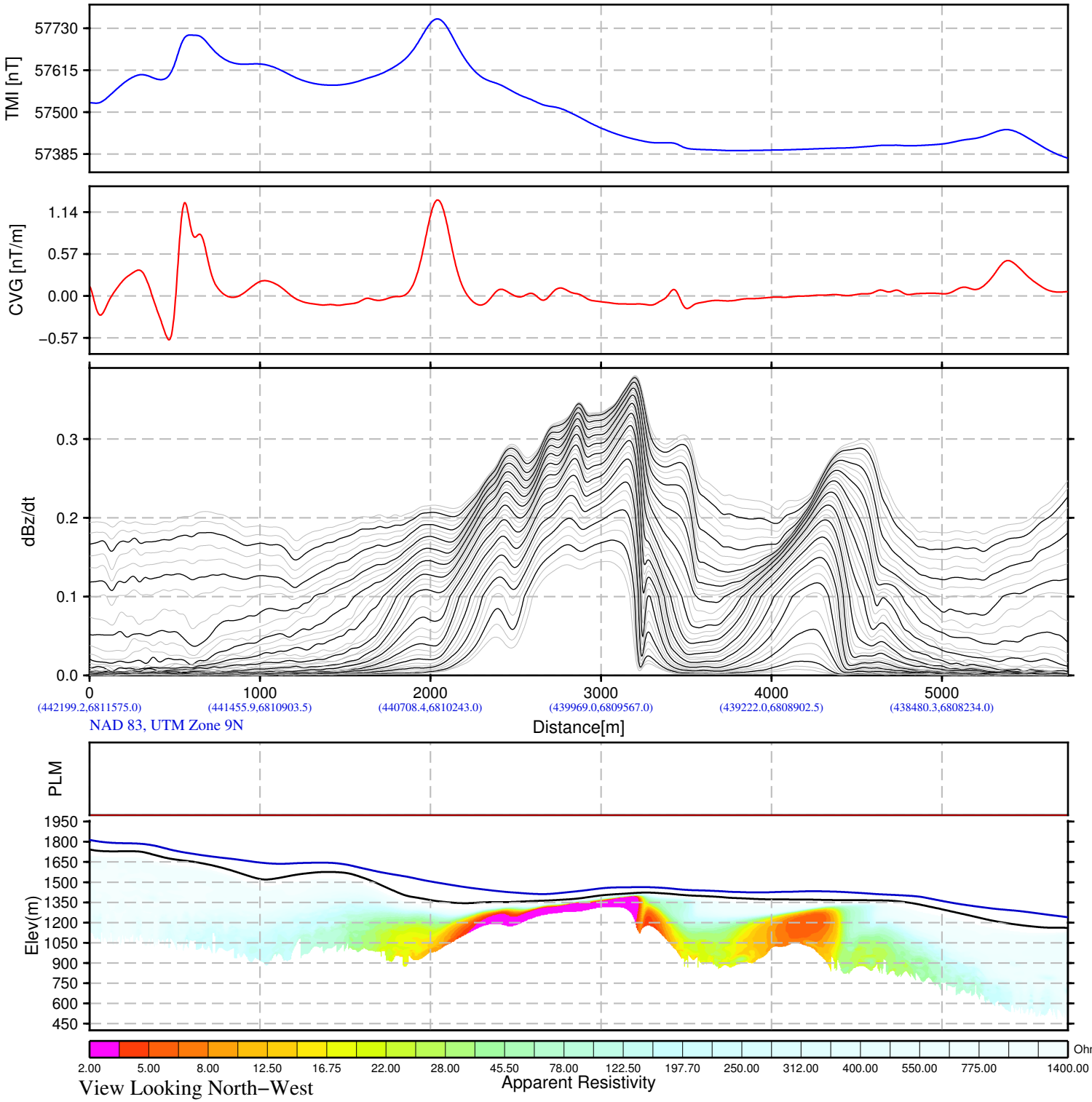
Resistivity Depth Image (RDI) for Line 4460

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

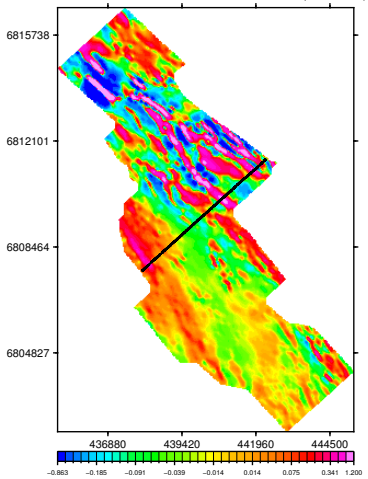
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Job Number:GL160037
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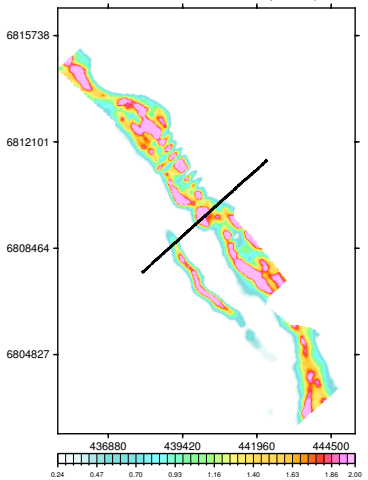
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AIRBORNE GEOPHYSICAL SURVEYS

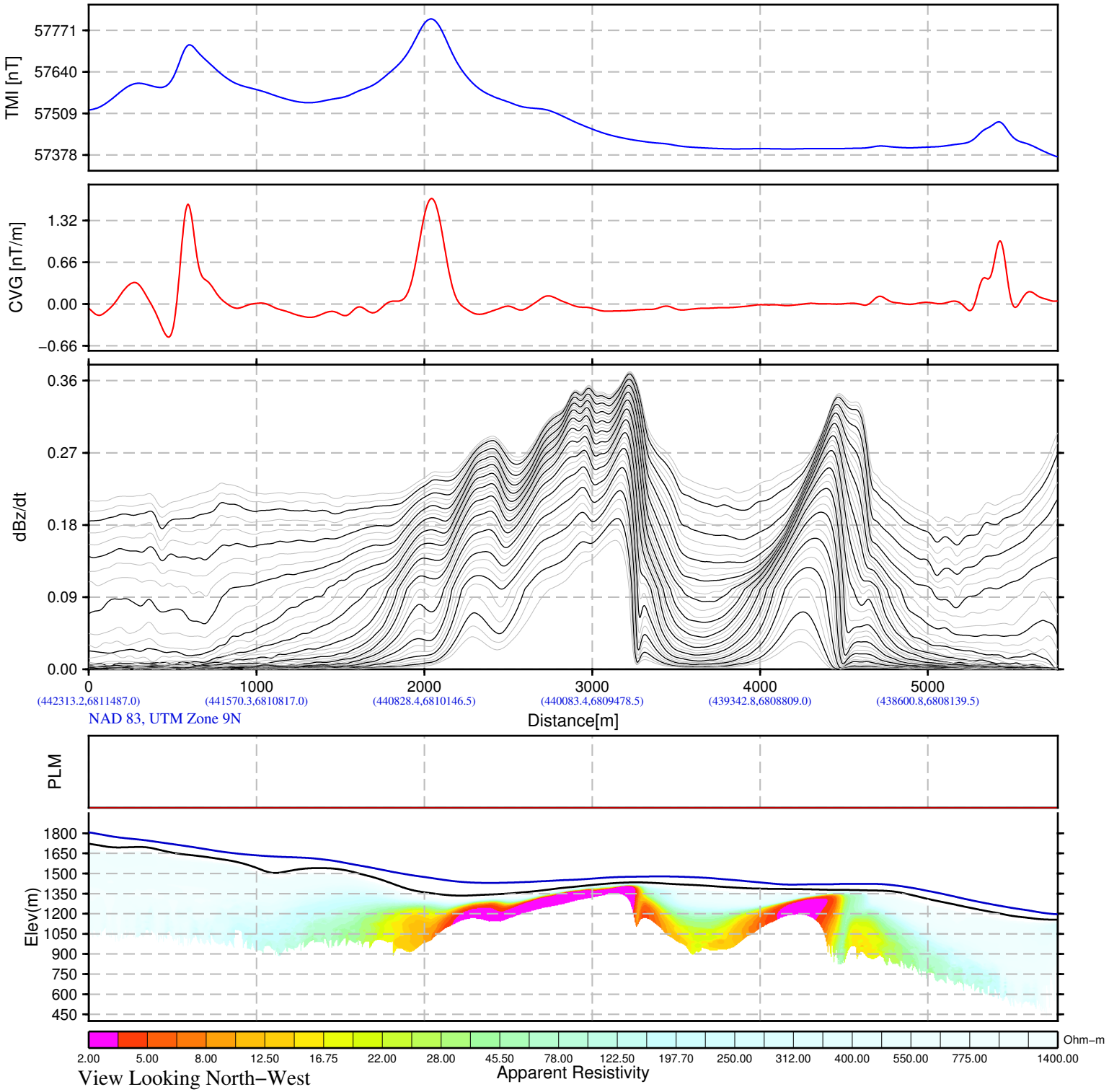
Resistivity Depth Image (RDI) for Line 4470

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

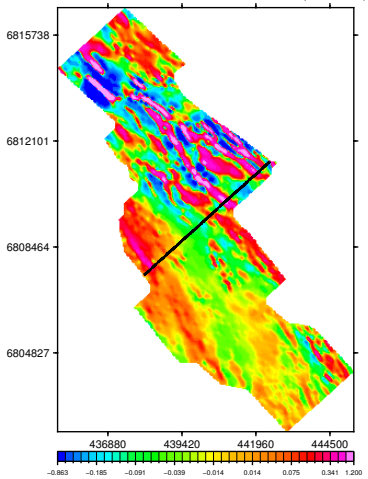
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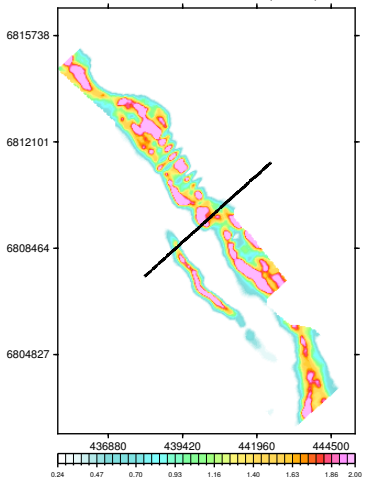
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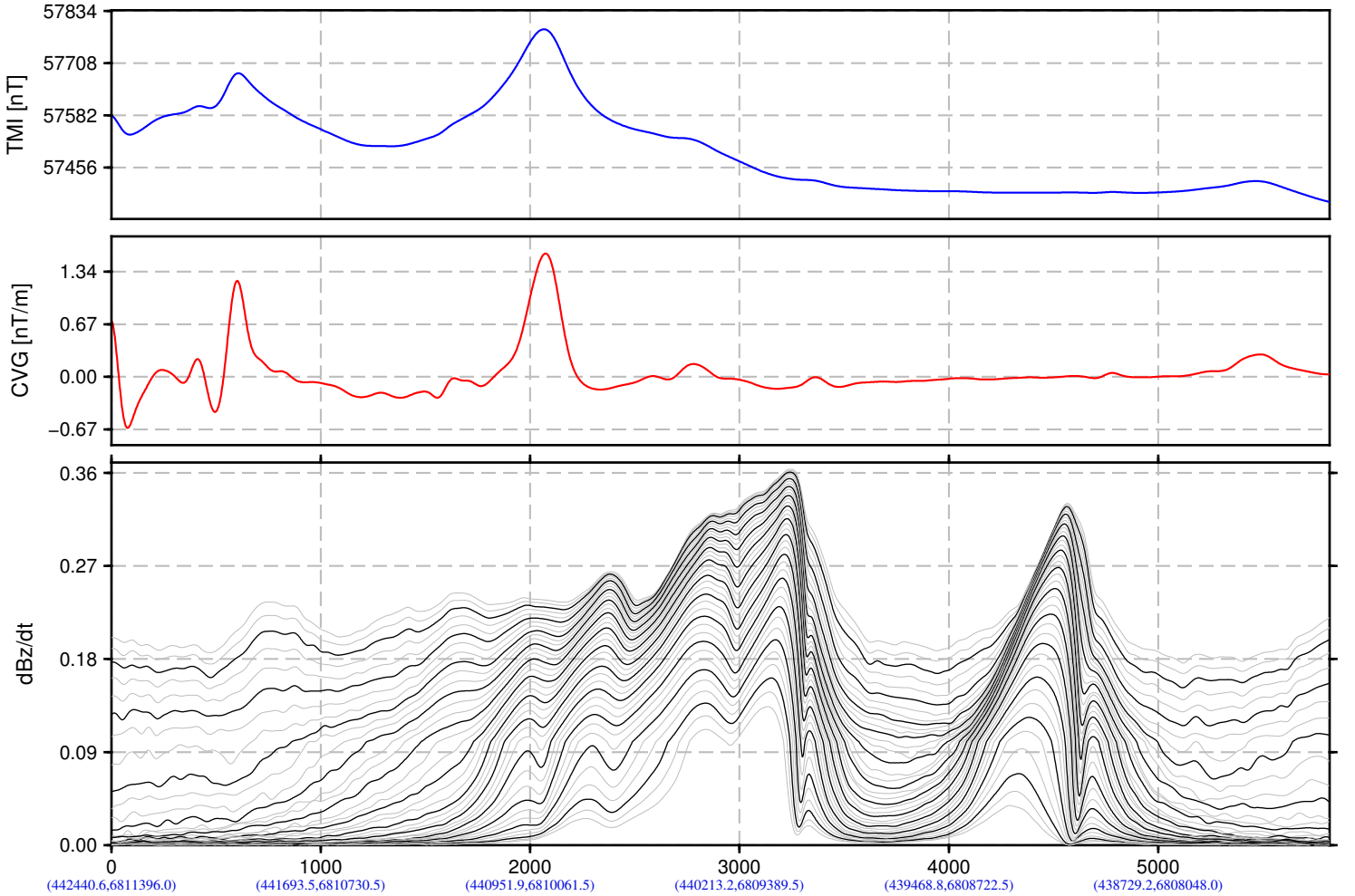
Resistivity Depth Image (RDI) for Line 4480

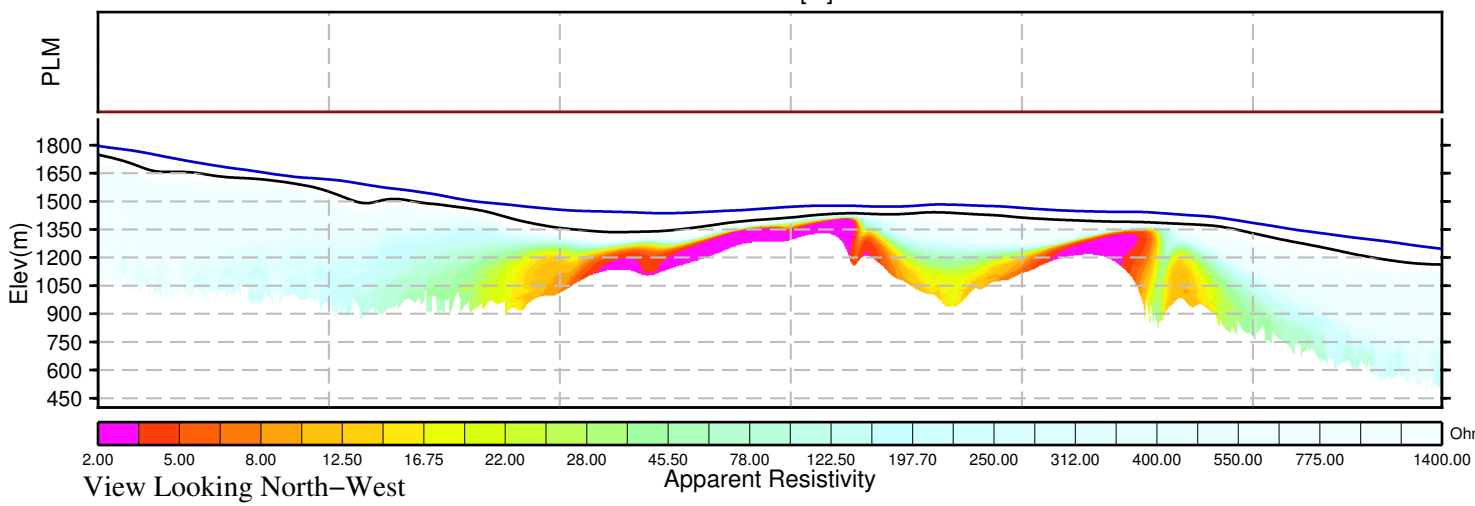
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

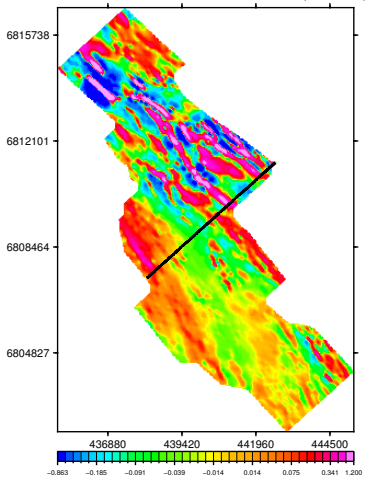
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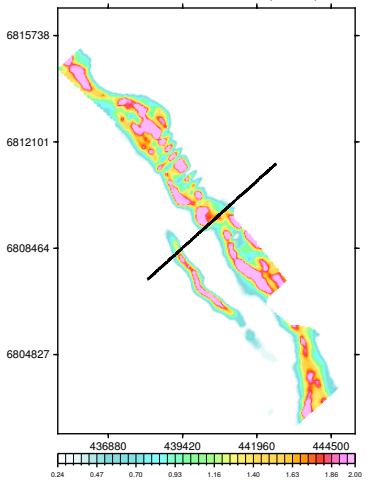
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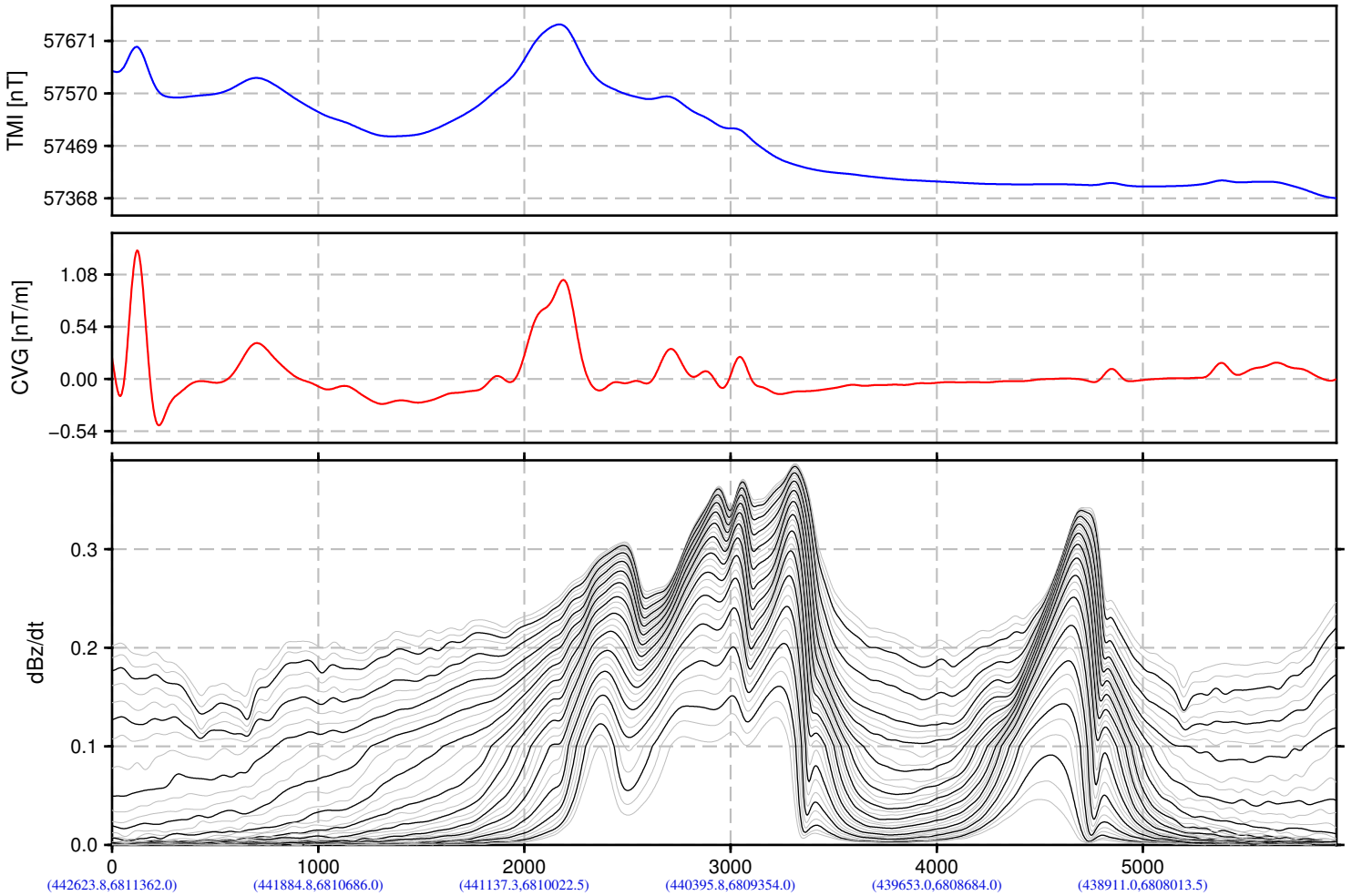
Resistivity Depth Image (RDI) for Line 4490

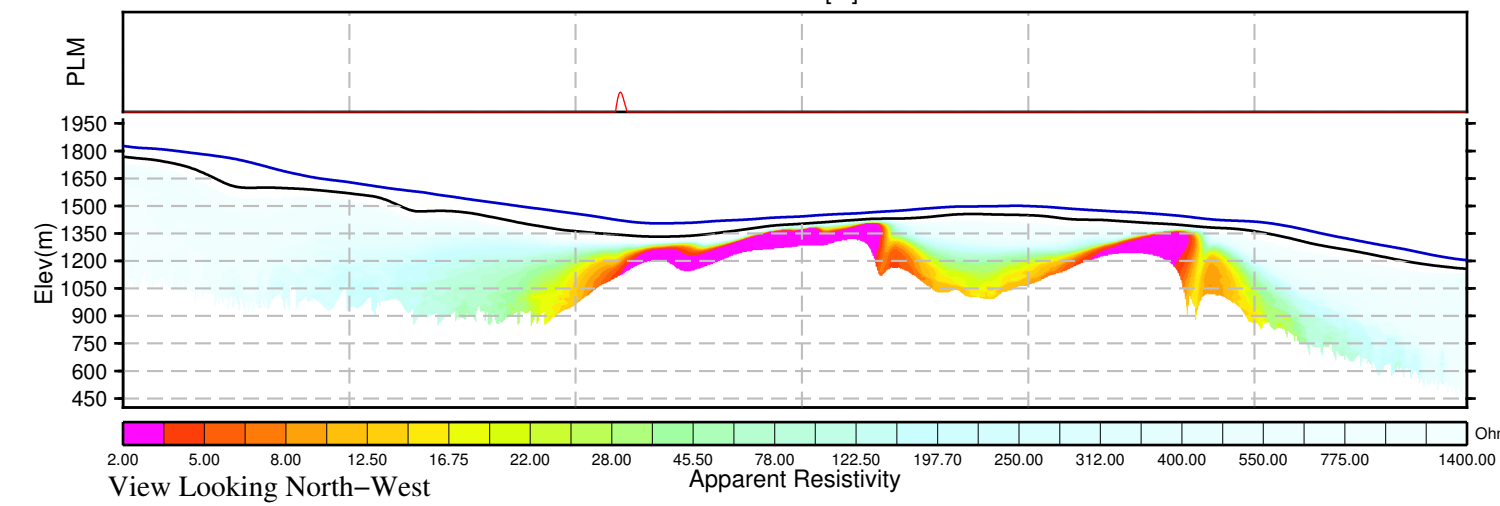
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

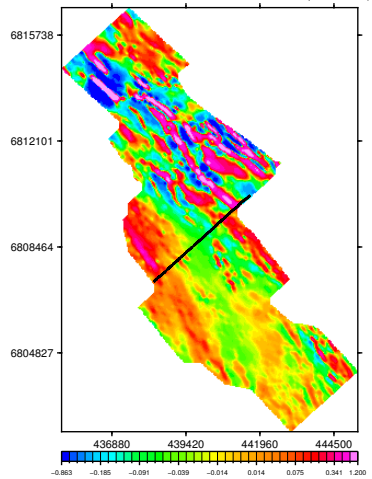
VTEM System:VTEM31−Plus
Job Number:GL160037
Resistivity Depth Image (RDI)
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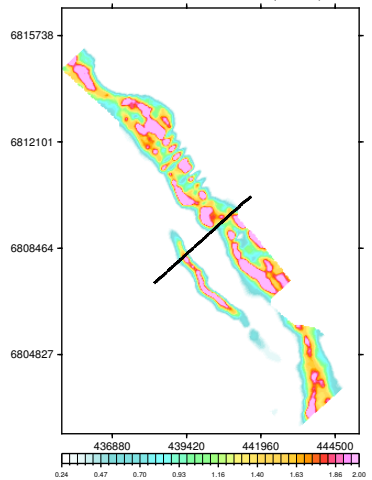
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AIRBORNE GEOPHYSICAL SURVEYS

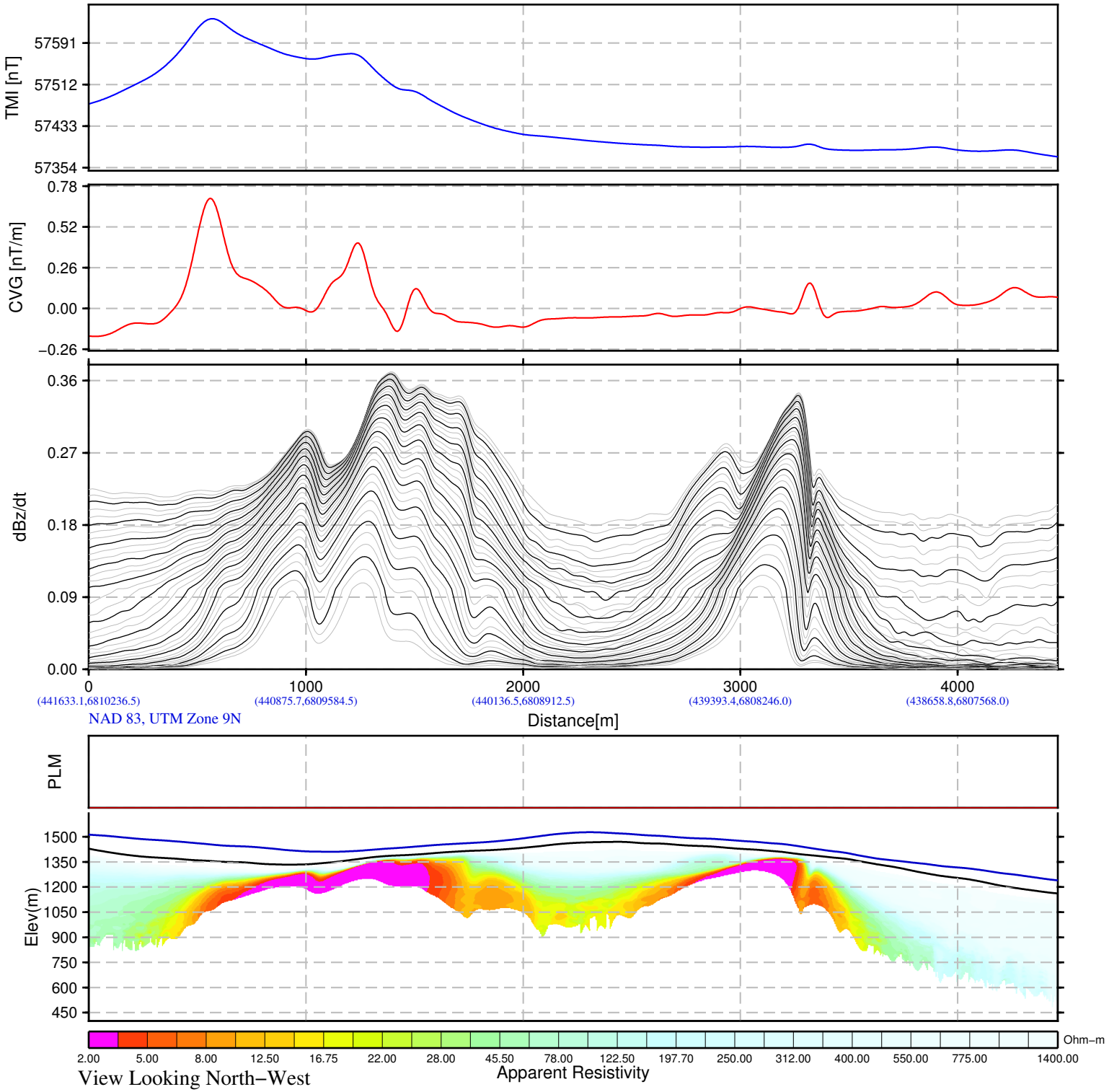
Resistivity Depth Image (RDI) for Line 4500

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

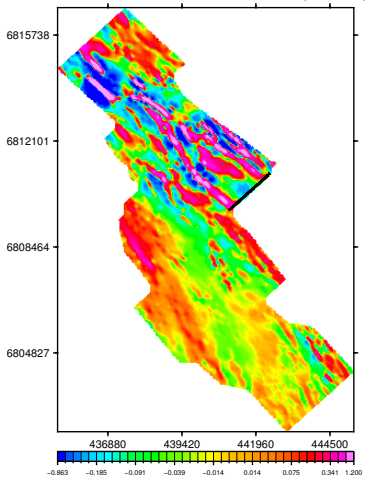
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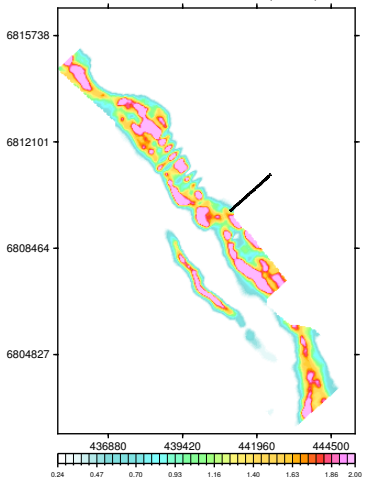
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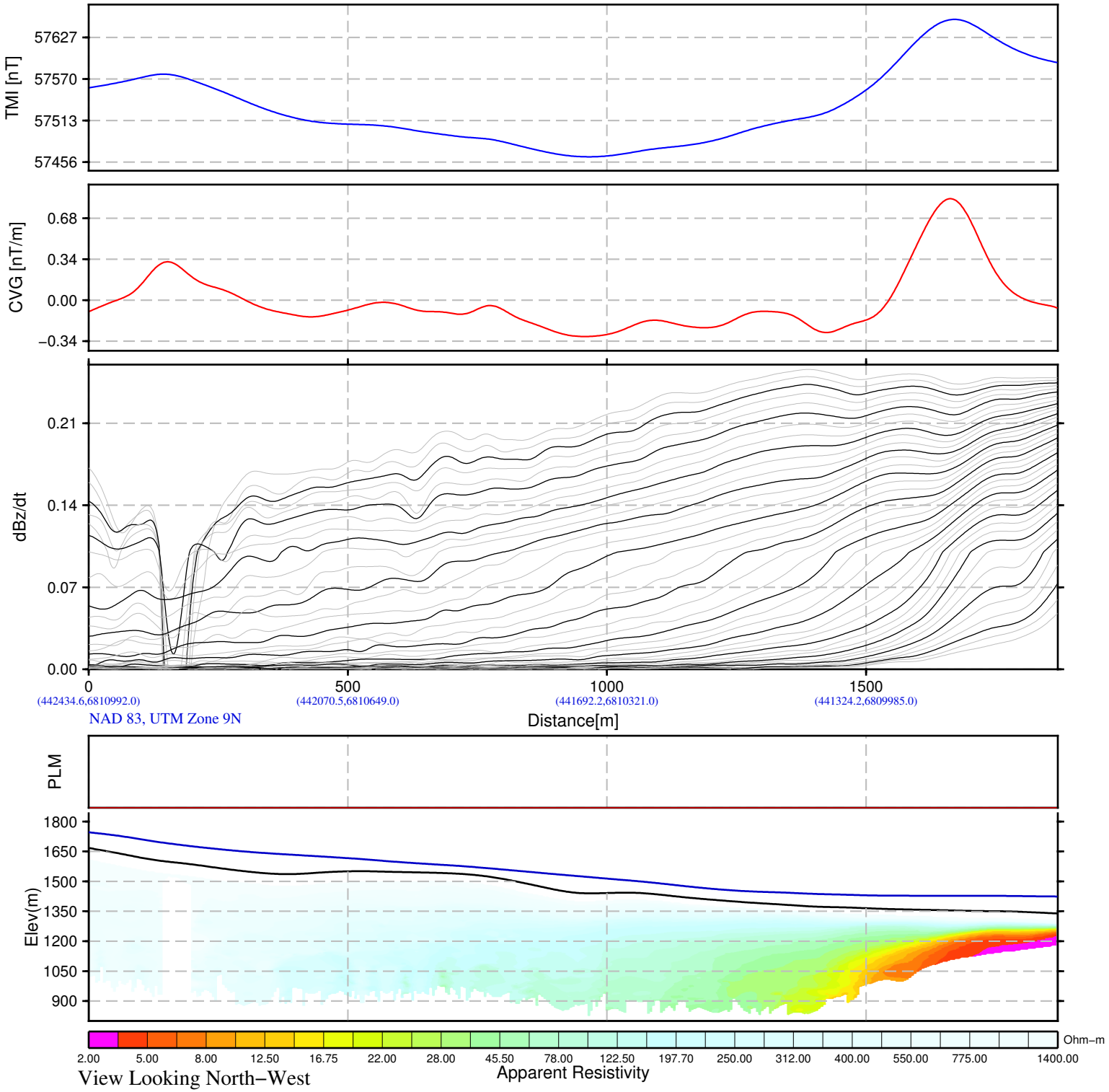
Resistivity Depth Image (RDI) for Line 4501

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

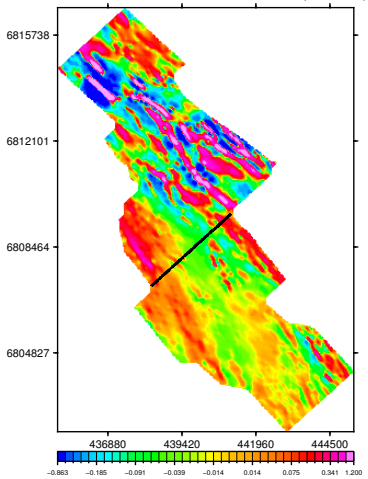
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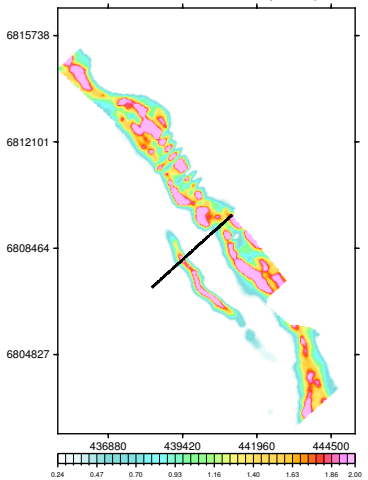
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AIRBORNE GEOPHYSICAL SURVEYS

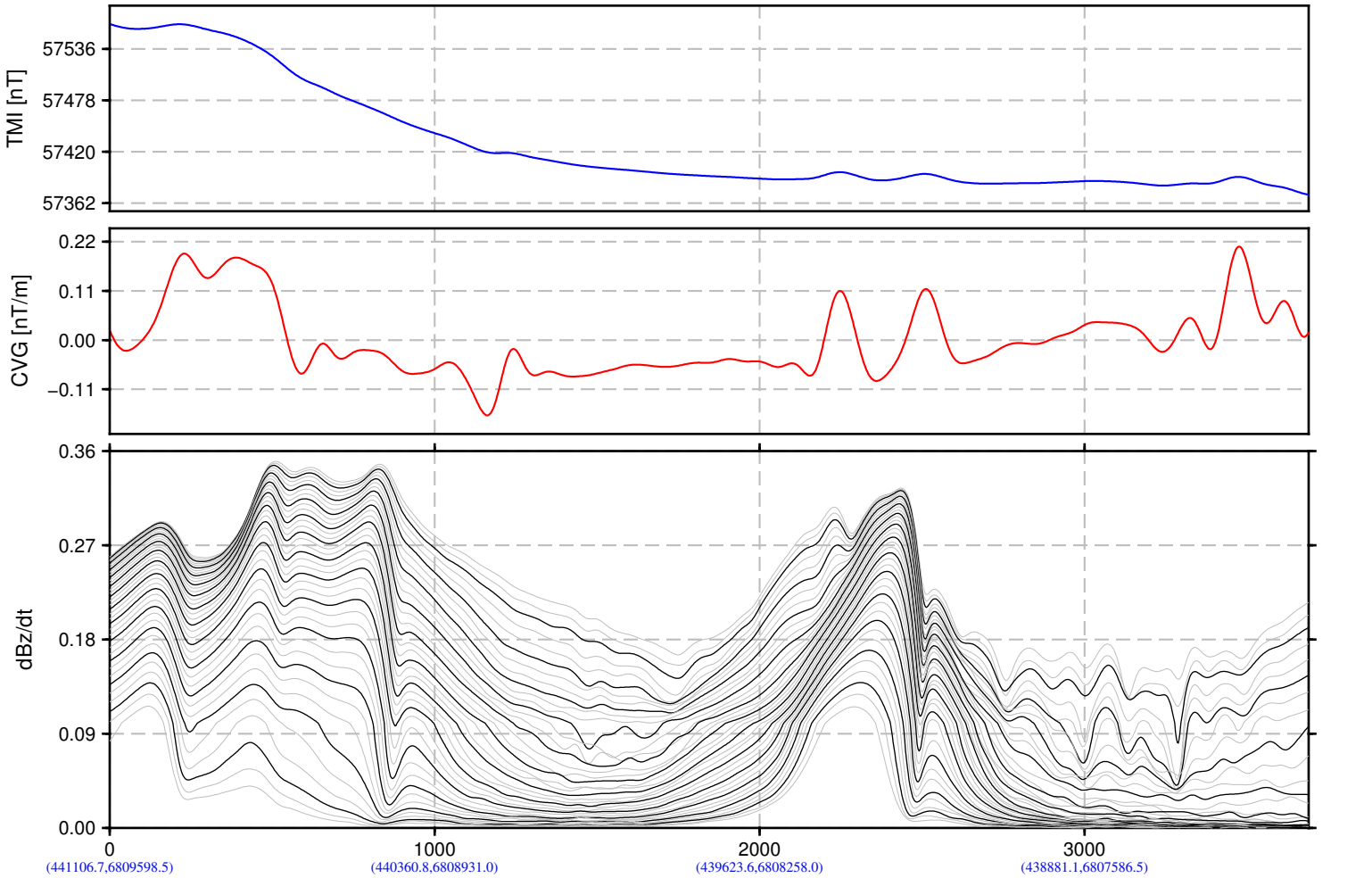
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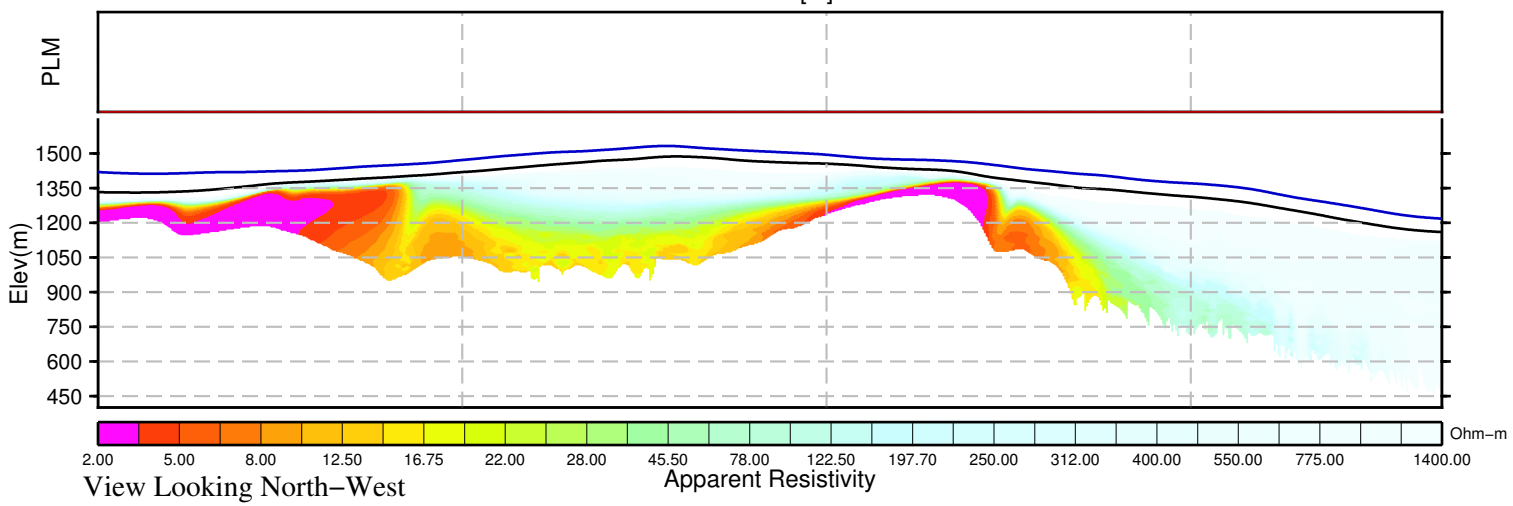
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

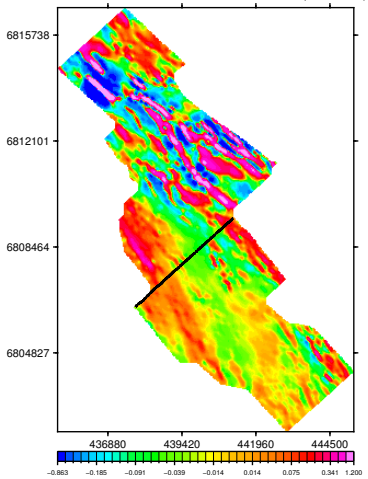
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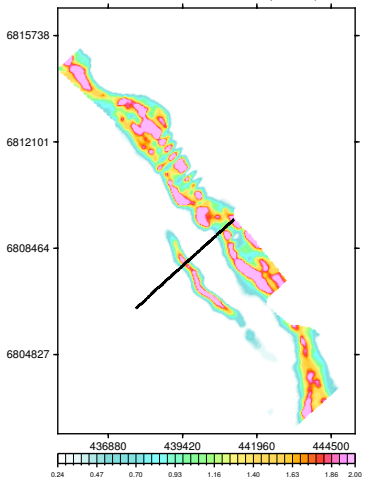
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AIRBORNE GEOPHYSICAL SURVEYS

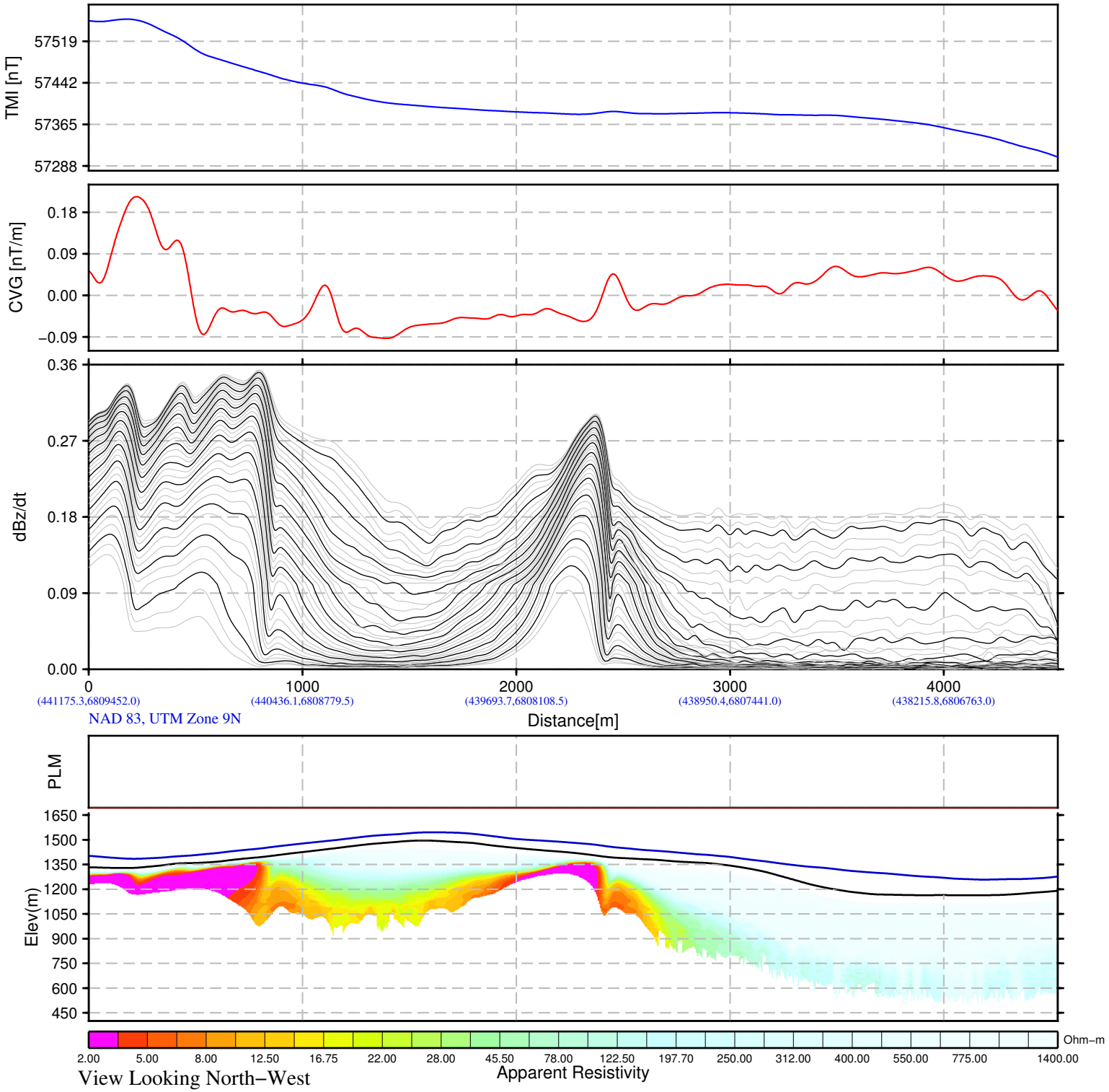
Resistivity Depth Image (RDI) for Line 4520

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

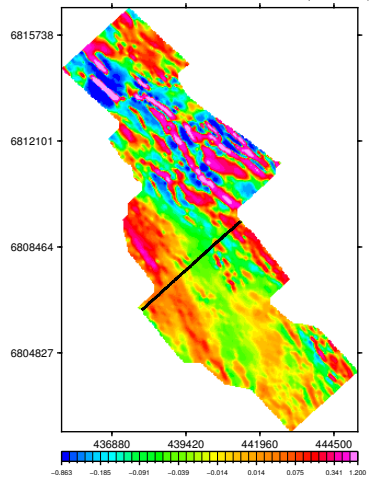
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Job Number:GL160037
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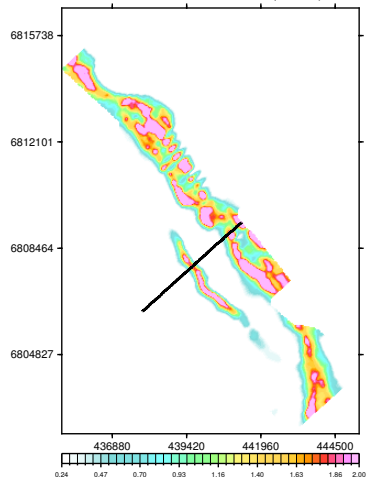
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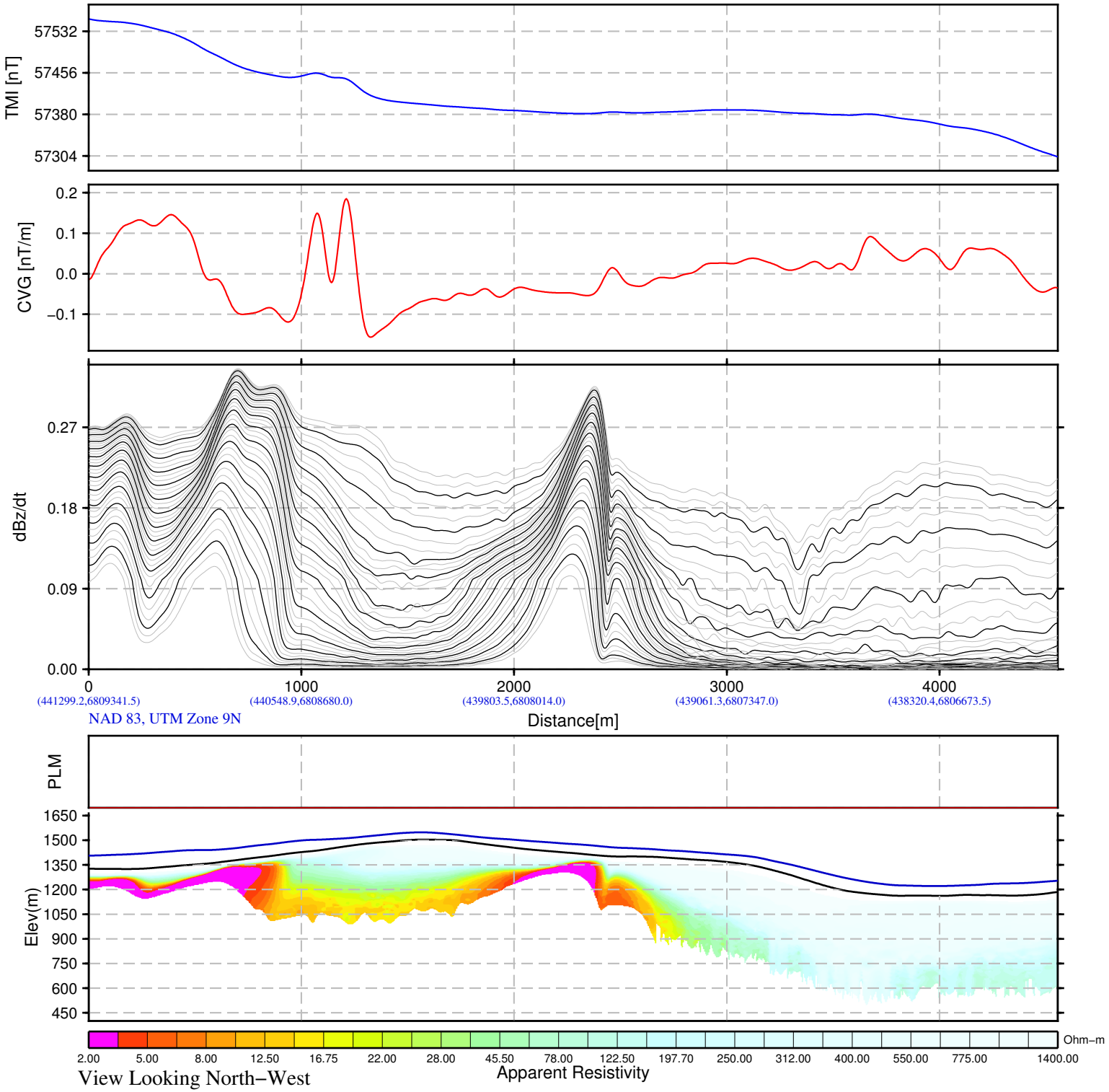
Resistivity Depth Image (RDI) for Line 4530

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

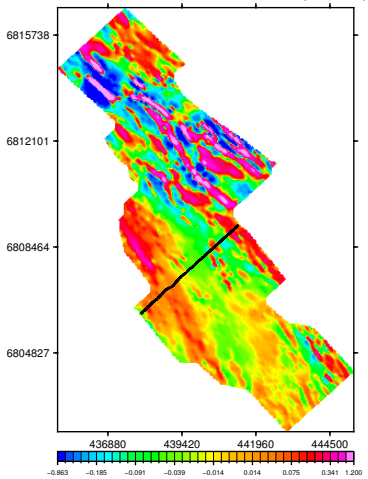
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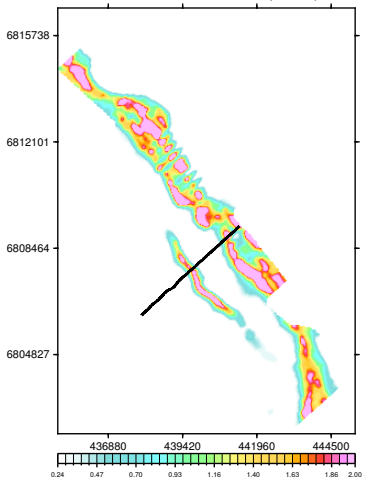
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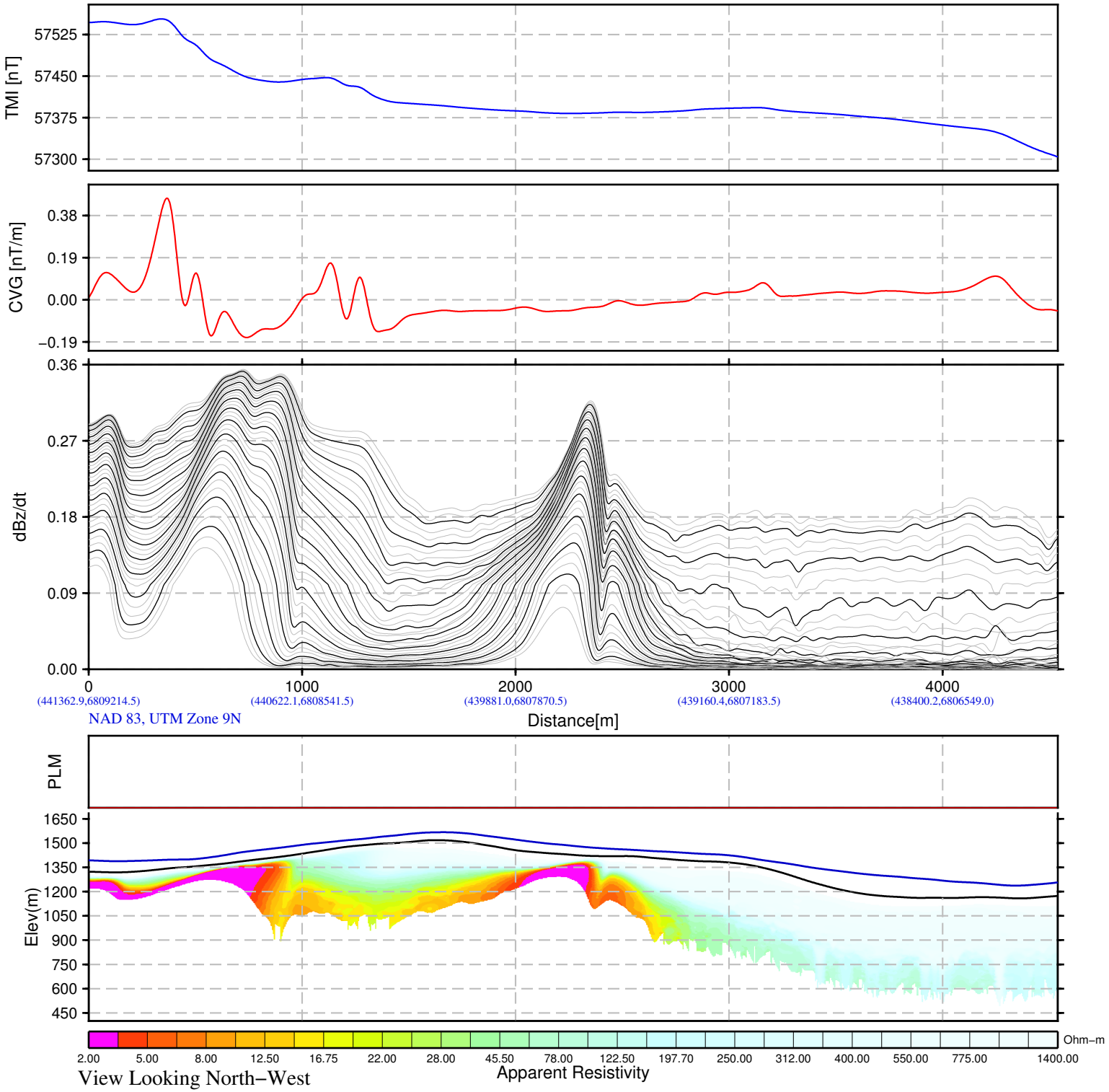
Resistivity Depth Image (RDI) for Line 4540

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

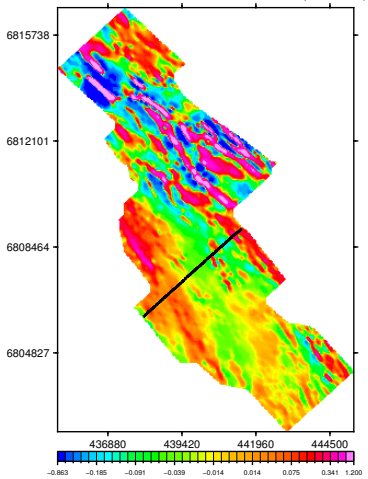
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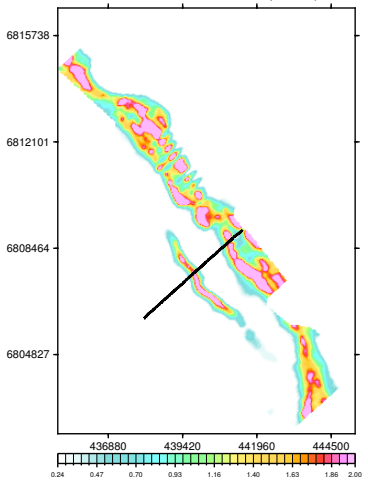
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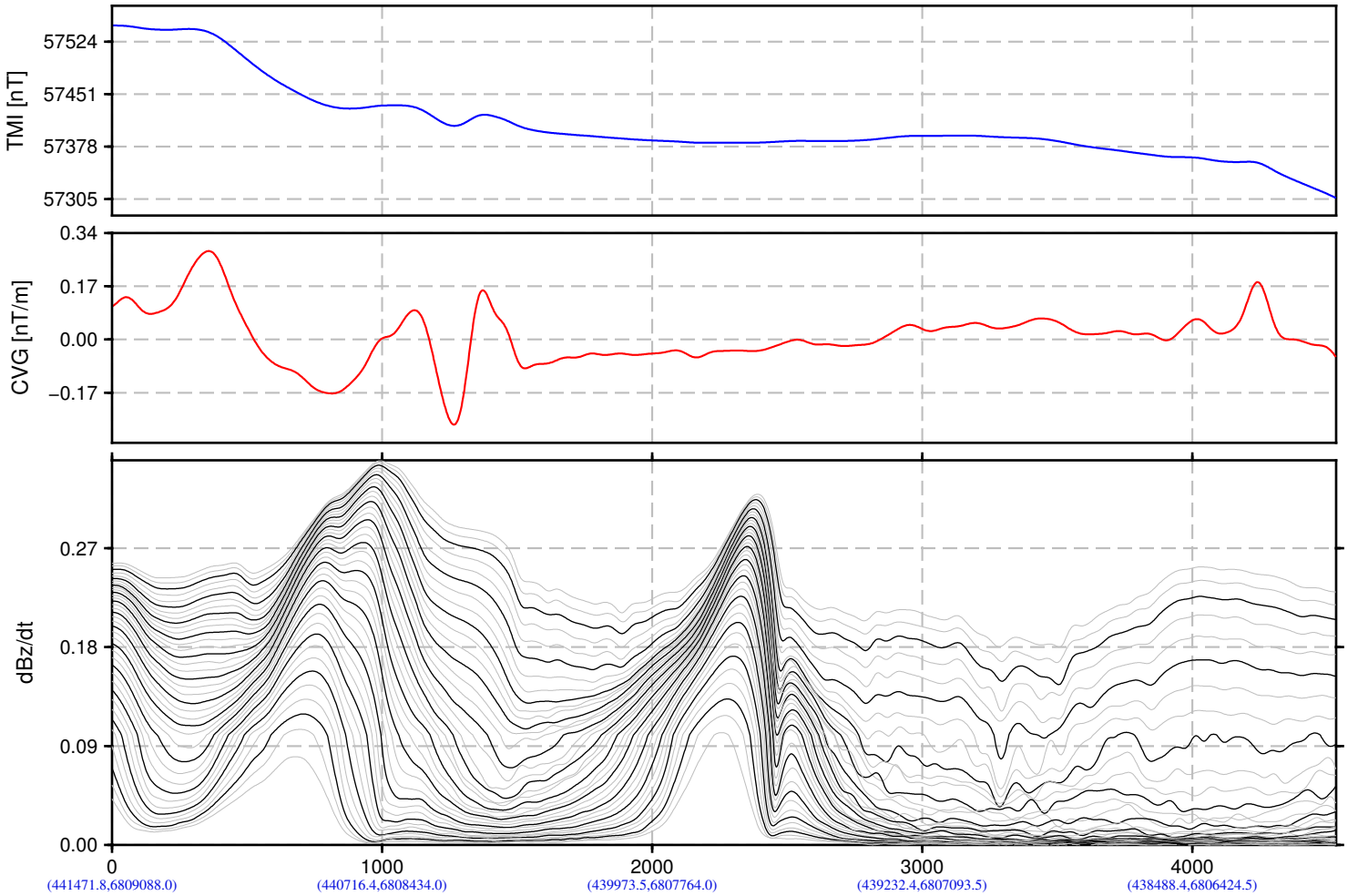
Resistivity Depth Image (RDI) for Line 4550

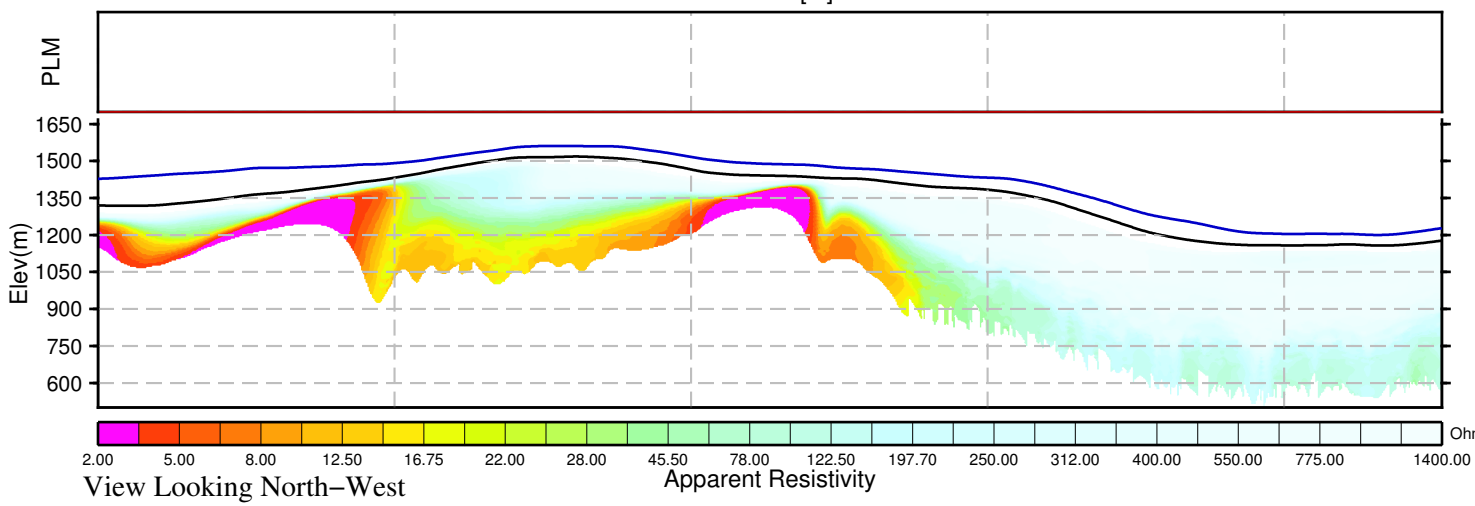
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

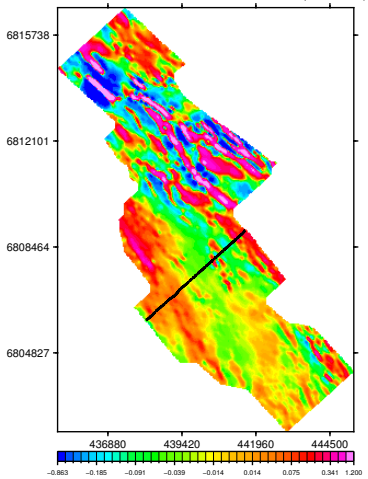
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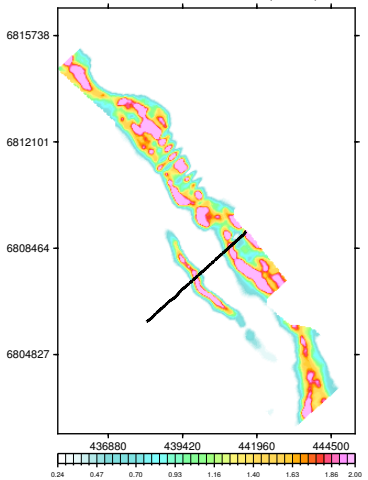
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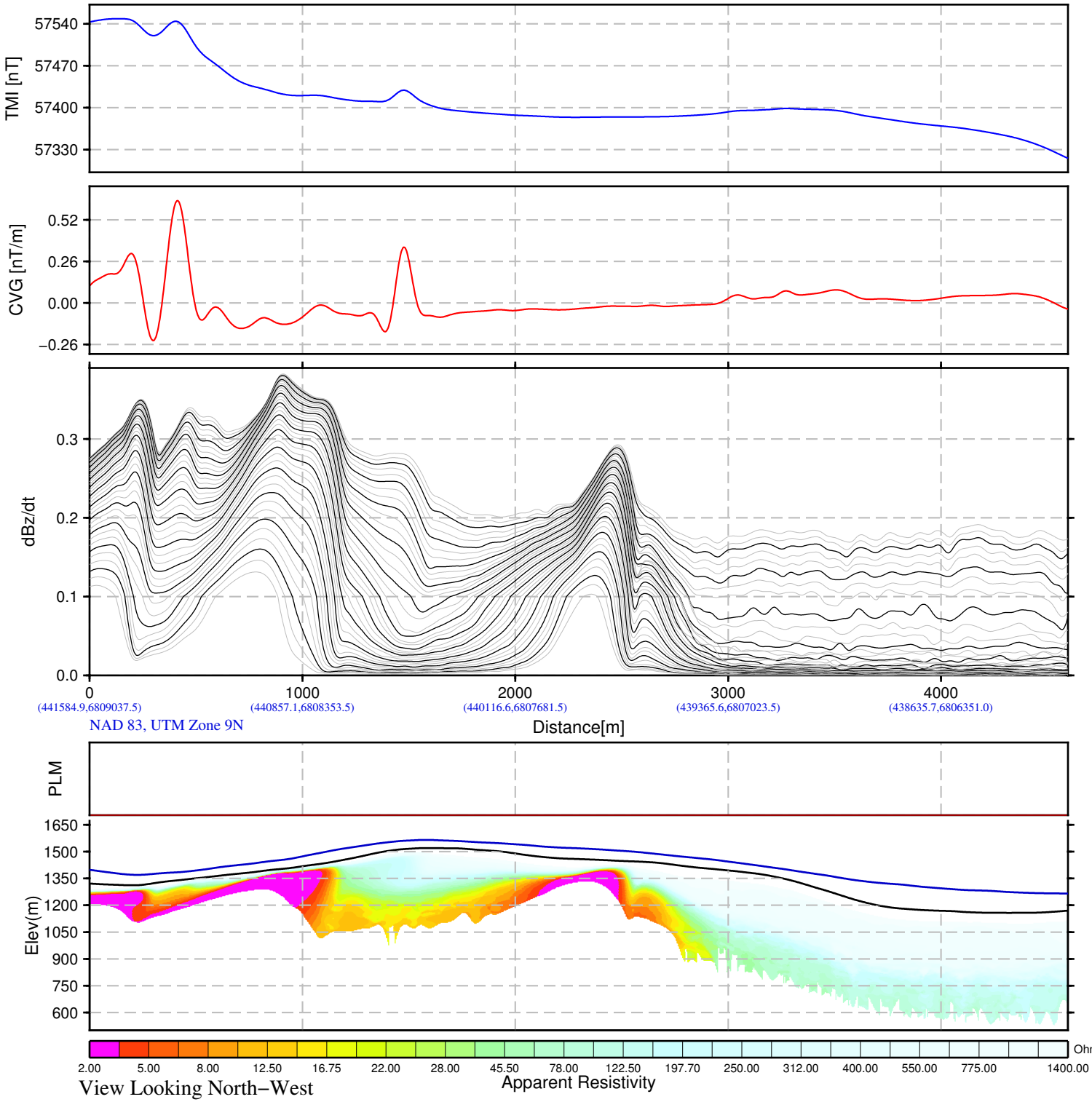
Resistivity Depth Image (RDI) for Line 4560

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

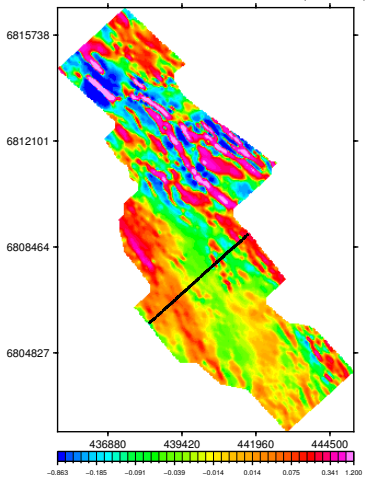
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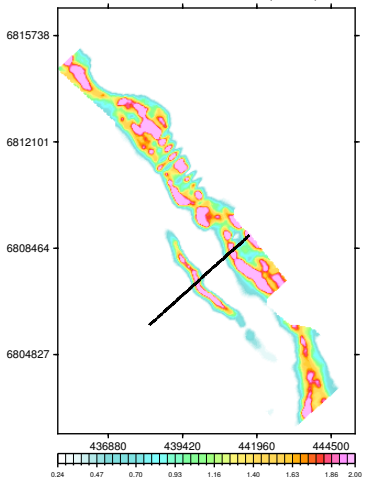
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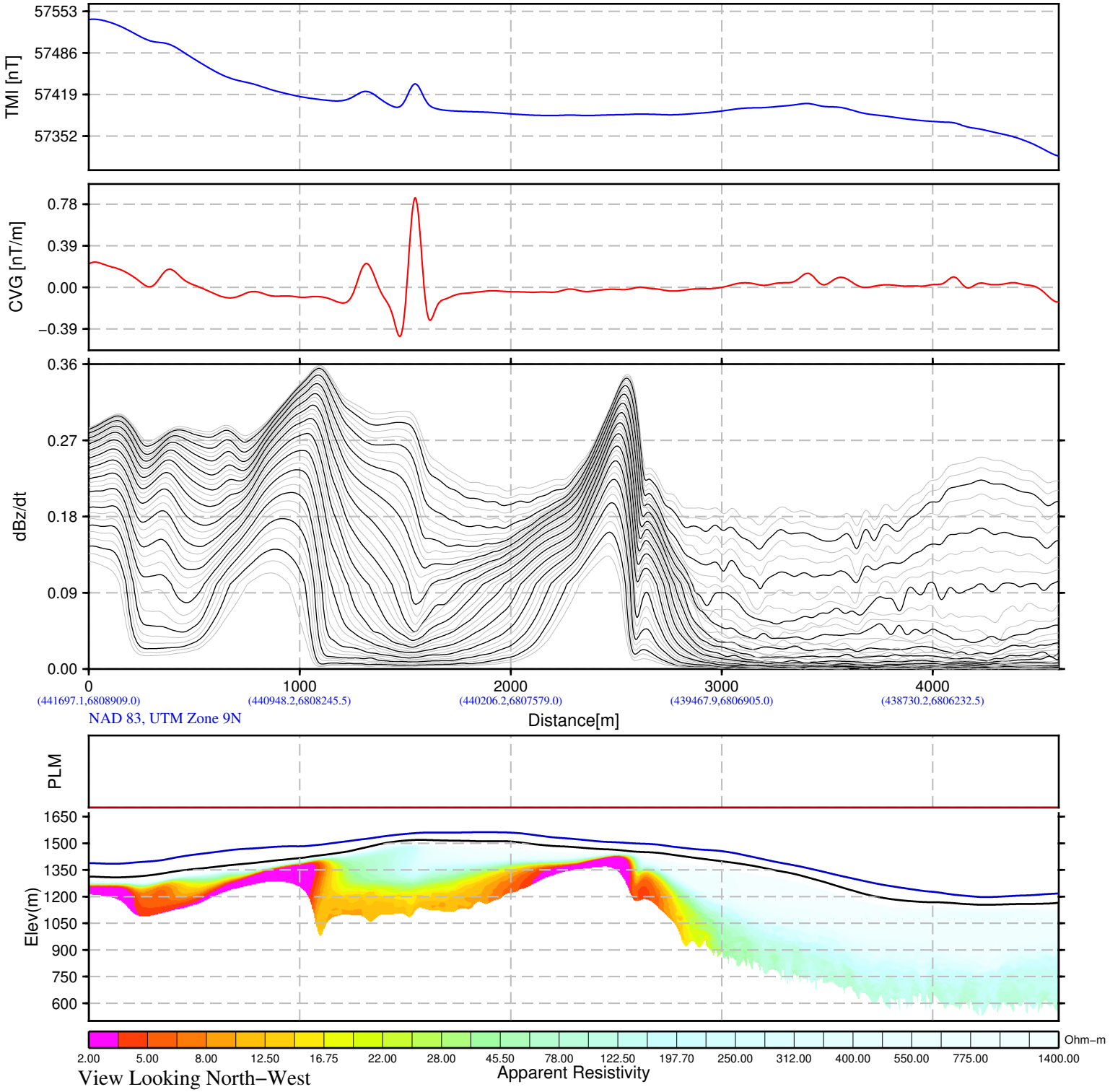
Resistivity Depth Image (RDI) for Line 4570

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

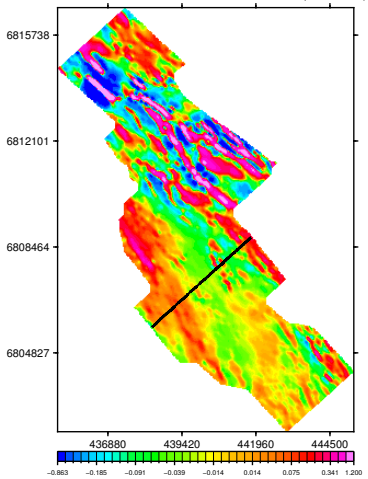
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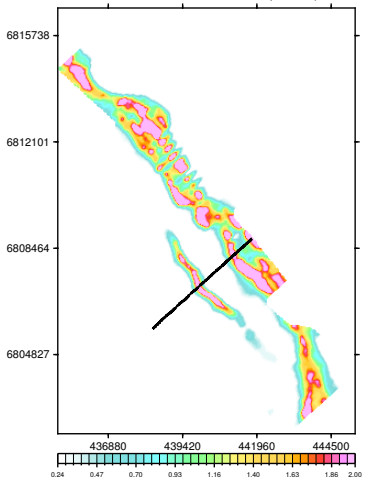
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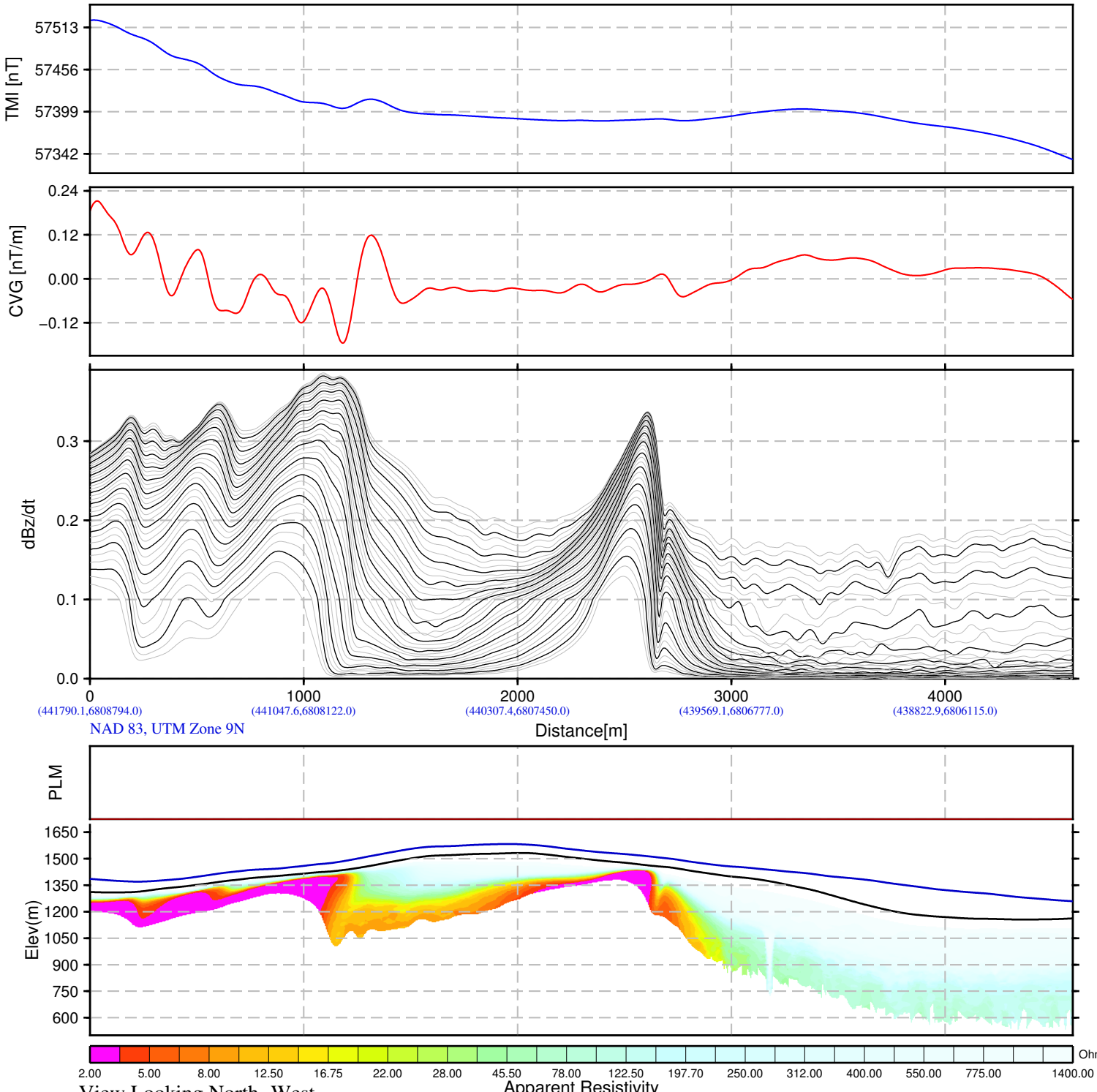
Resistivity Depth Image (RDI) for Line 4580

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





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Pelly Block
Yukon, Canada

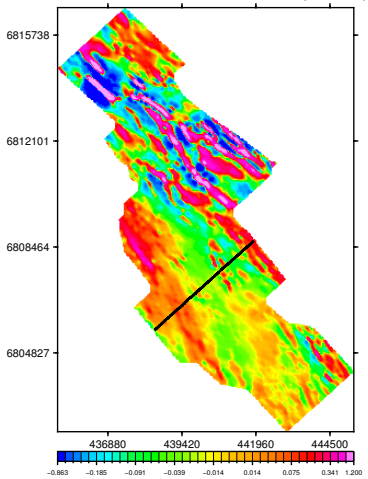
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Job Number:GL160037
Resistivity Depth Image (RDI)
Flown by Geotech Ltd.
Processed by Geotech Ltd.
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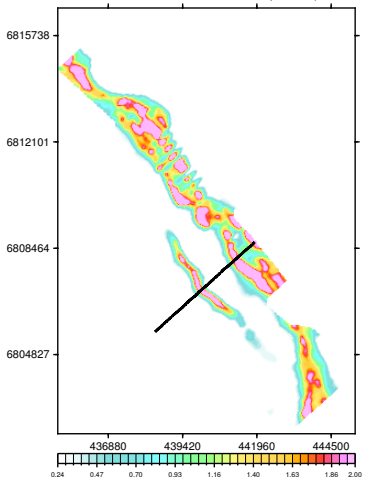
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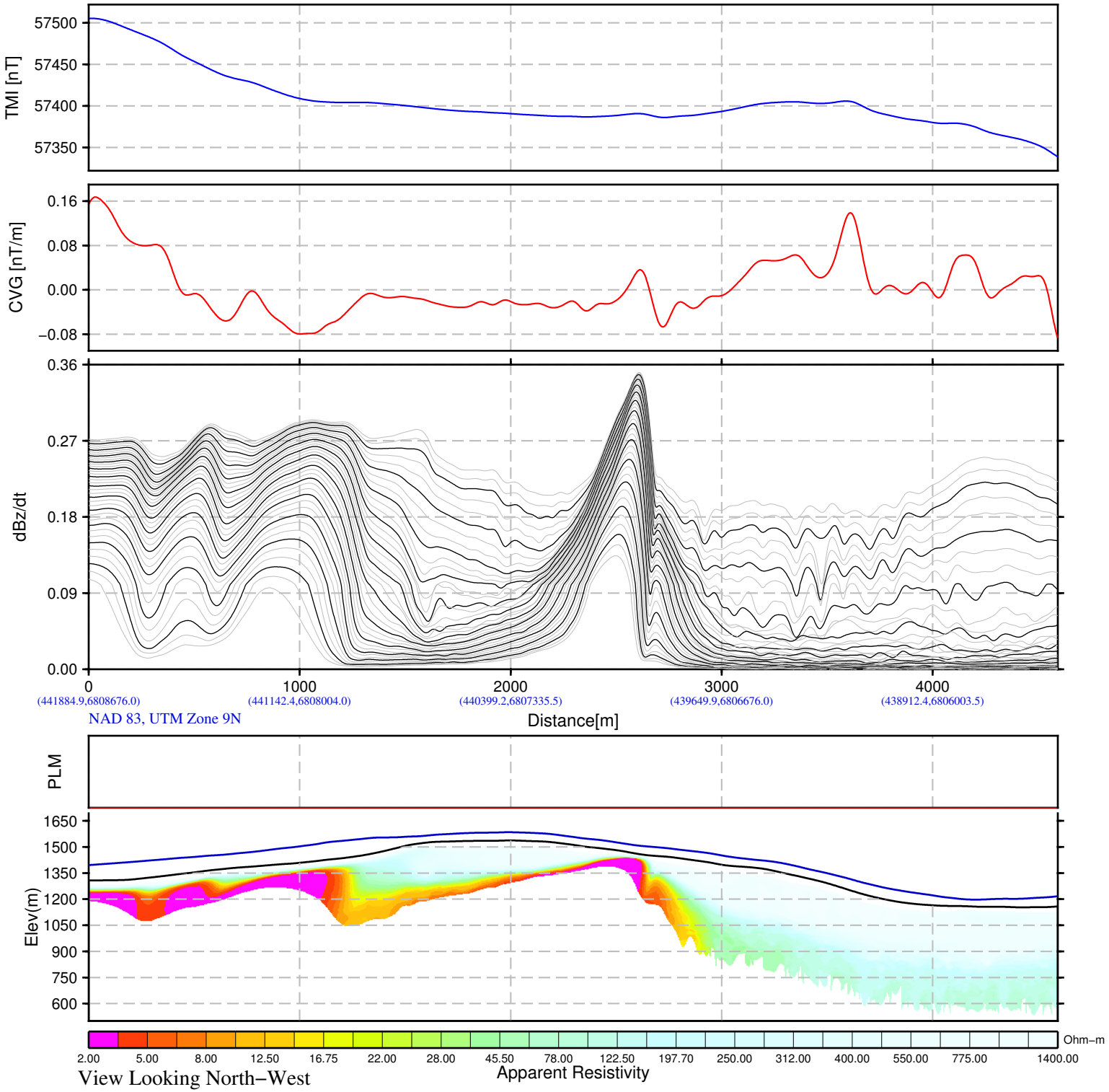
Resistivity Depth Image (RDI) for Line 4590

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

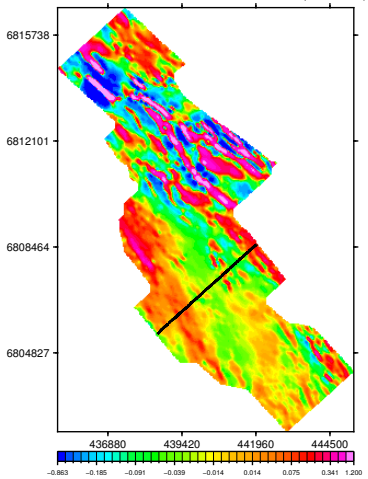
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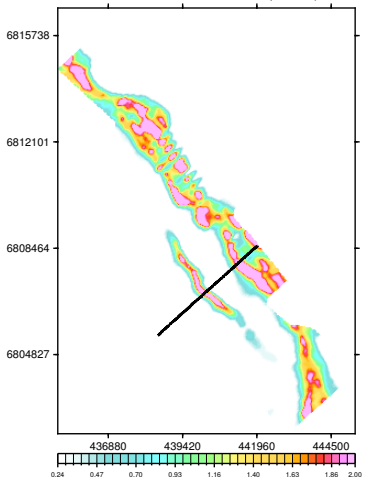
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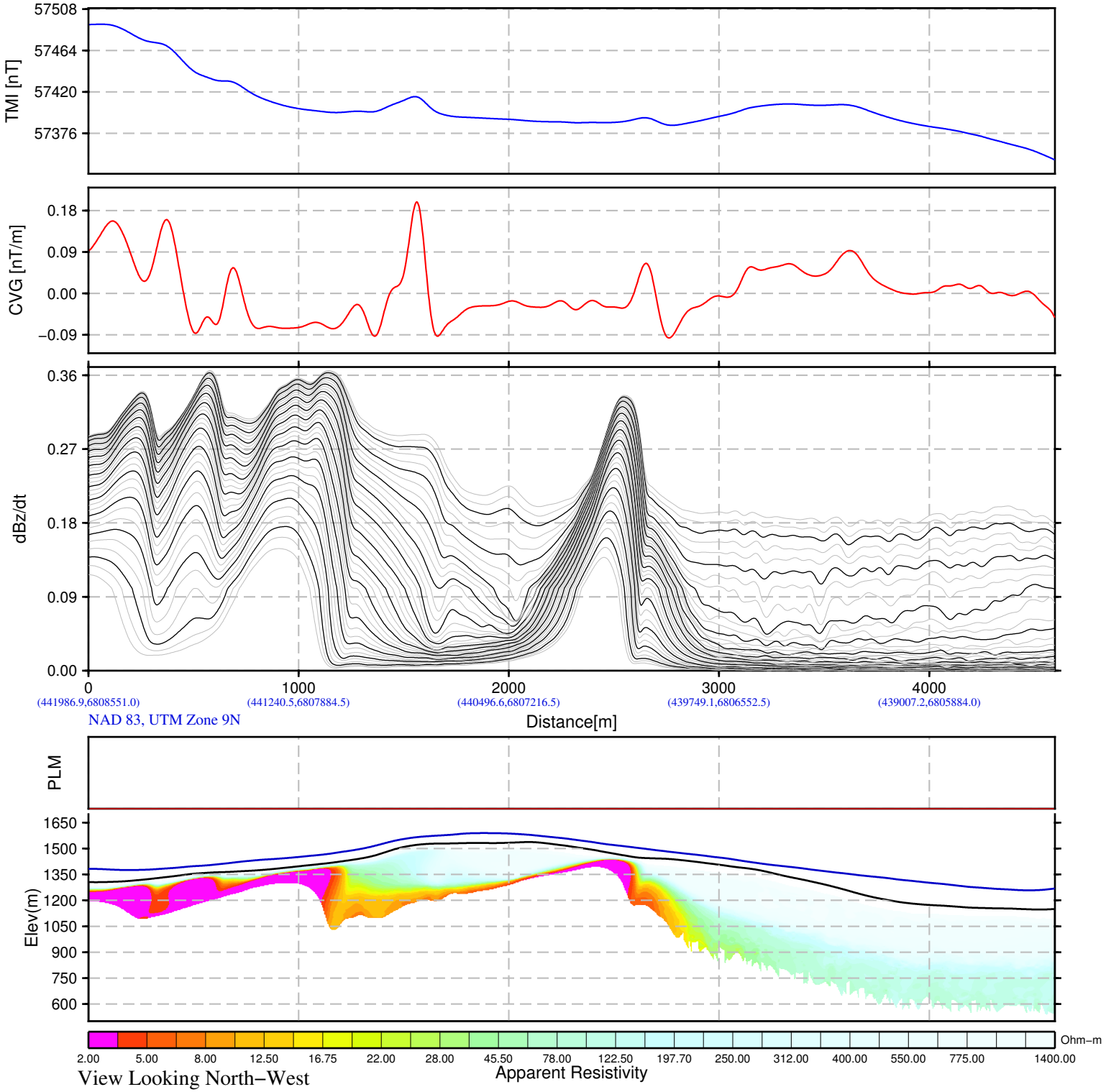
Resistivity Depth Image (RDI) for Line 4605

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

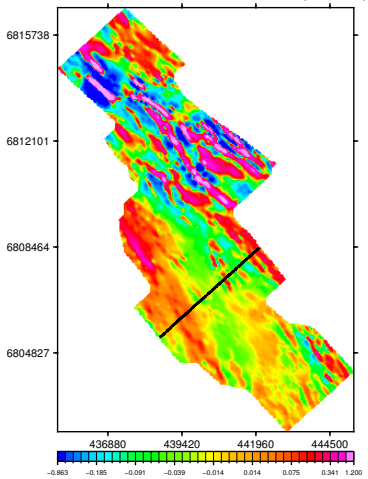
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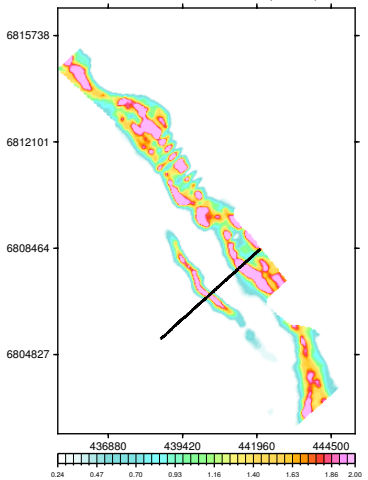
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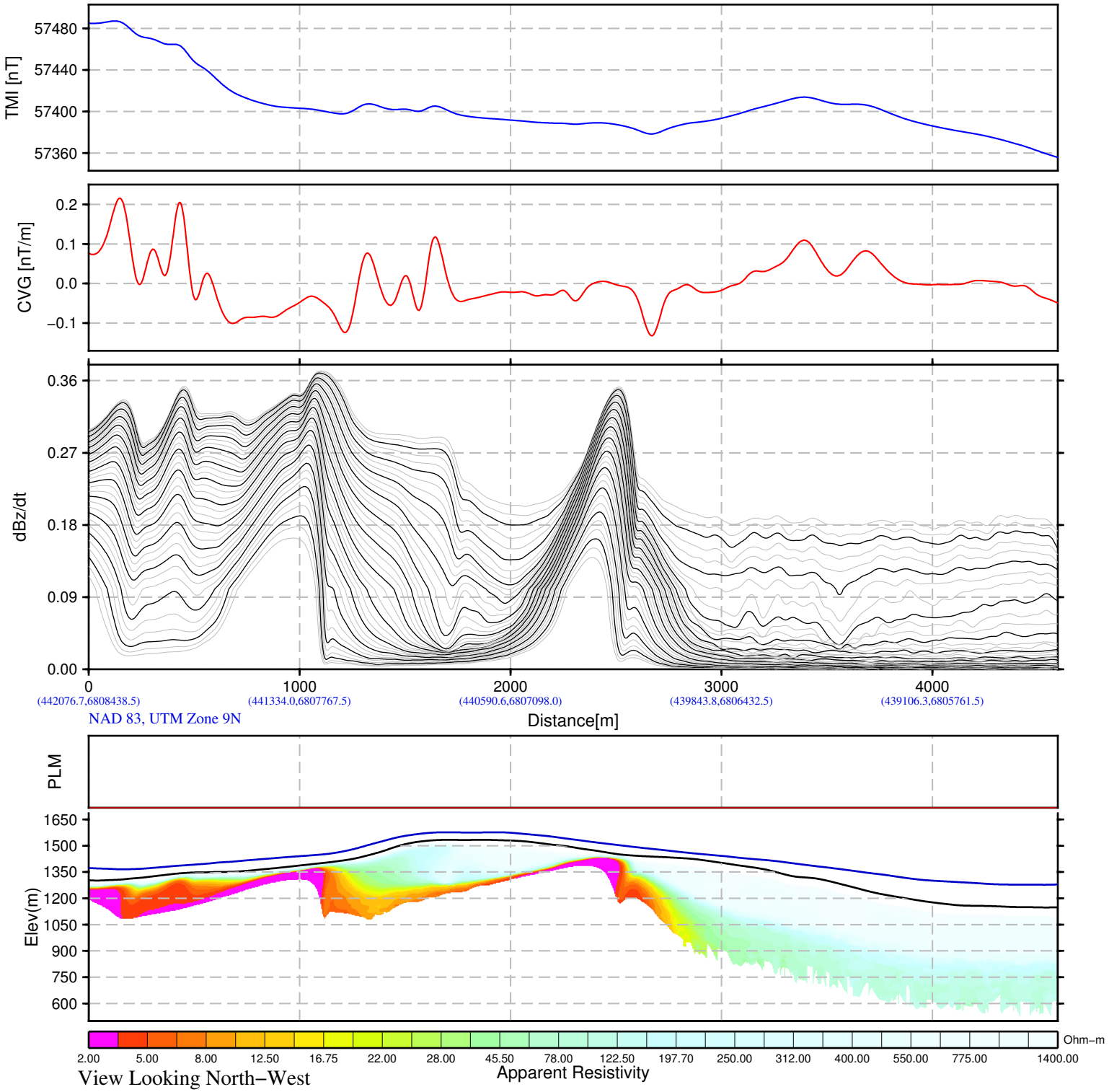
Resistivity Depth Image (RDI) for Line 4615

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

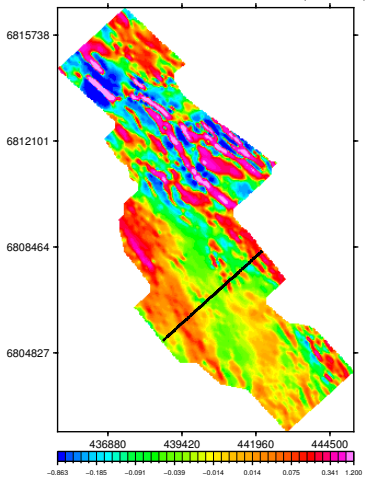
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Job Number:GL160037
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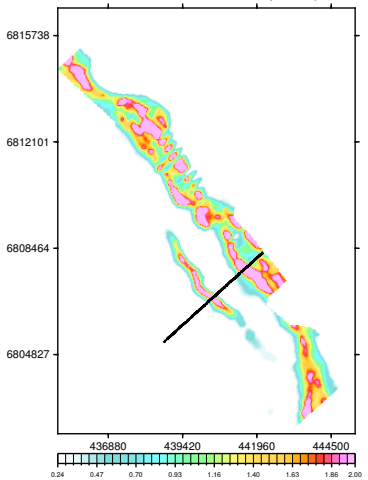
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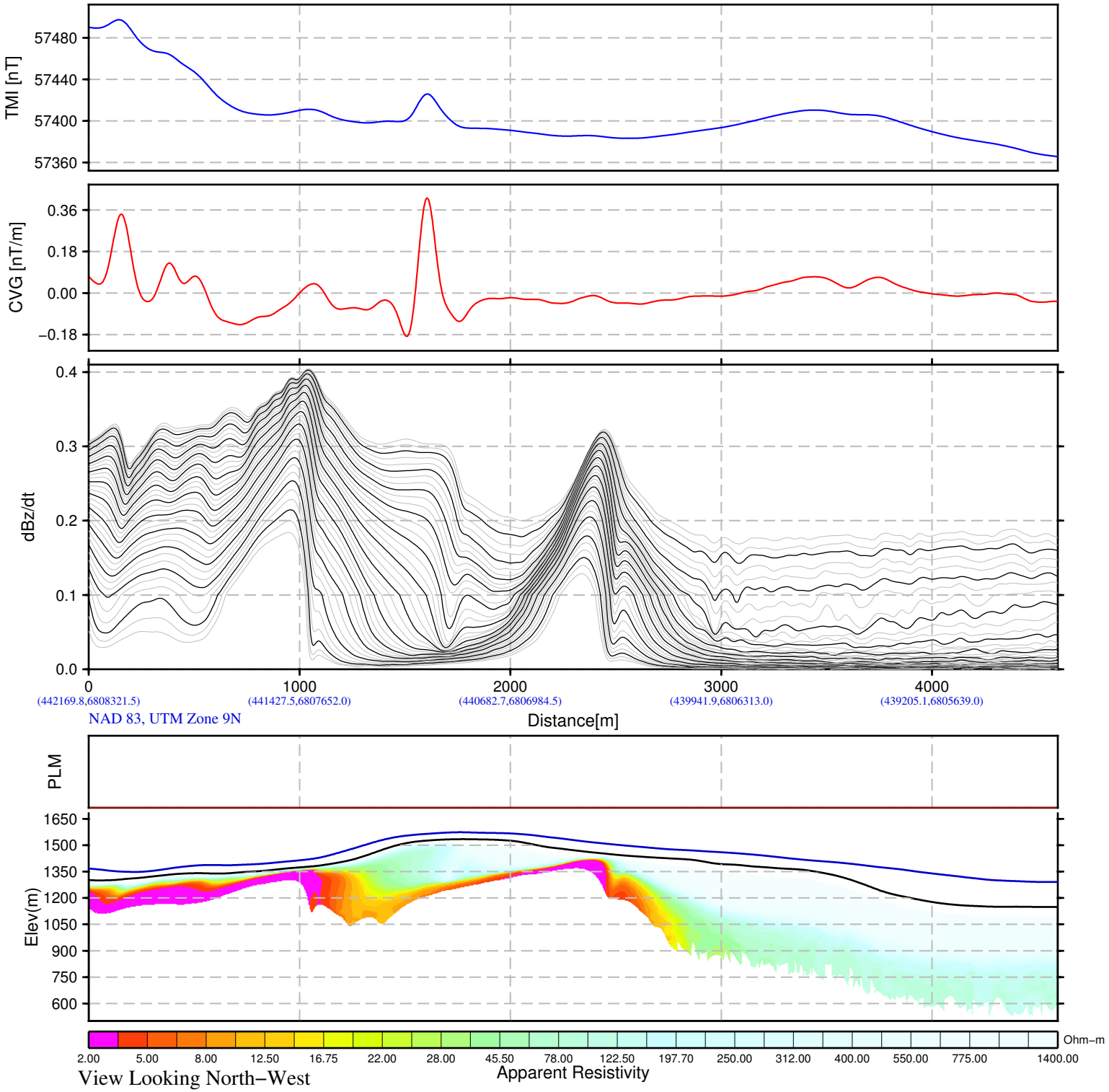
Resistivity Depth Image (RDI) for Line 4625

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

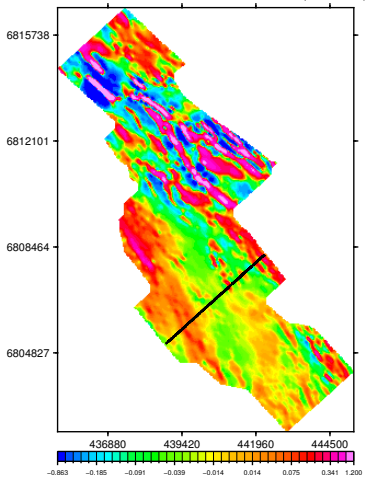
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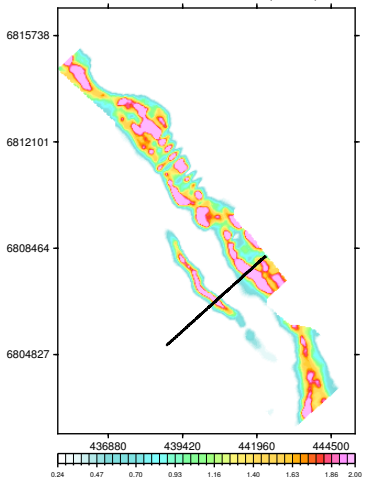
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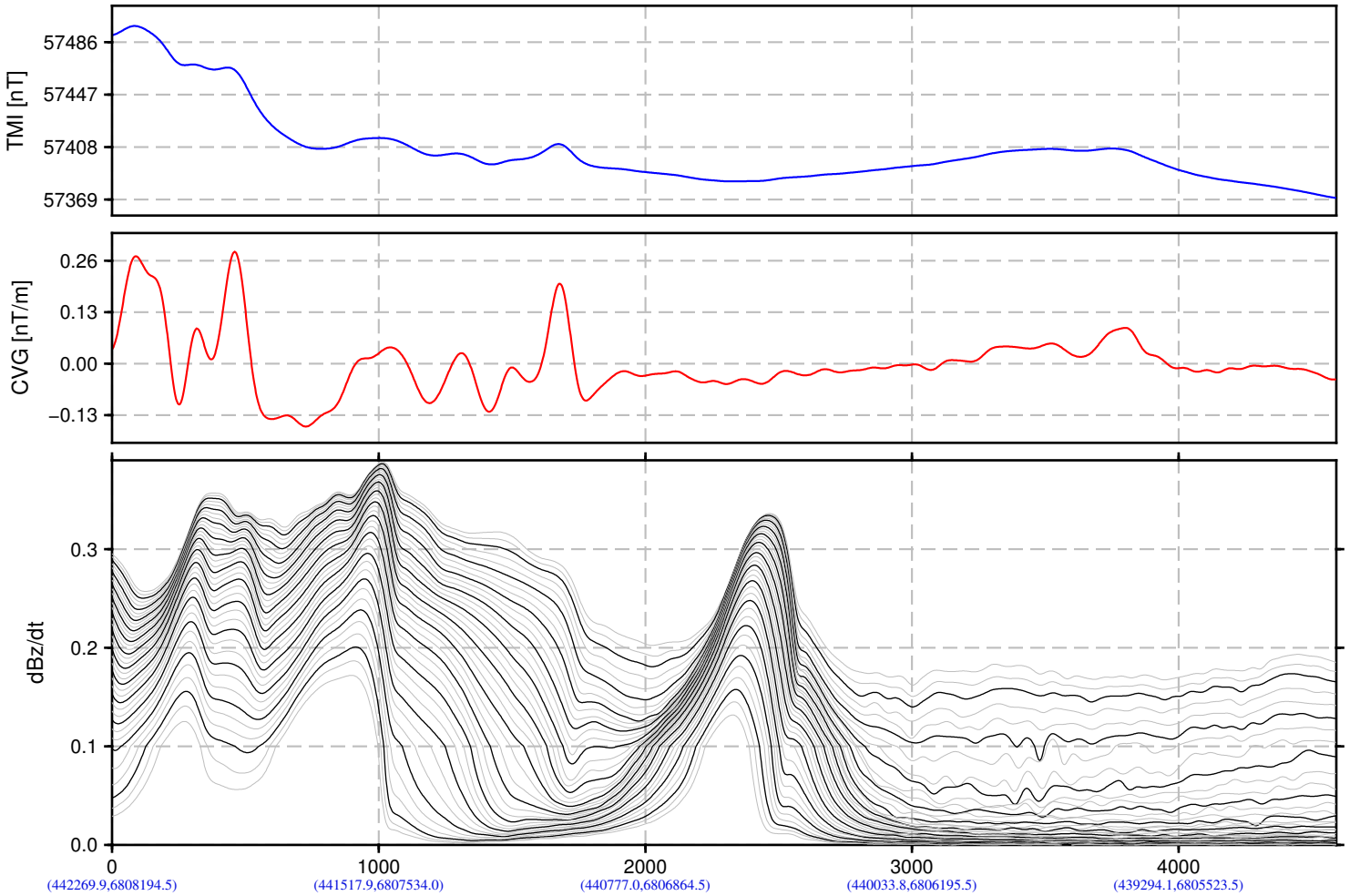
Resistivity Depth Image (RDI) for Line 4635

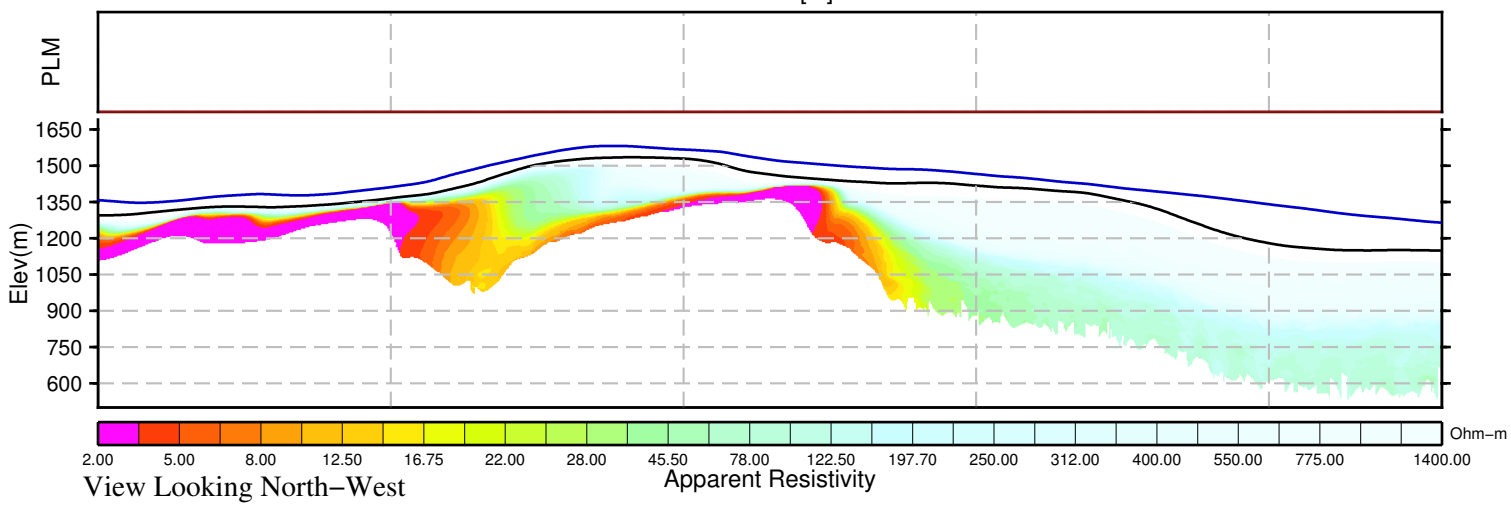
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

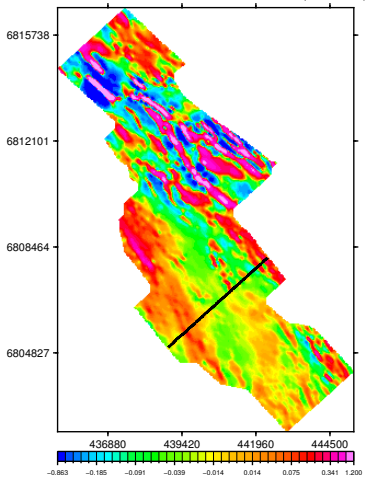
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Job Number:GL160037
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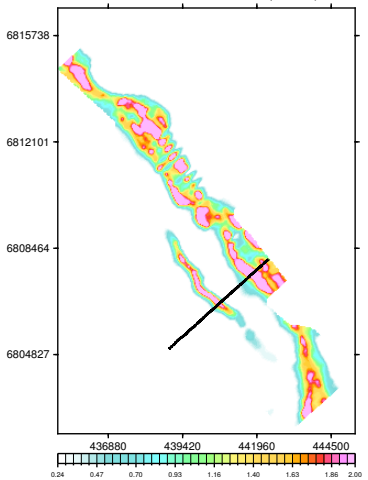
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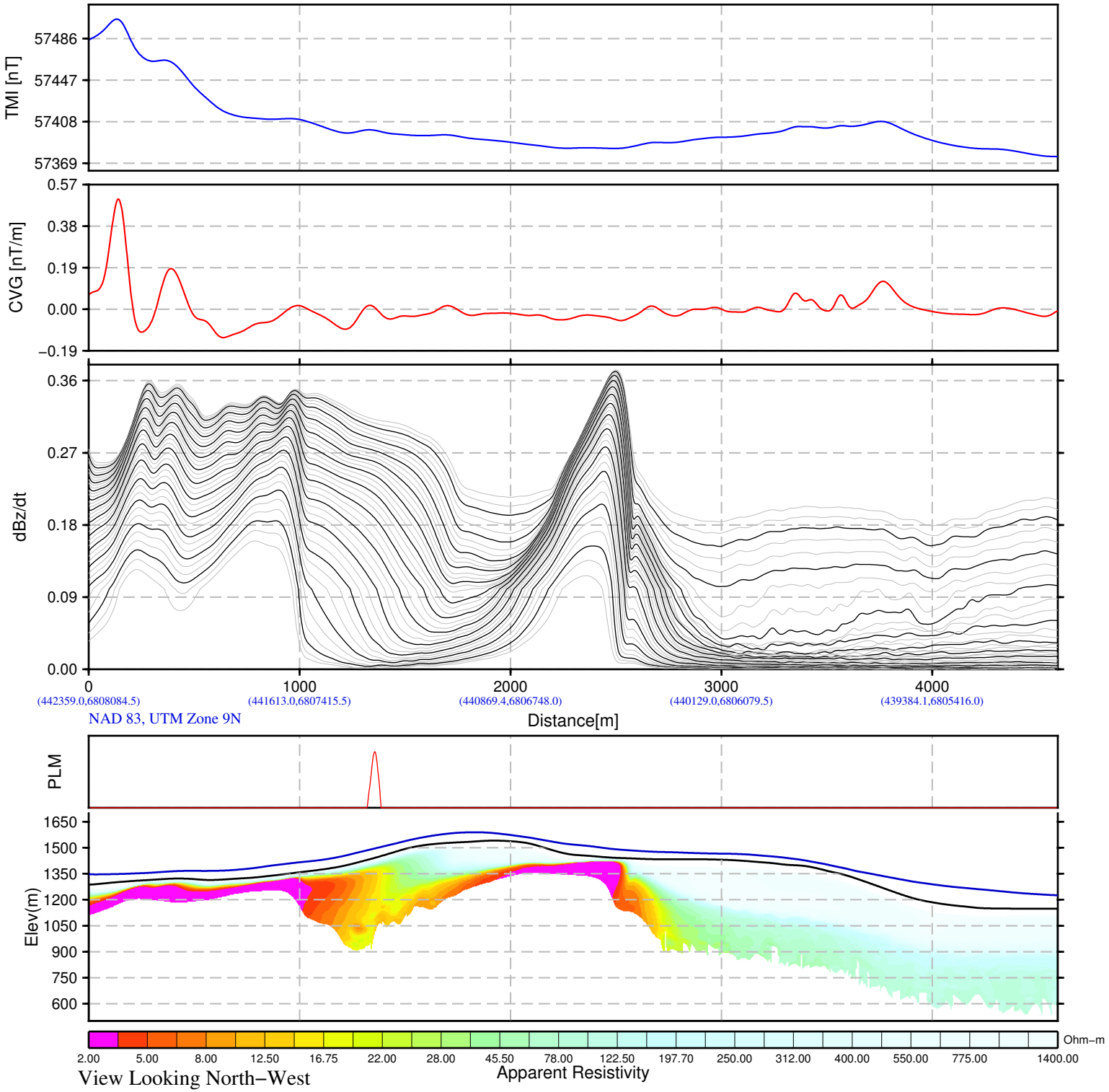
Resistivity Depth Image (RDI) for Line 4645

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

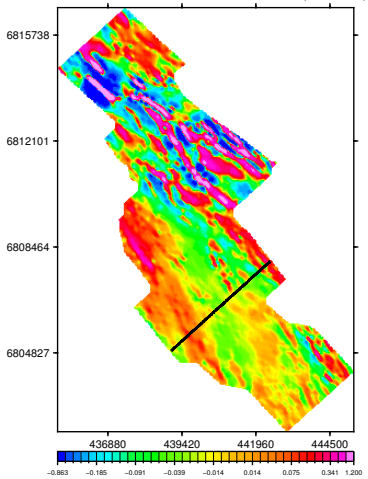
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Job Number:GL160037
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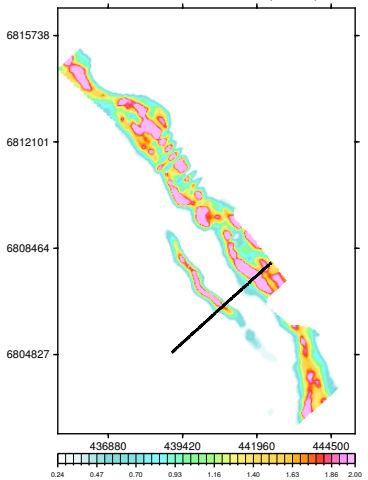
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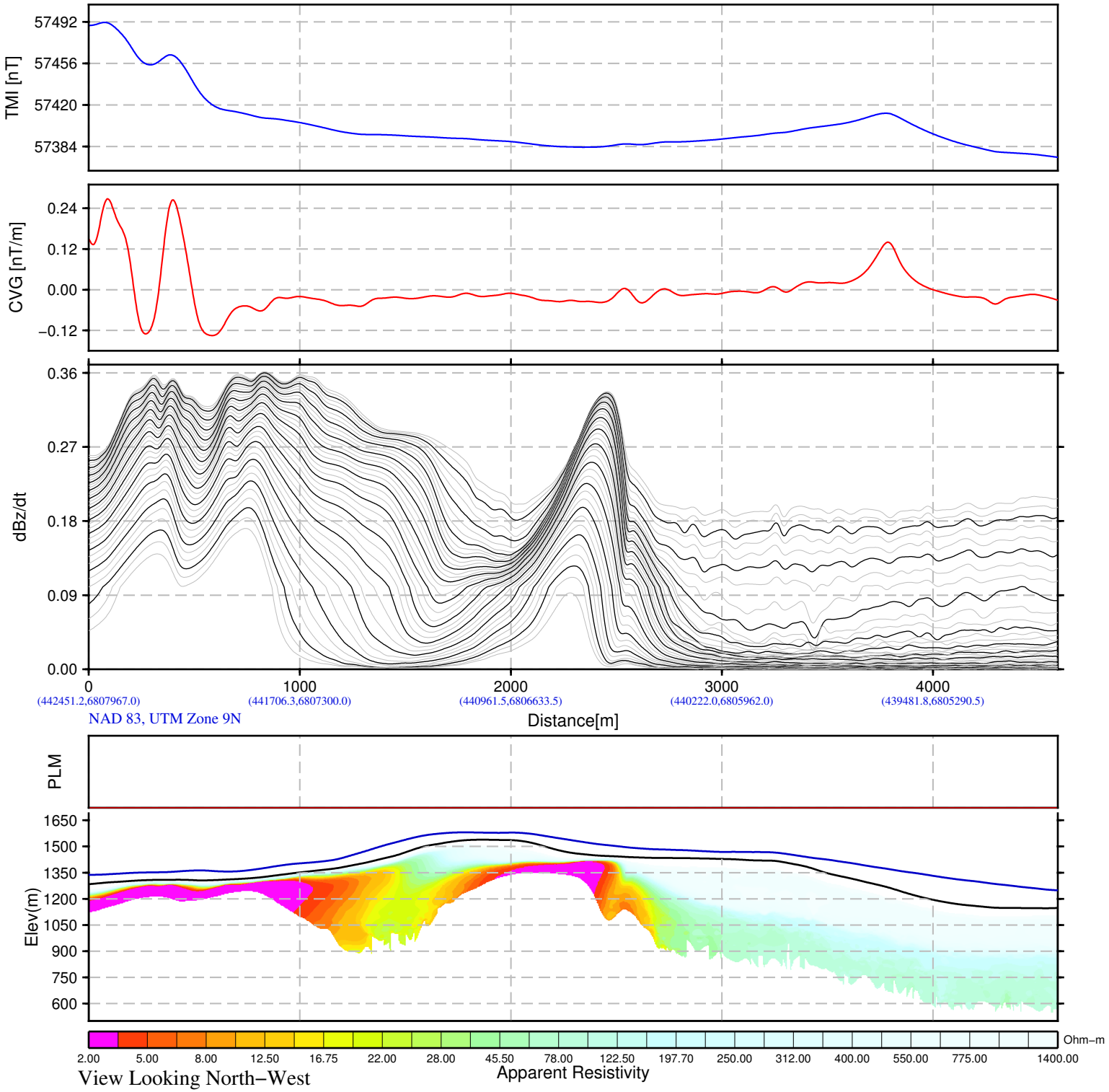
Resistivity Depth Image (RDI) for Line 4650

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

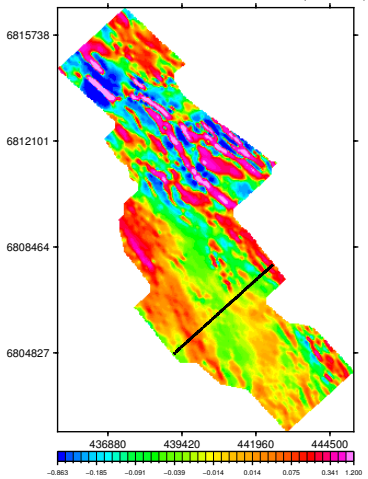
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Job Number:GL160037
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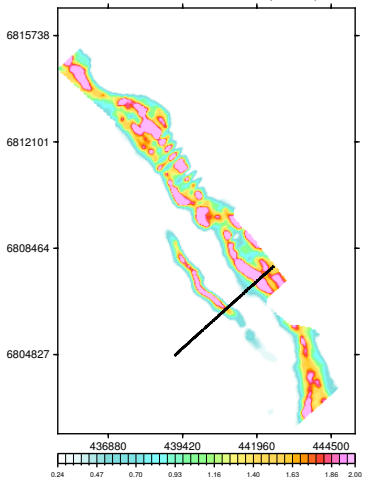
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AIRBORNE GEOPHYSICAL SURVEYS

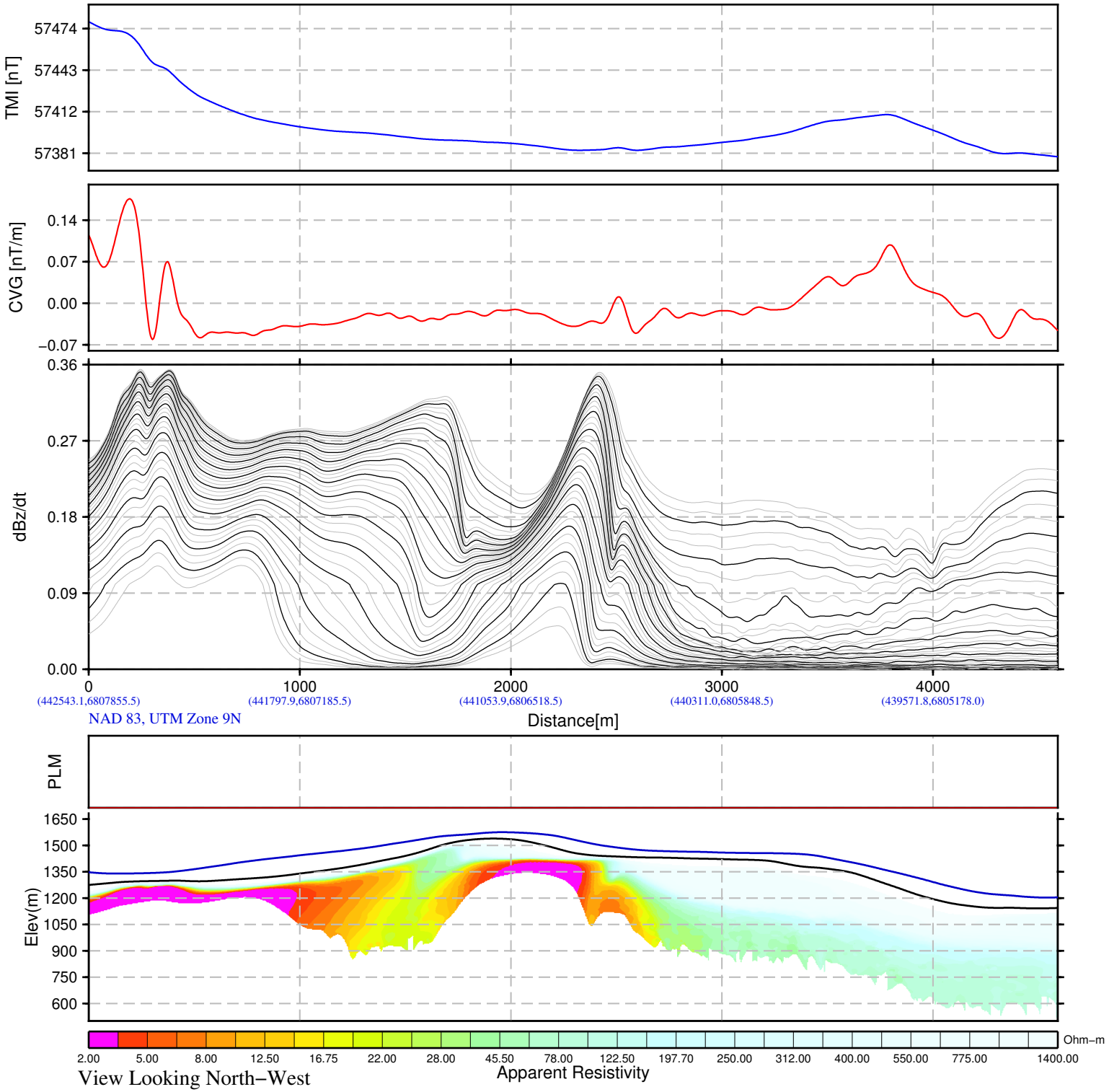
Resistivity Depth Image (RDI) for Line 4665

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

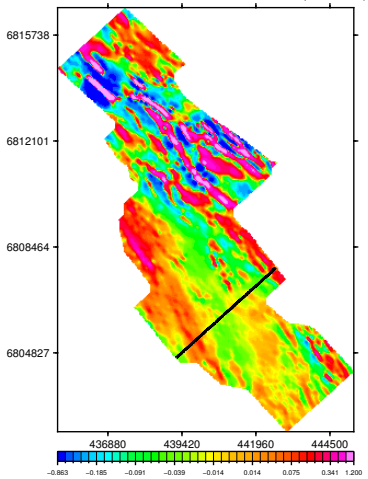
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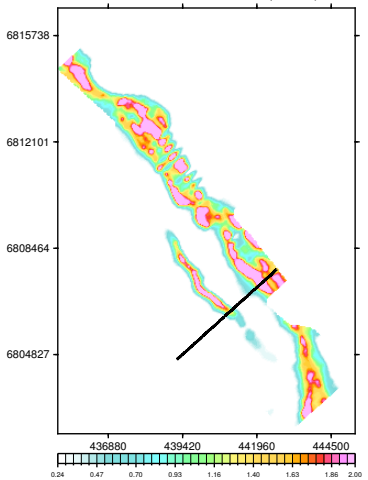
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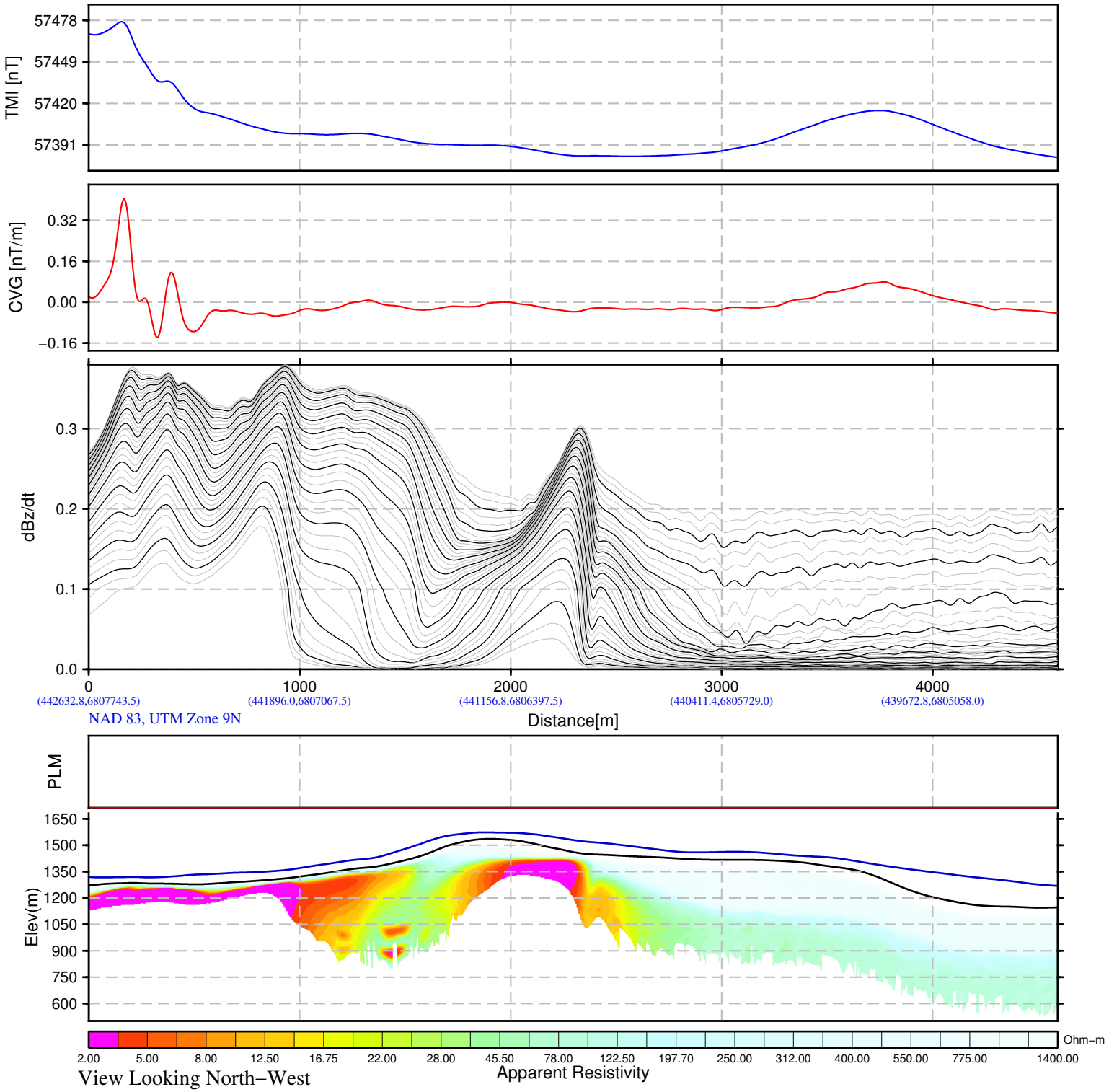
Resistivity Depth Image (RDI) for Line 4670

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

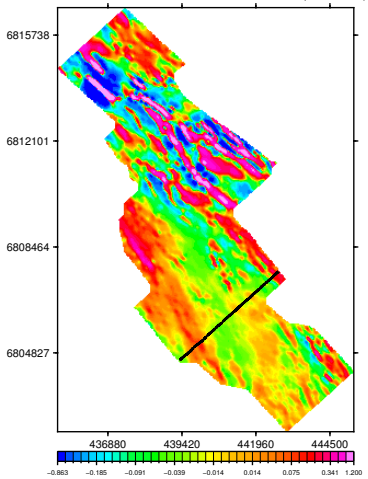
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Job Number:GL160037
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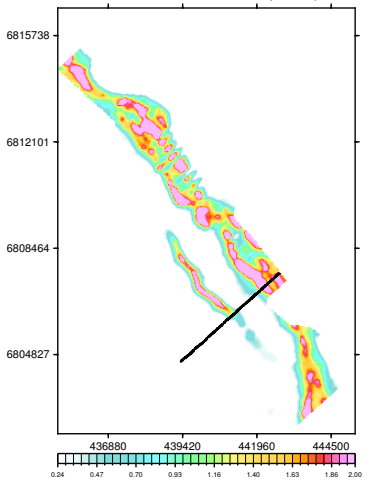
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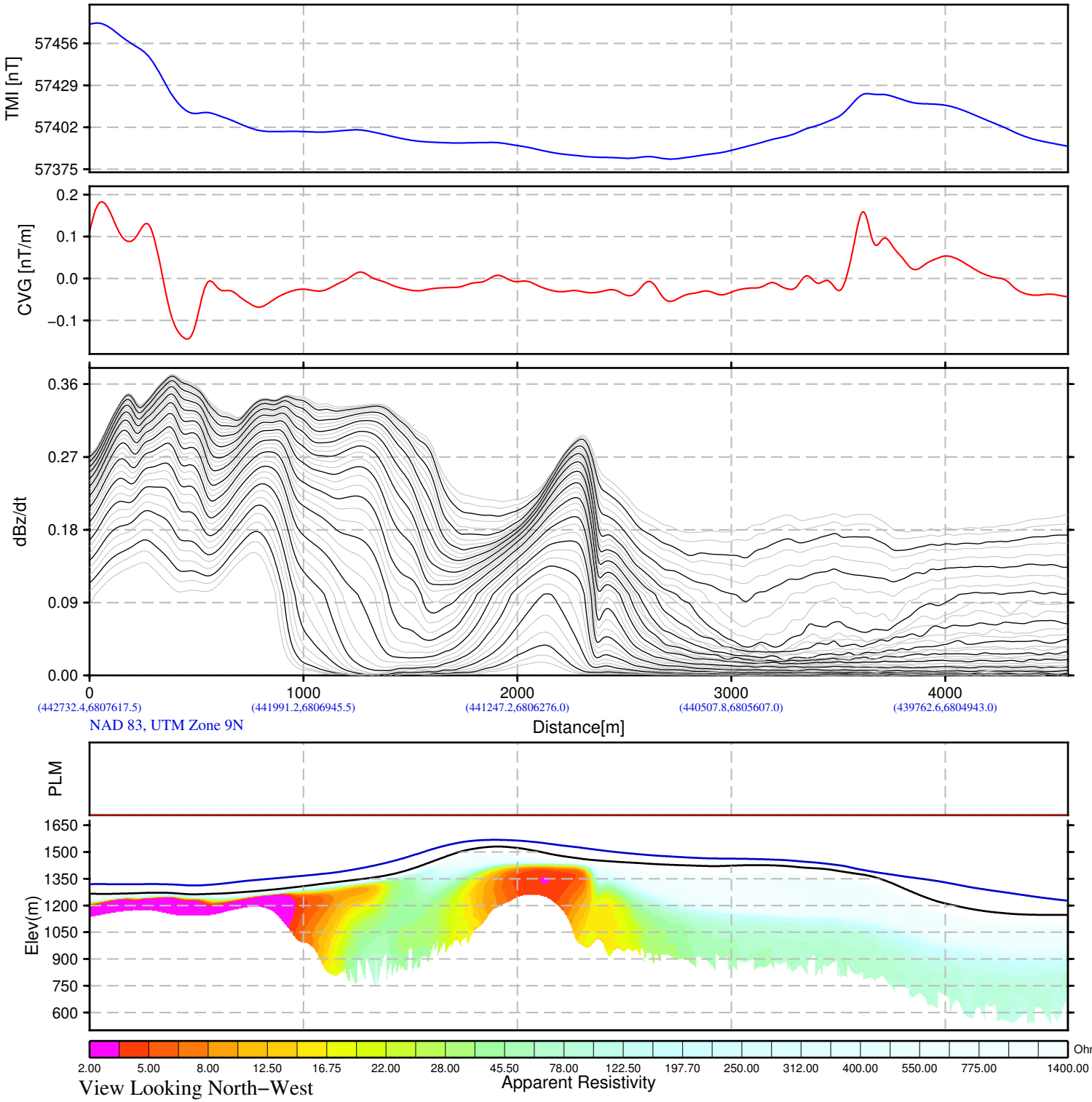
Resistivity Depth Image (RDI) for Line 4685

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

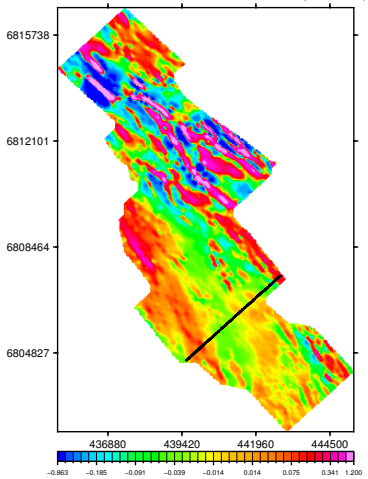
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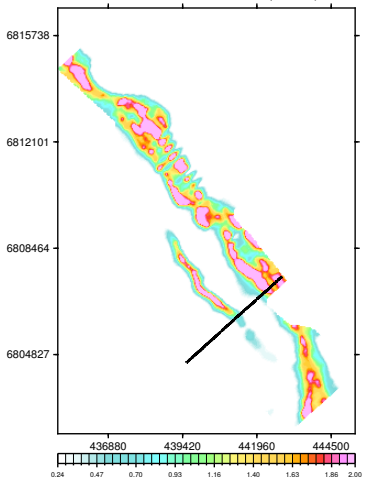
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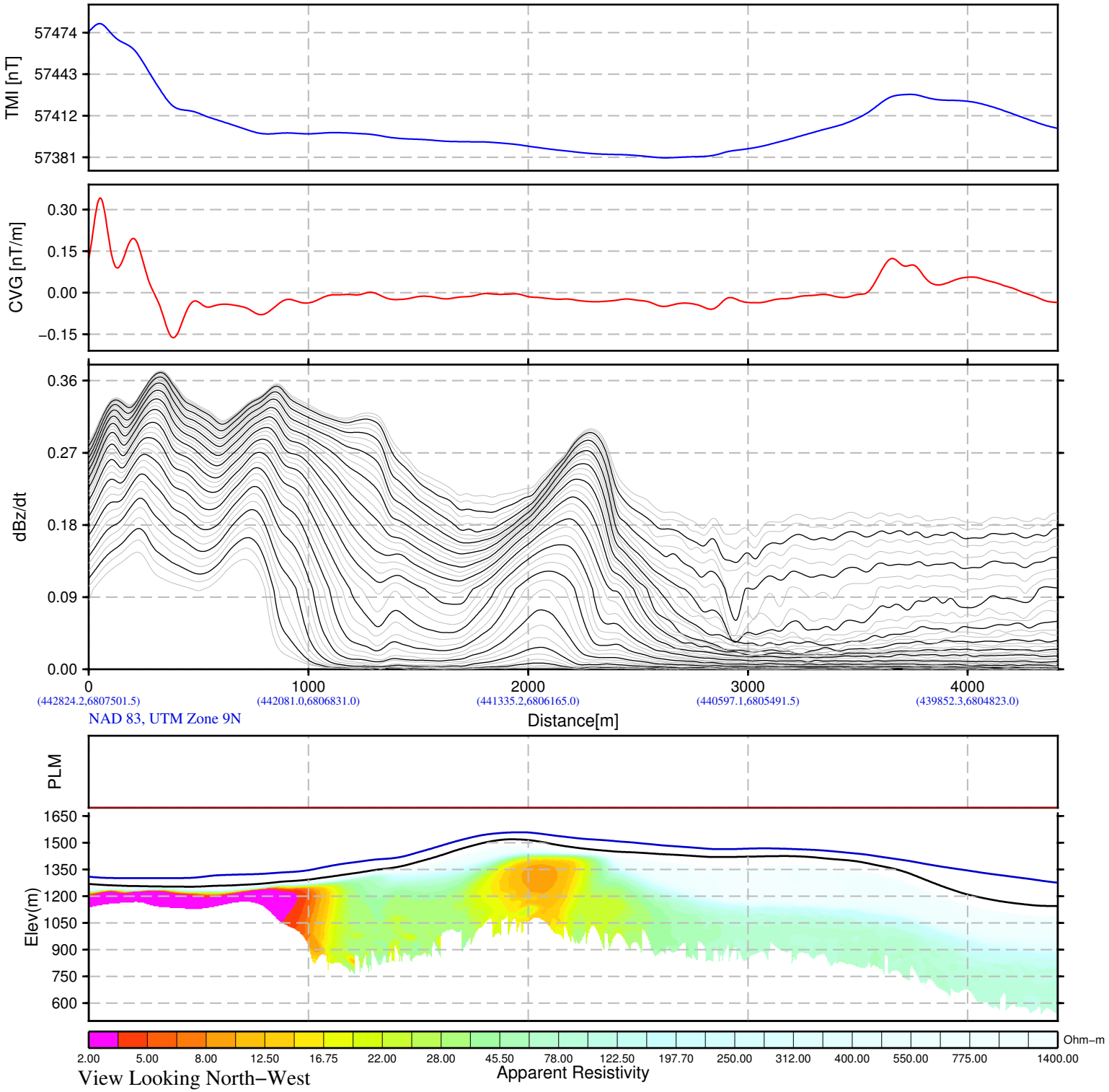
Resistivity Depth Image (RDI) for Line 4690

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

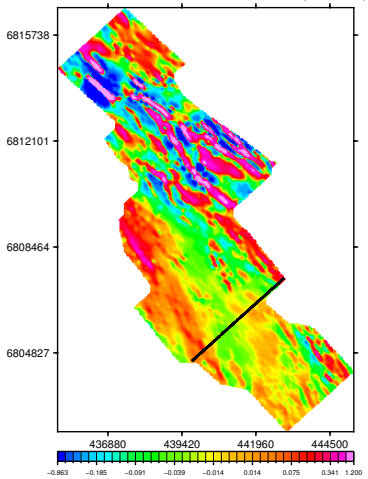
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Job Number:GL160037
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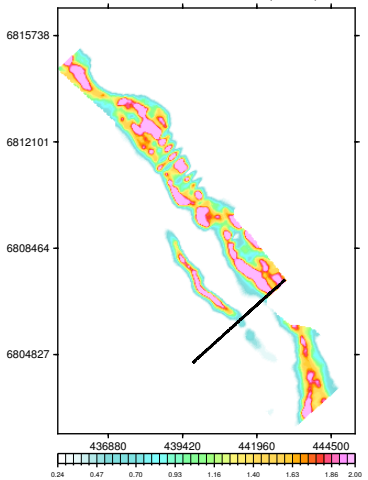
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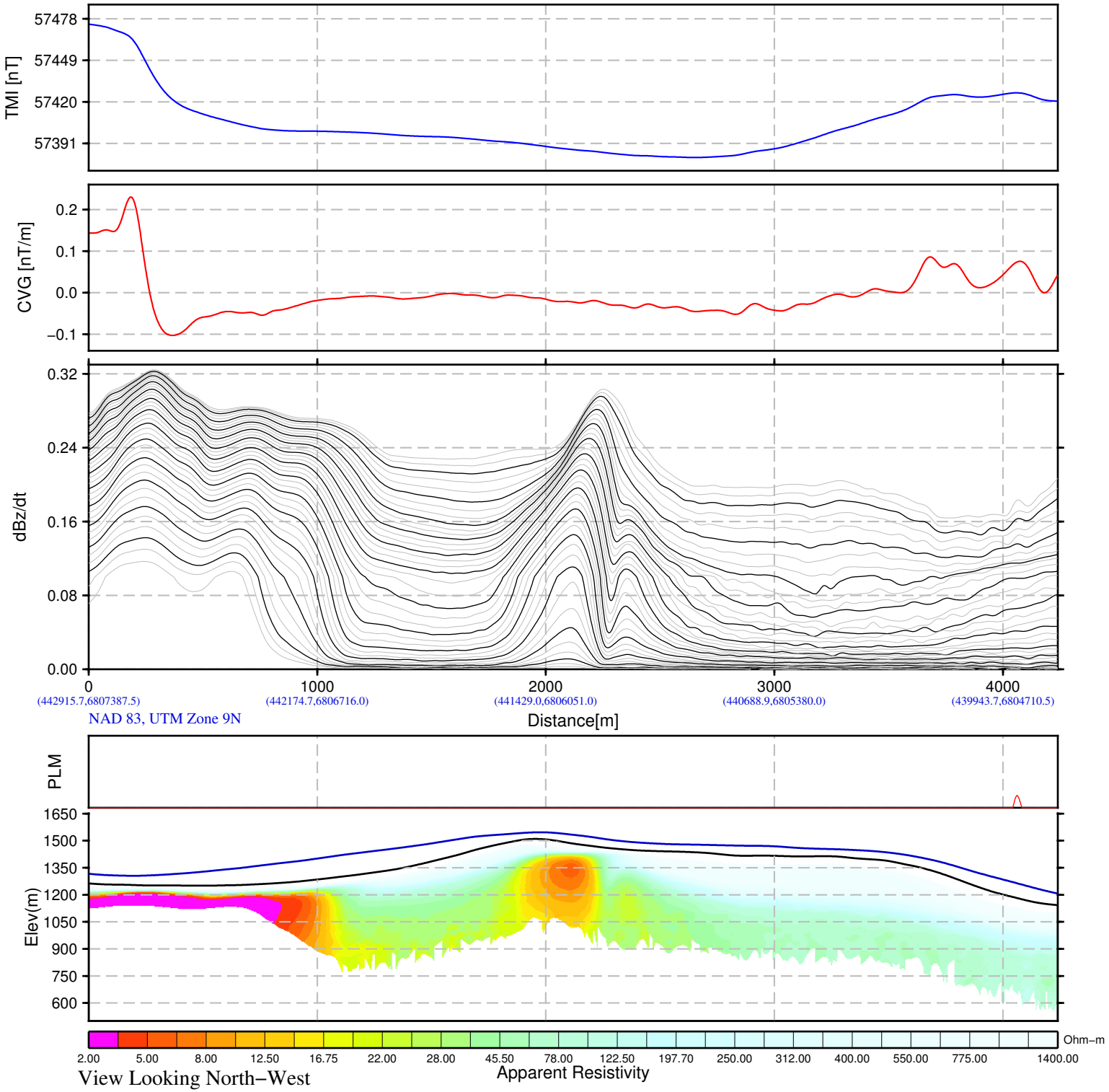
Resistivity Depth Image (RDI) for Line 4705

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

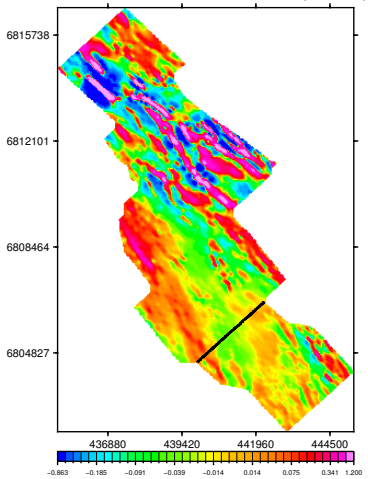
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Job Number:GL160037
Resistivity Depth Image (RDI)
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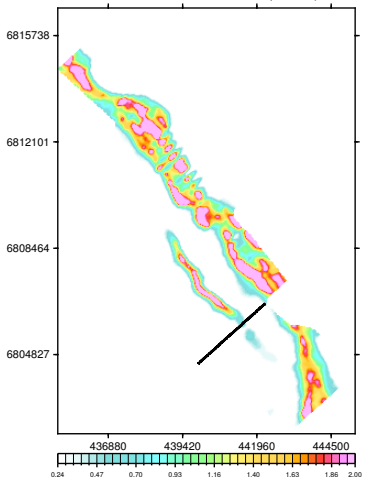
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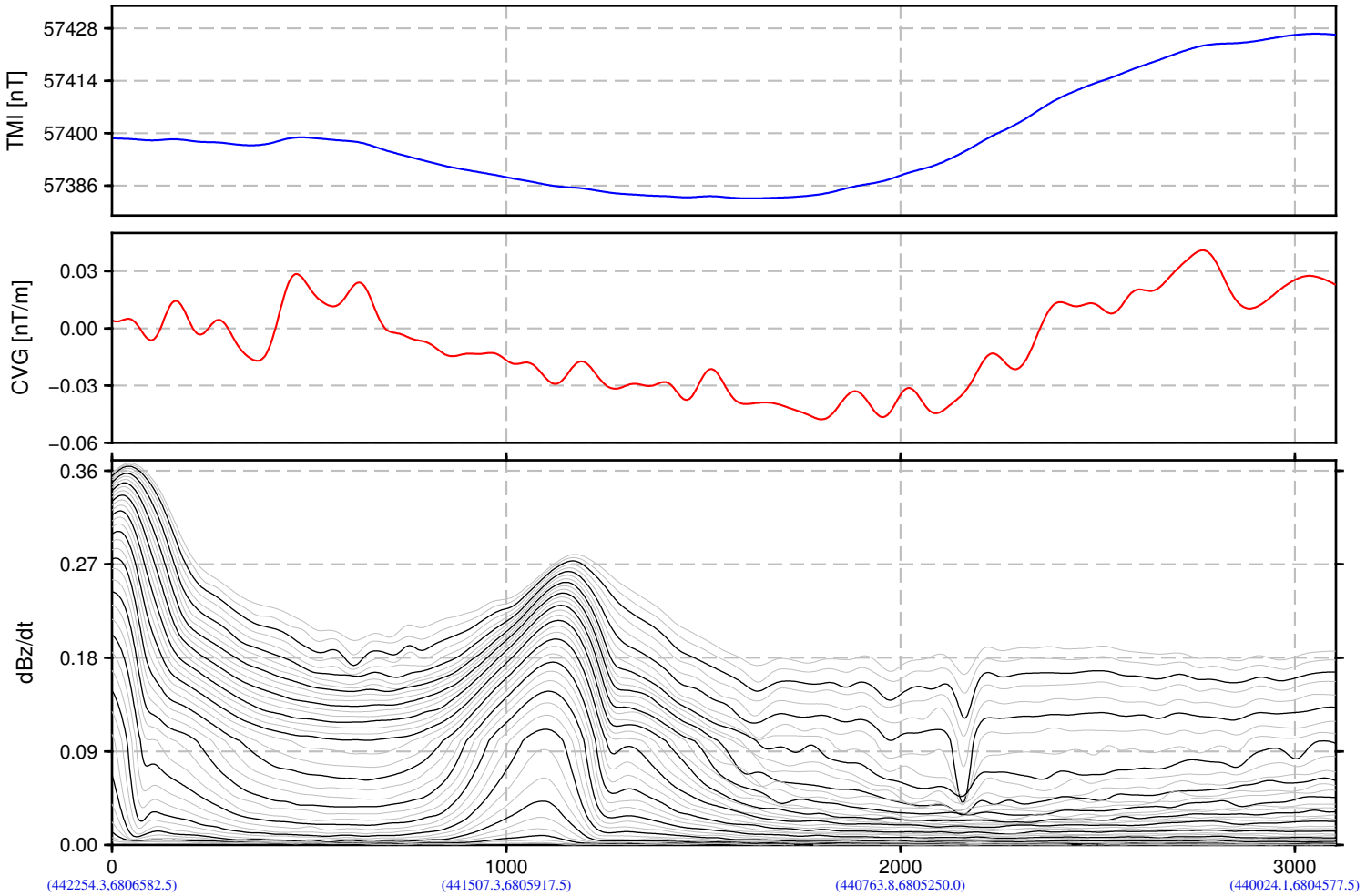
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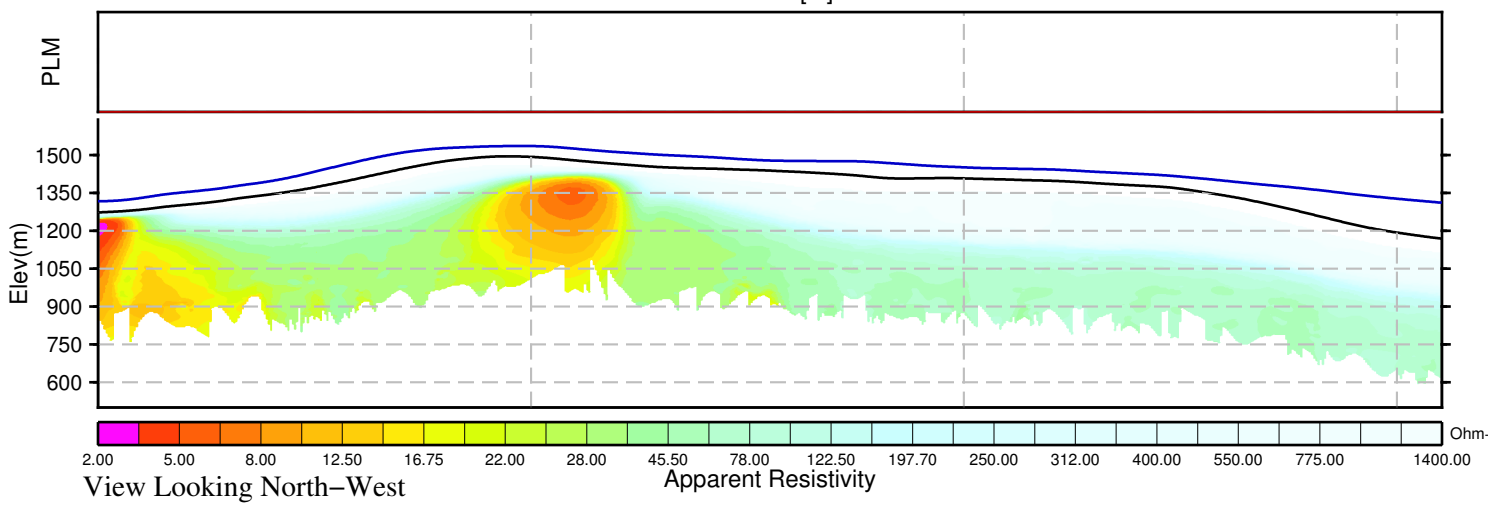
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







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Pelly Block
Yukon, Canada

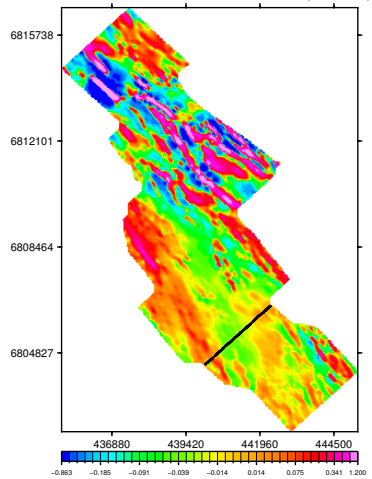
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Job Number:GL160037
Resistivity Depth Image (RDI)
Flown by Geotech Ltd.
Processed by Geotech Ltd.
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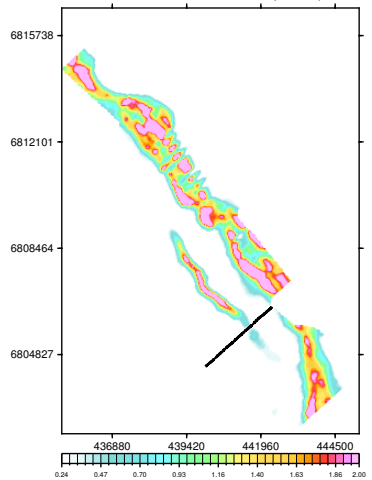
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

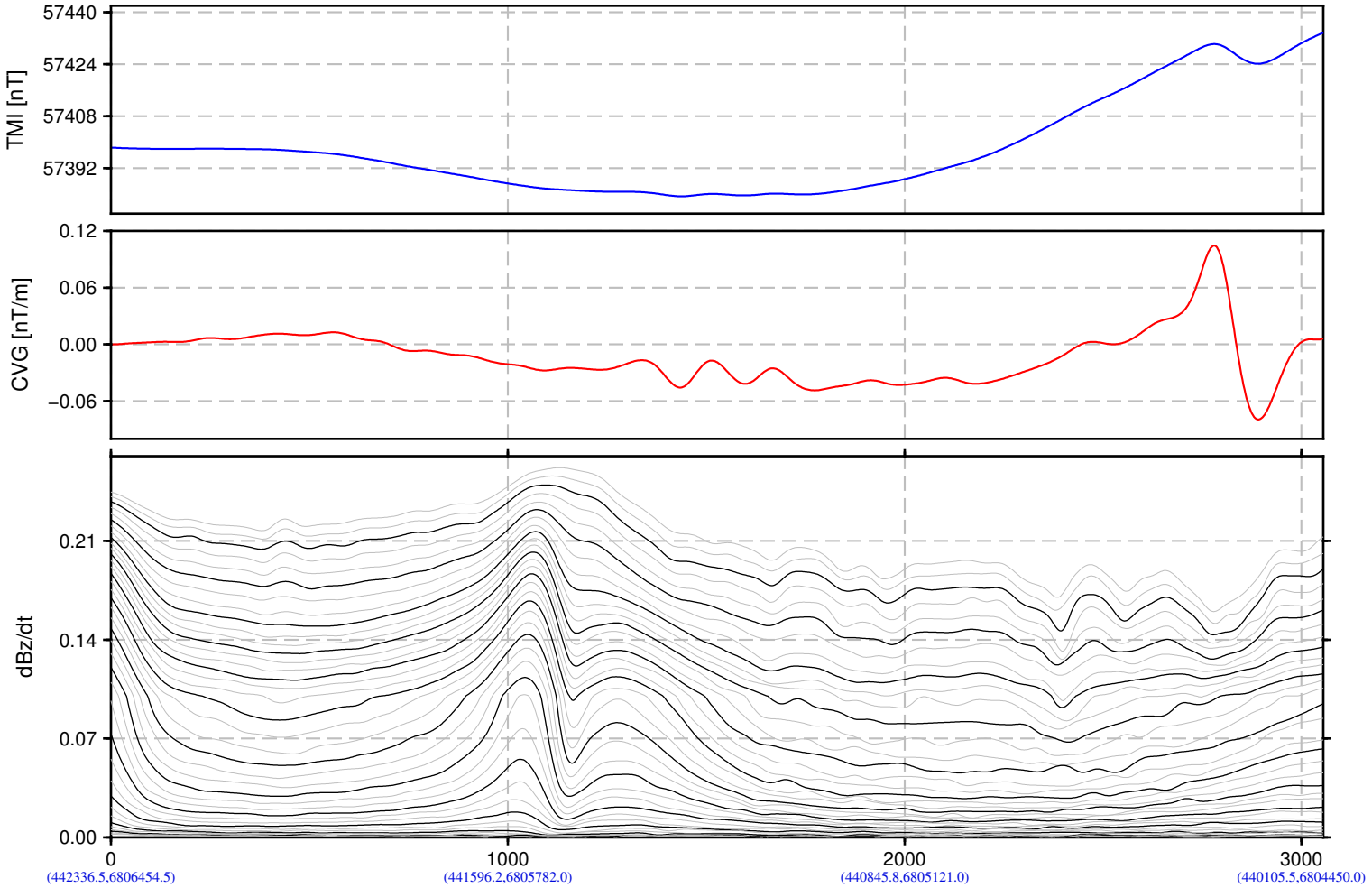
Resistivity Depth Image (RDI) for Line 4720

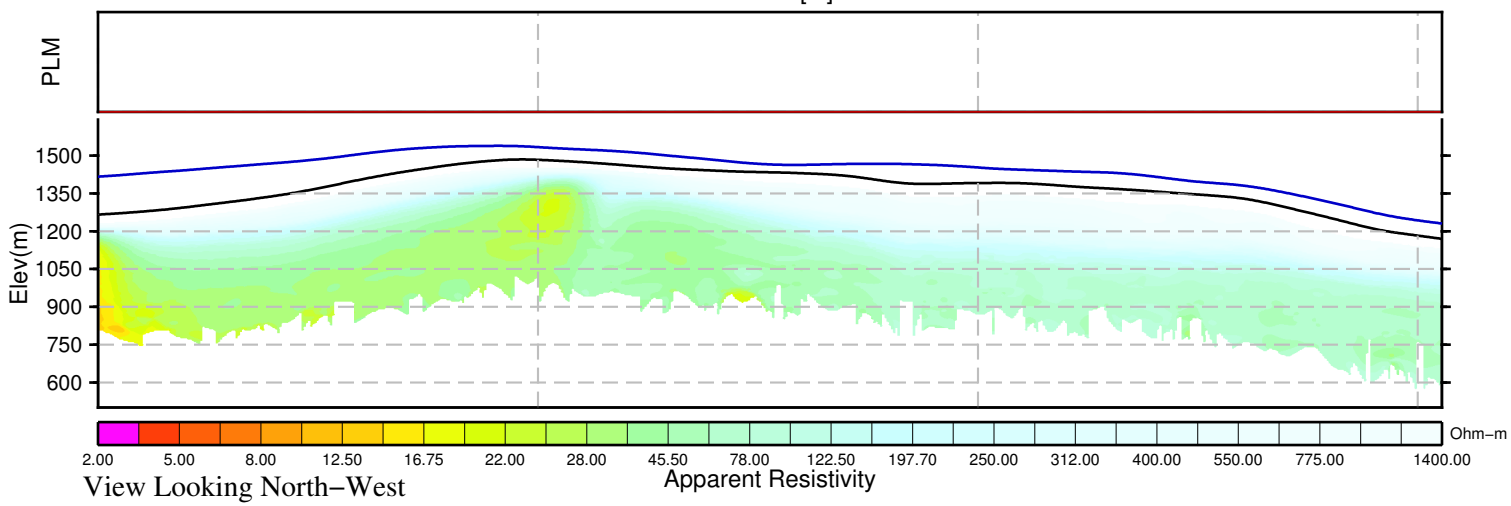
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

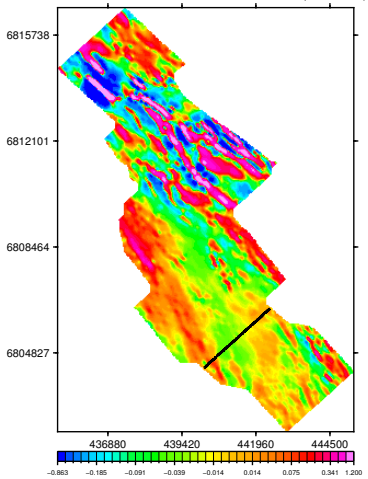
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Job Number:GL160037
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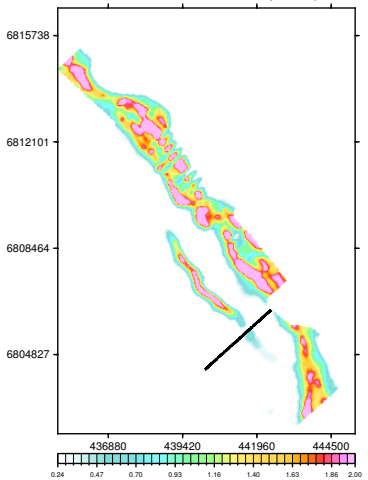
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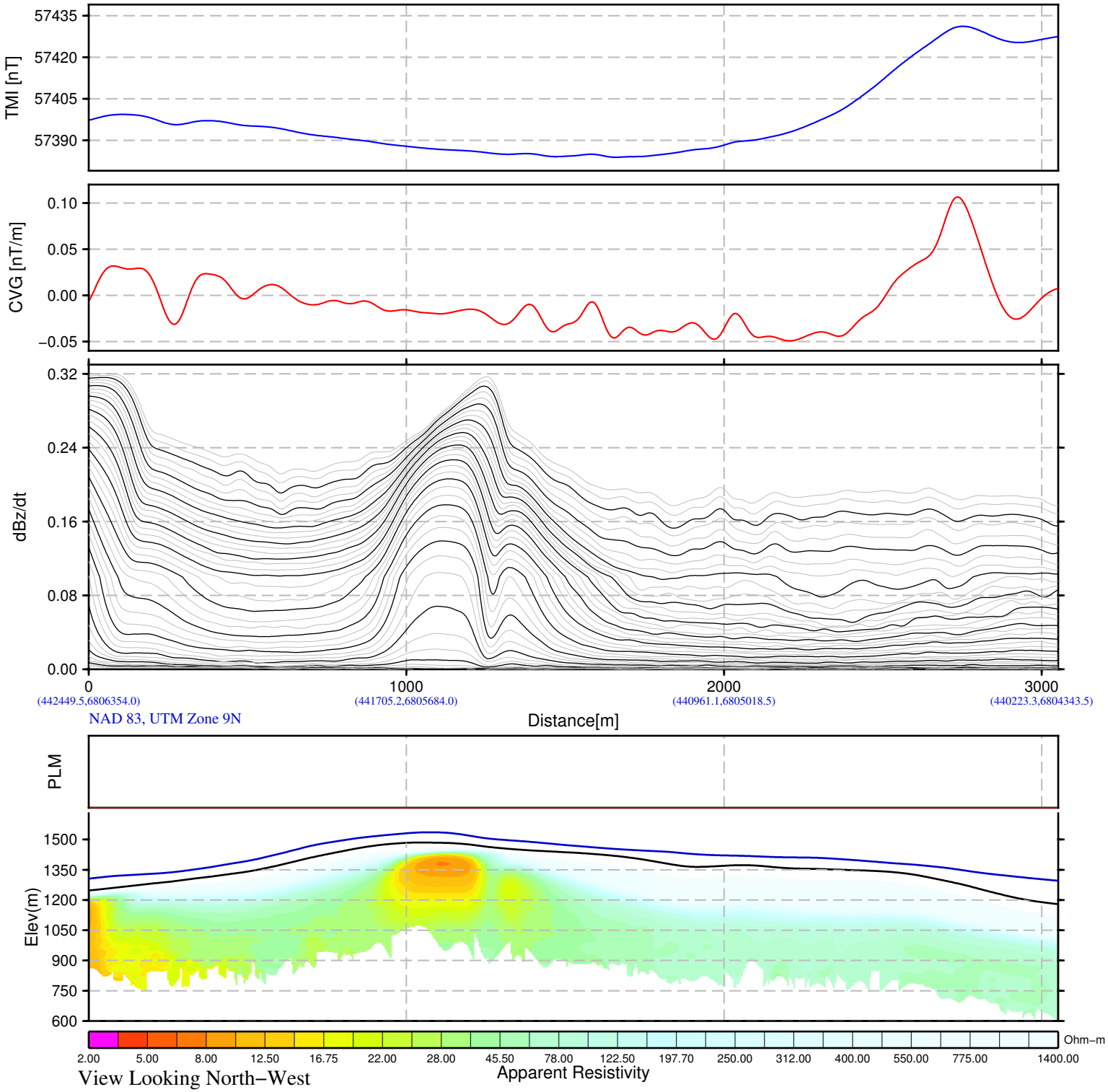
Resistivity Depth Image (RDI) for Line 4730

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

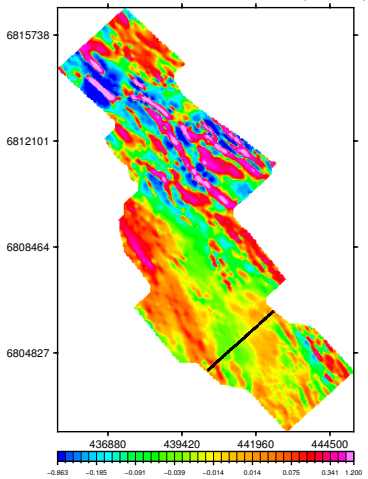
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Resistivity Depth Image (RDI)
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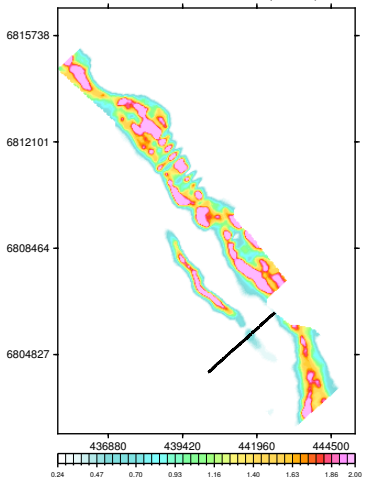
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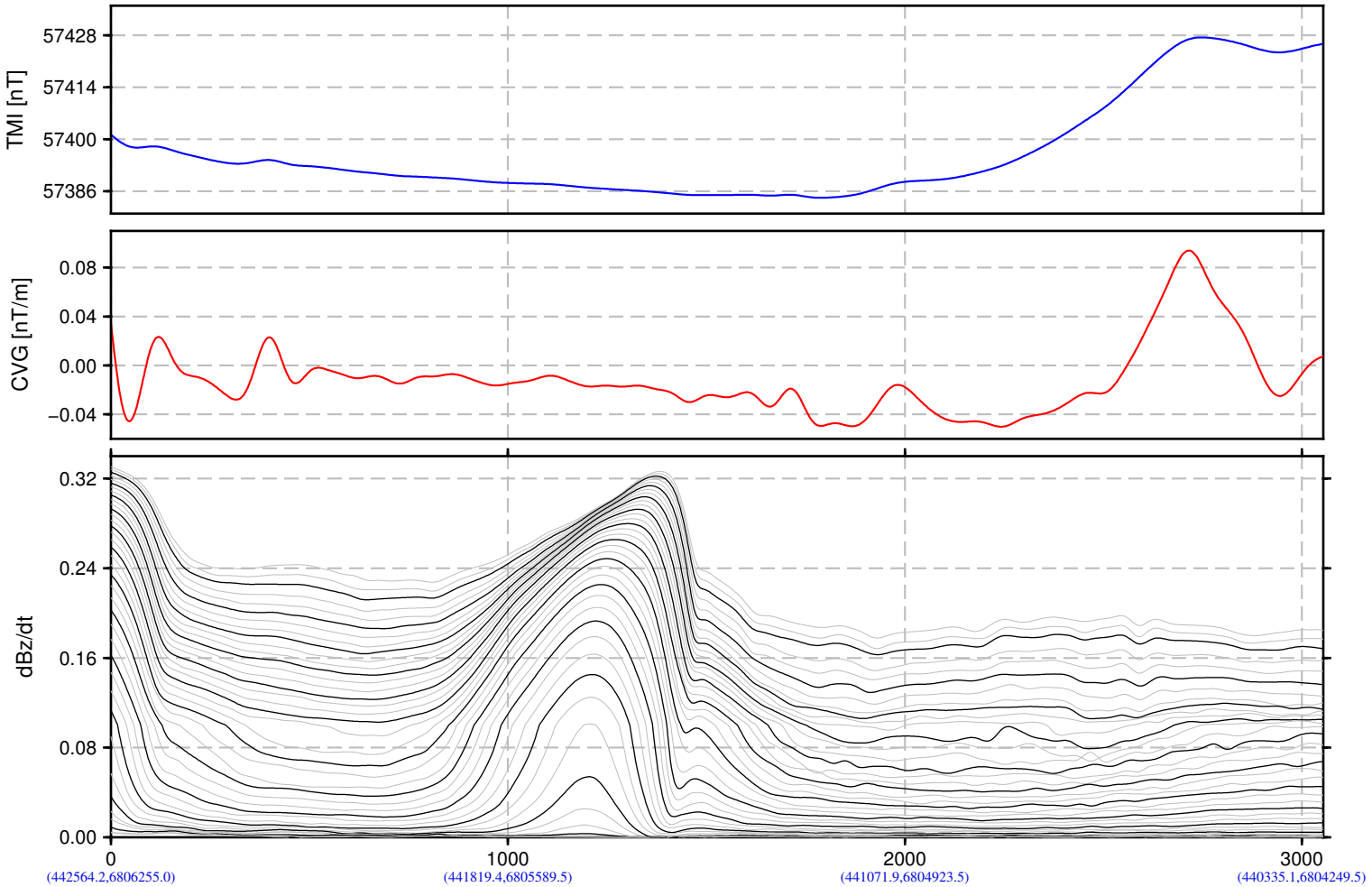
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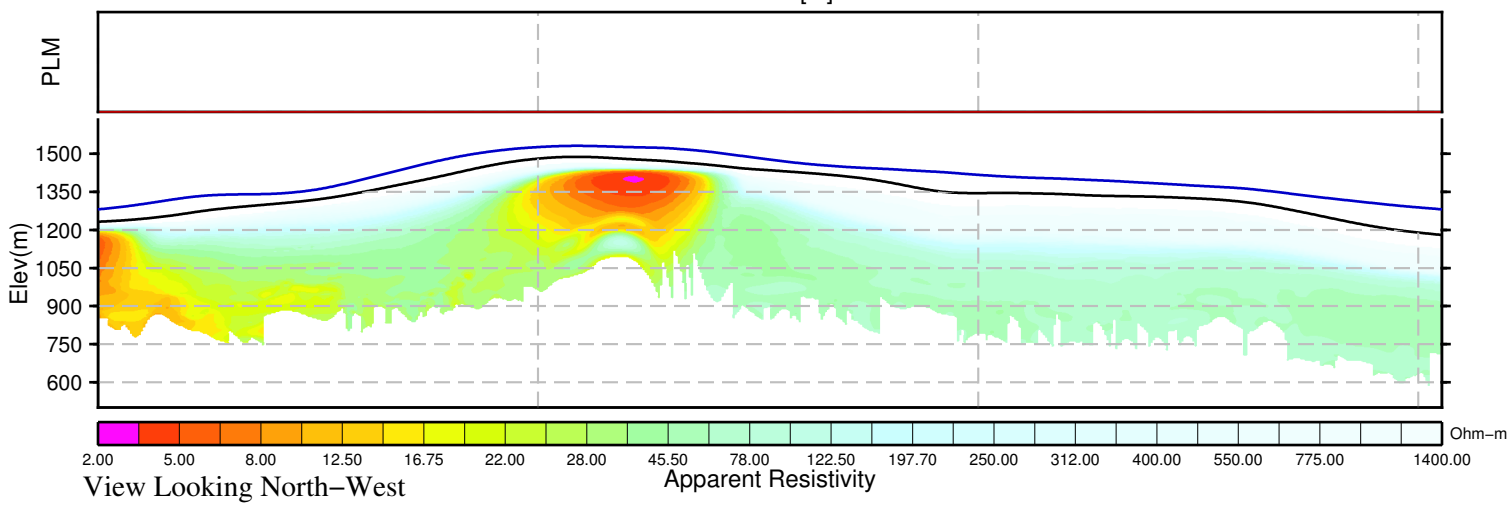
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

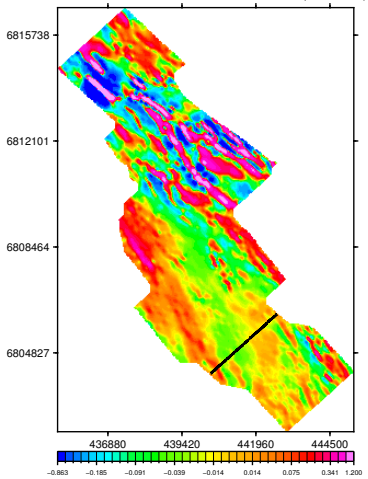
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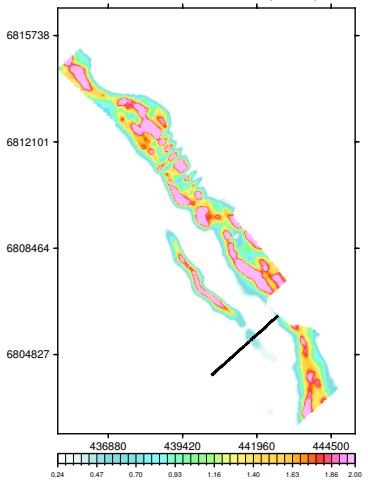
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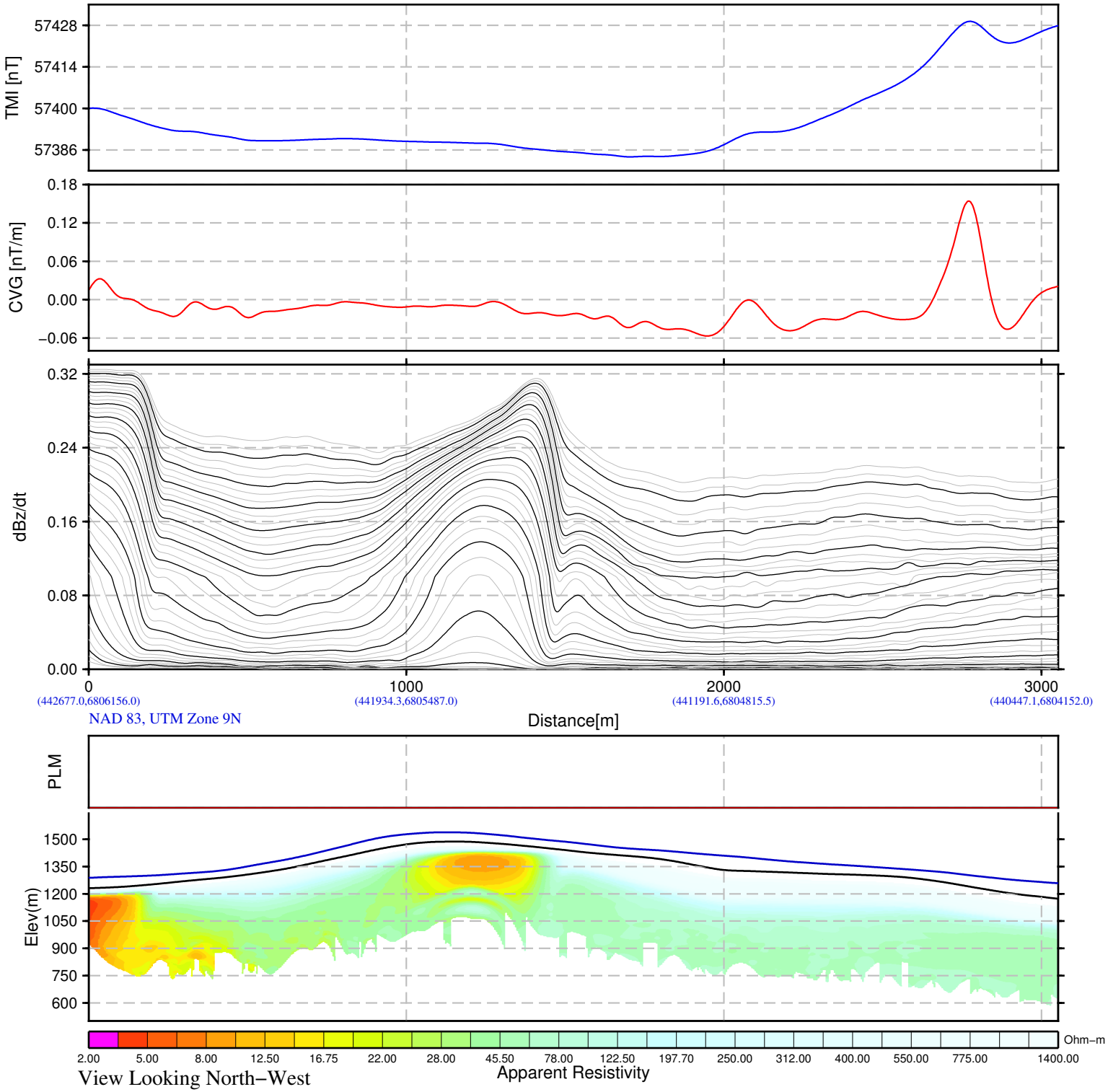
Resistivity Depth Image (RDI) for Line 4751

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

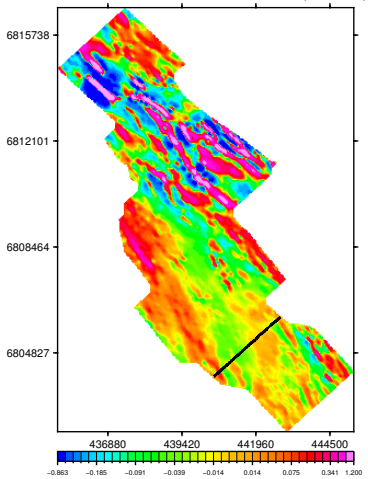
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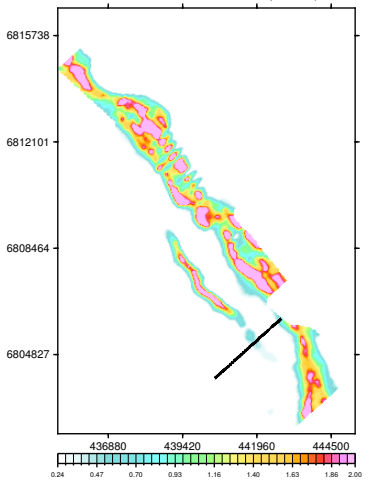
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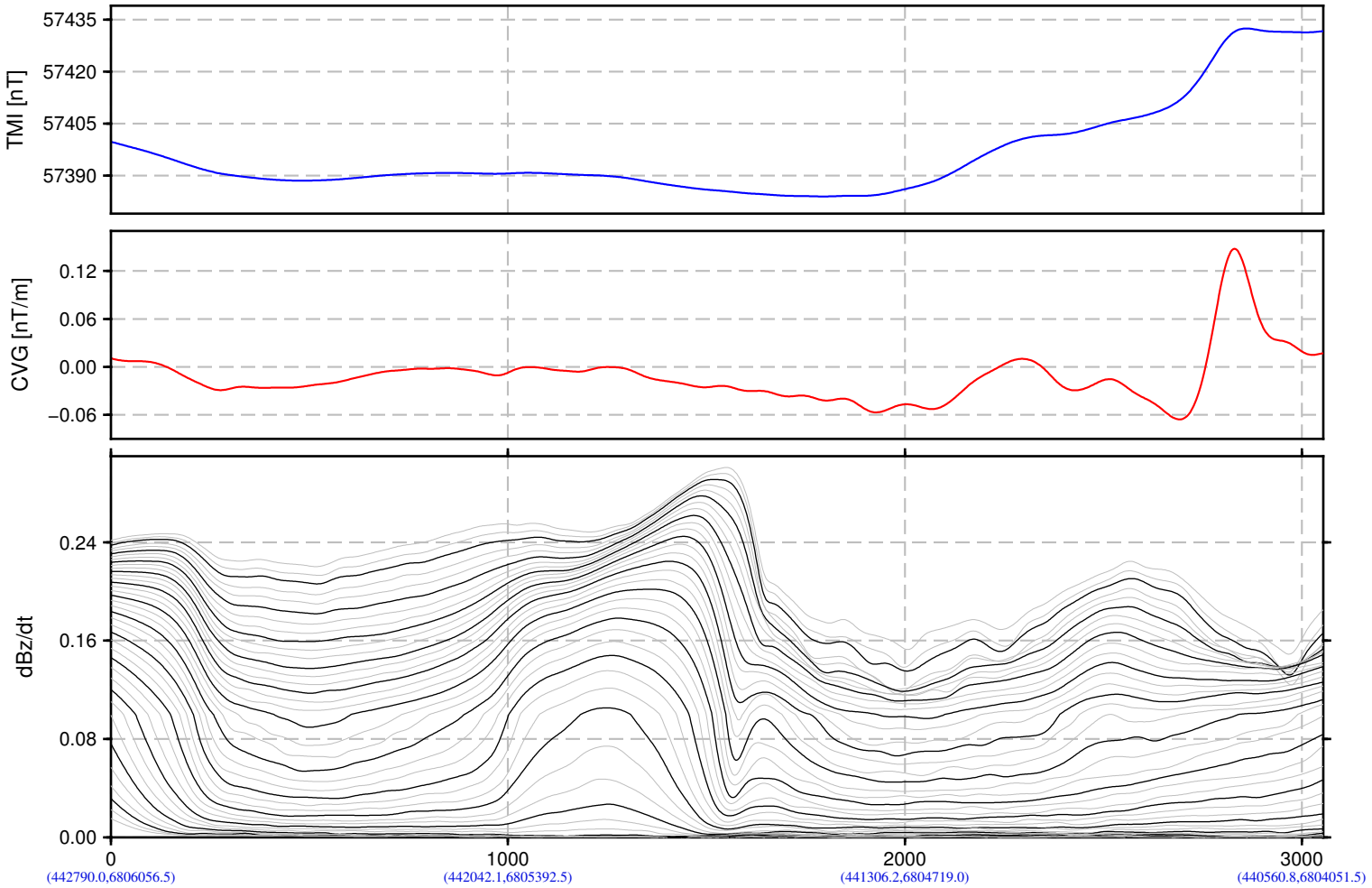
Resistivity Depth Image (RDI) for Line 4760

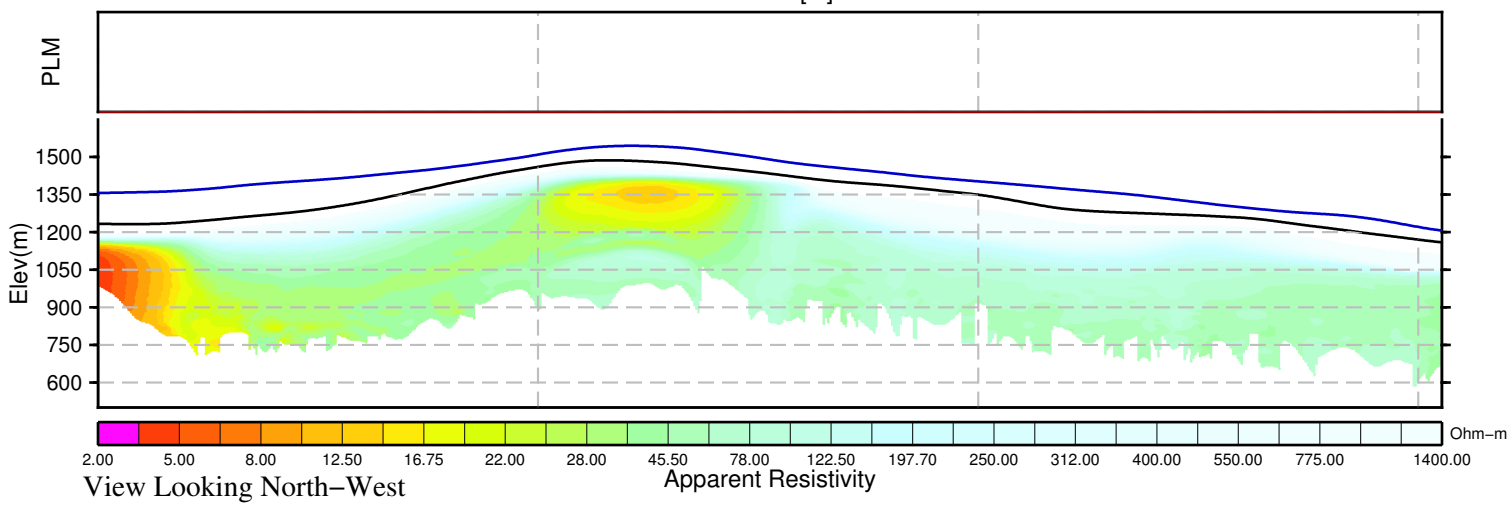
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

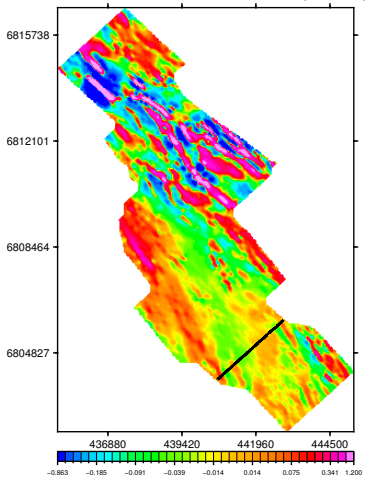
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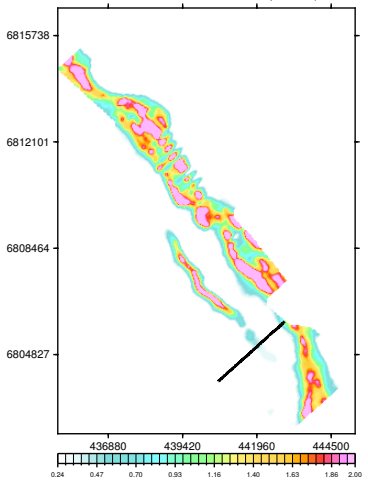
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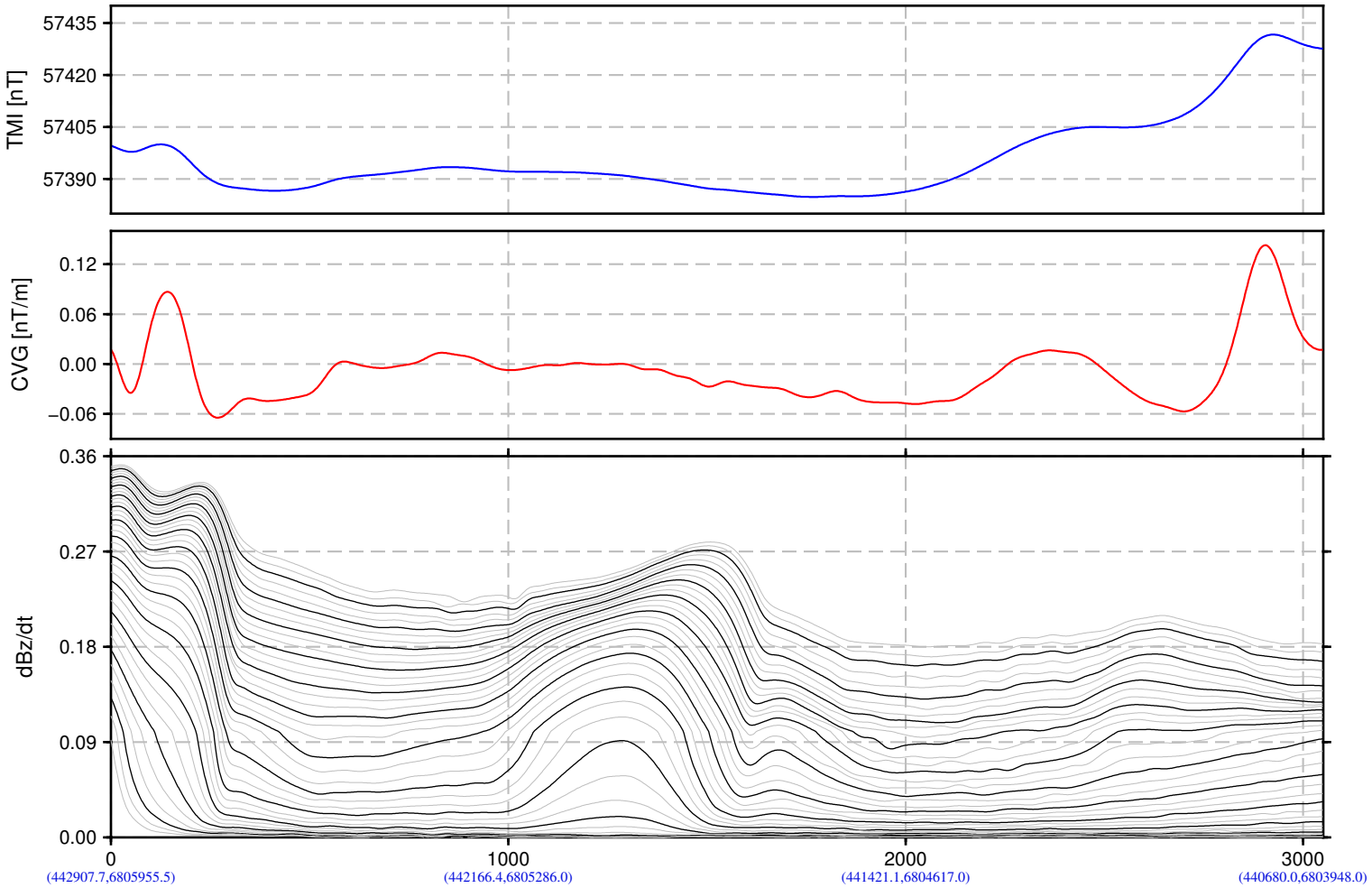
Resistivity Depth Image (RDI) for Line 4775

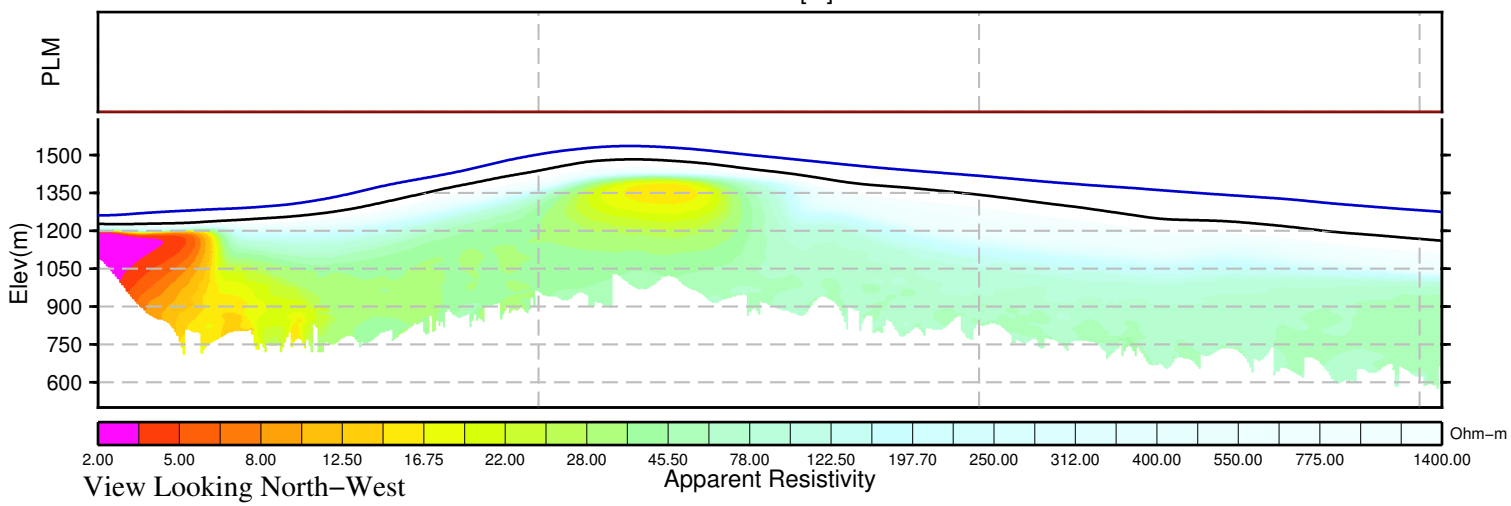
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

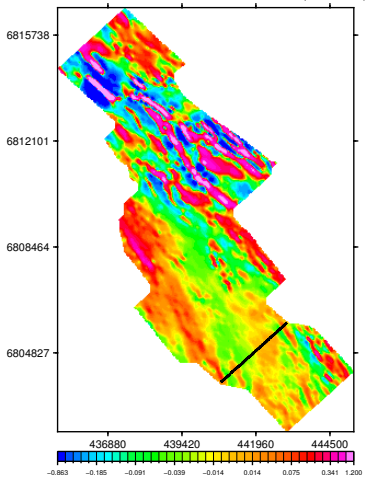
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Job Number:GL160037
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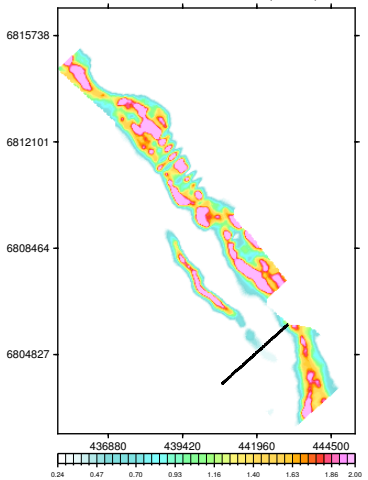
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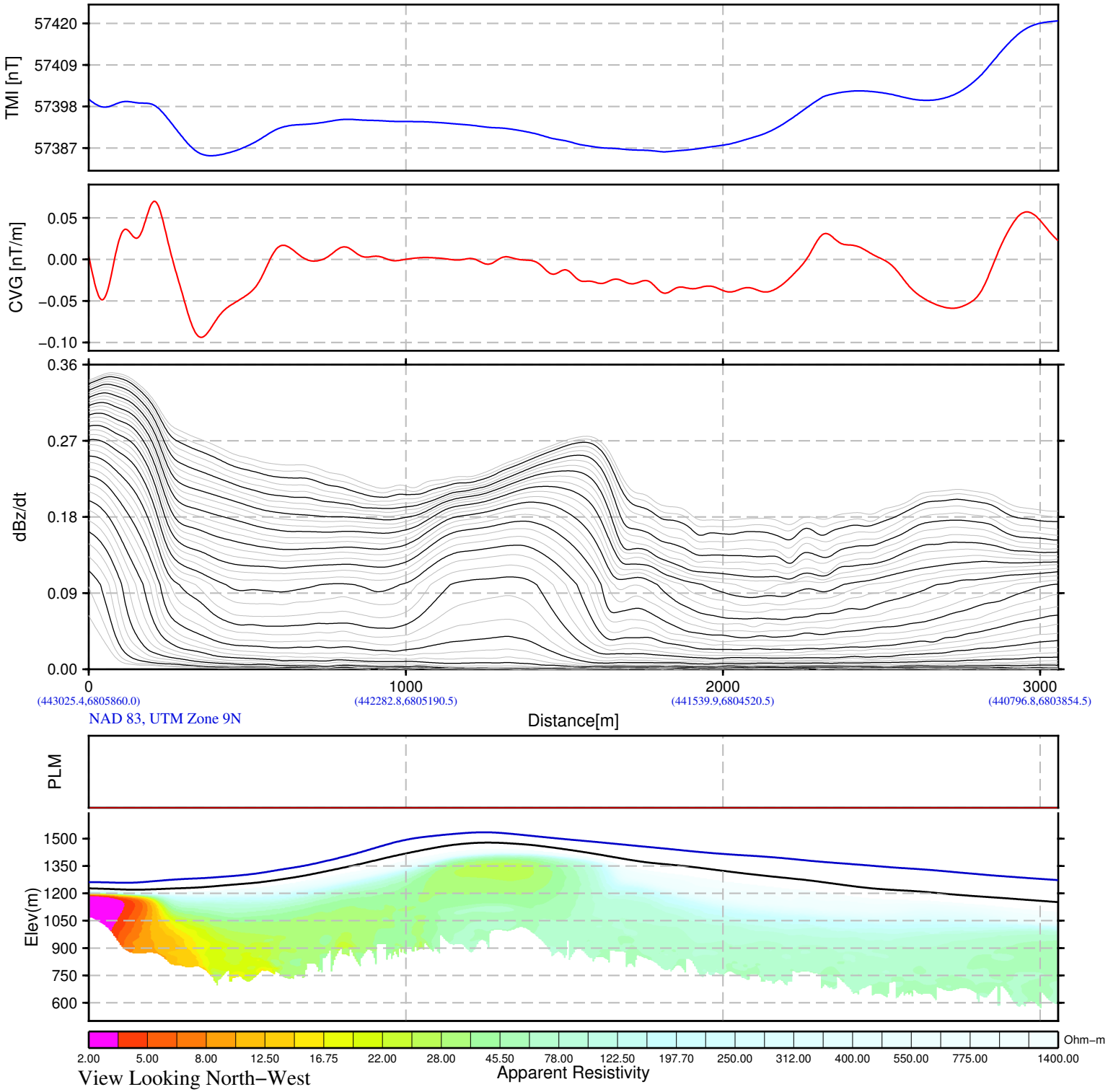
Resistivity Depth Image (RDI) for Line 4785

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

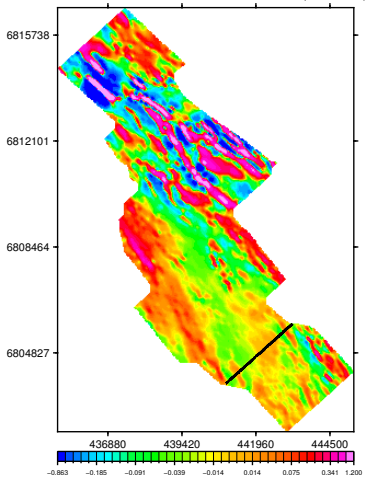
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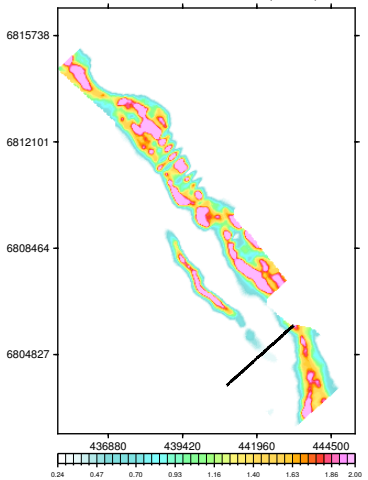
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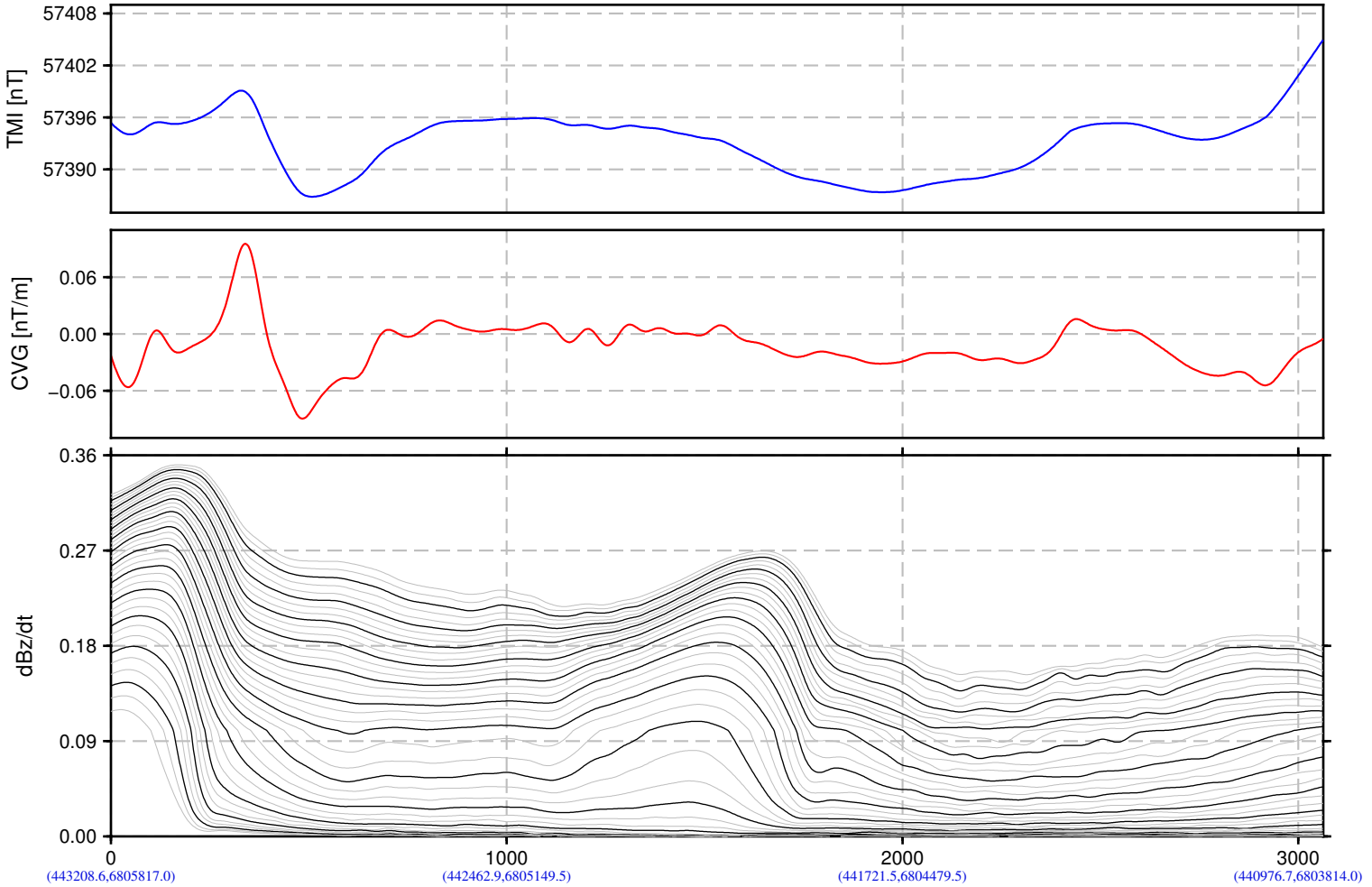
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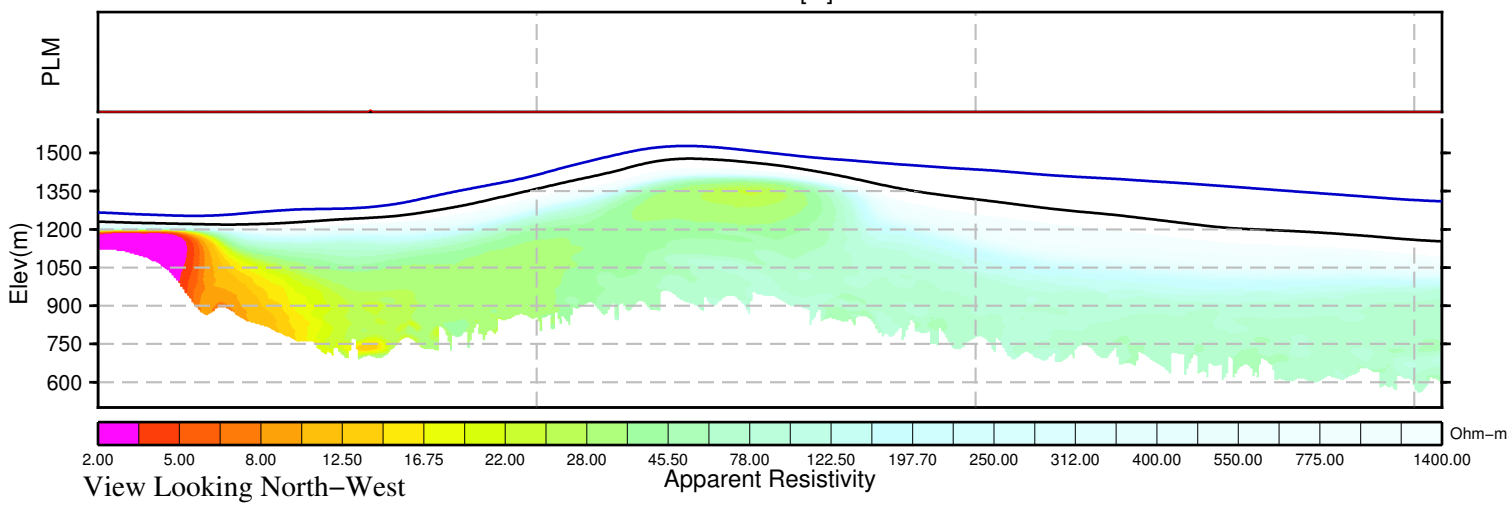
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

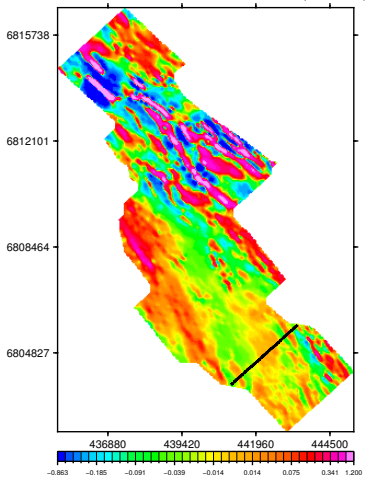
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Job Number:GL160037
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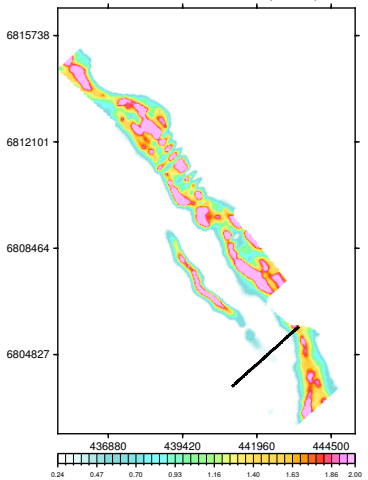
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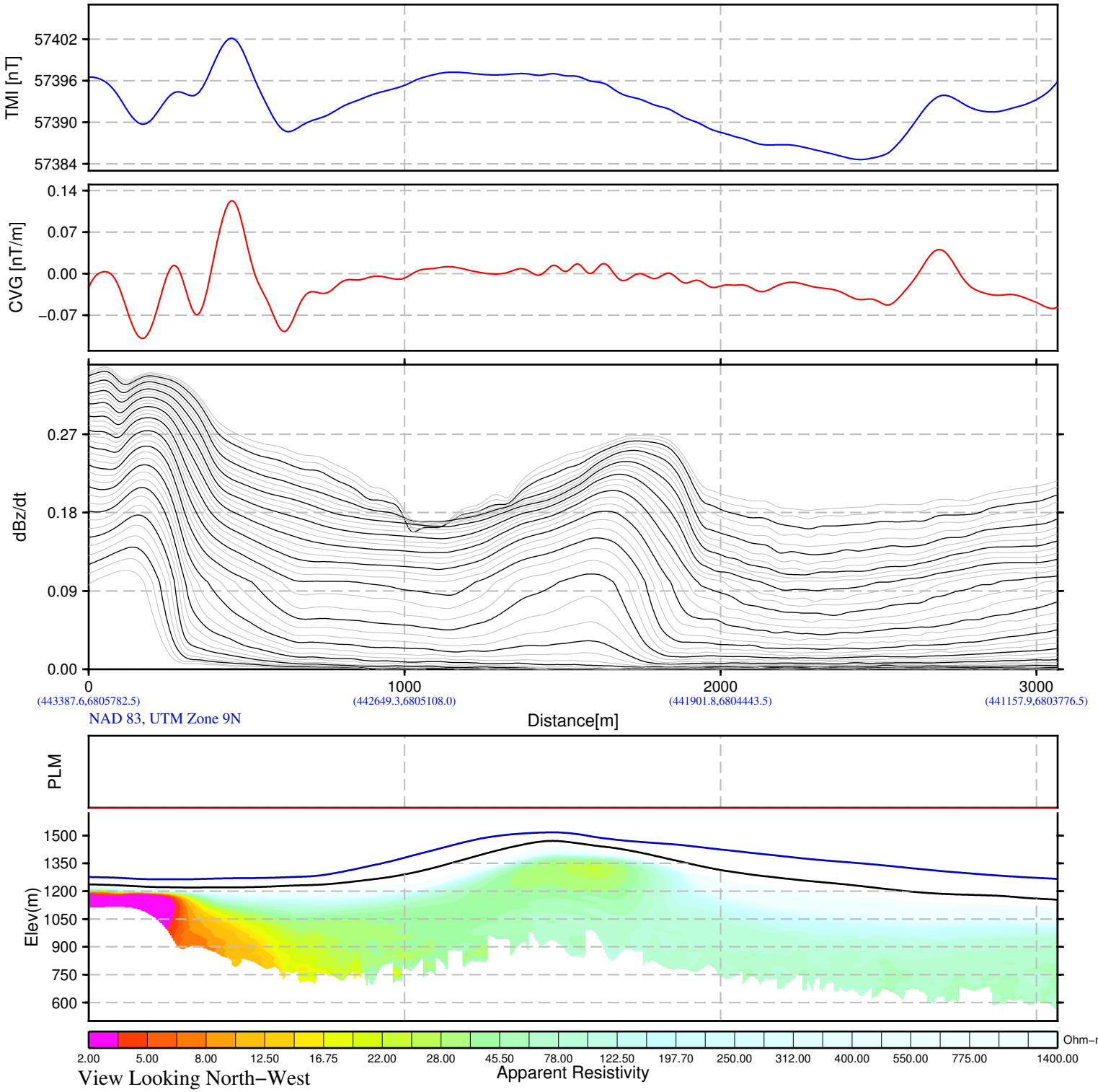
Resistivity Depth Image (RDI) for Line 4805

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

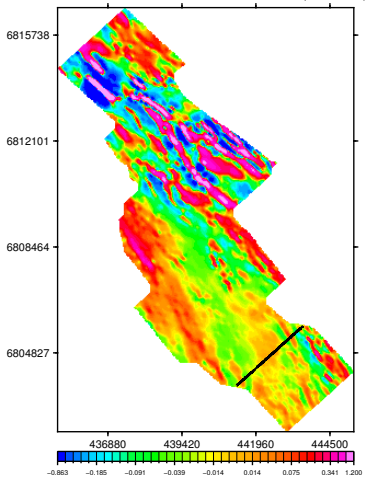
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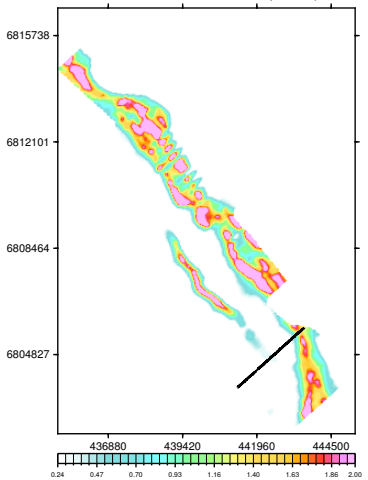
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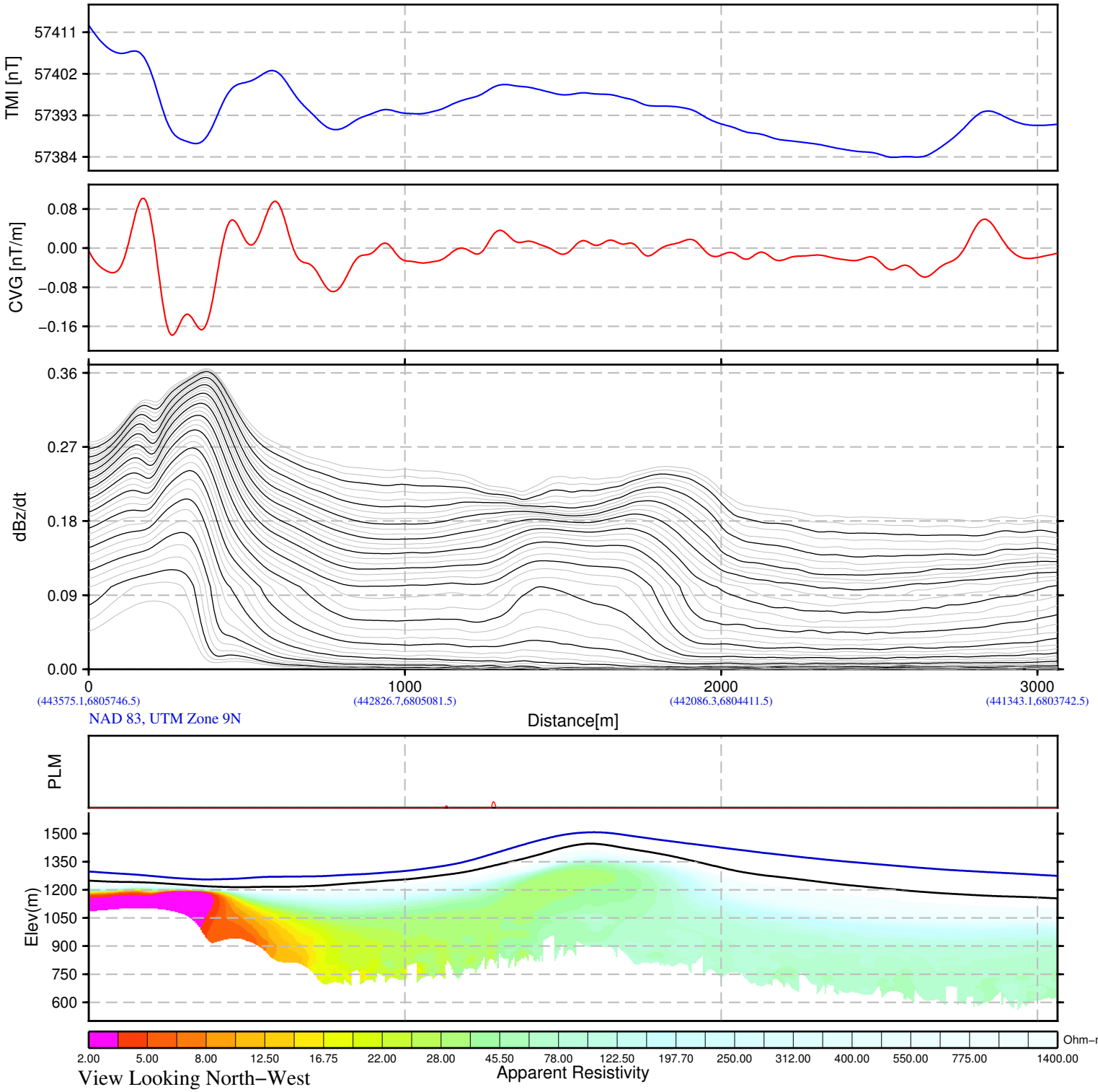
Resistivity Depth Image (RDI) for Line 4815

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





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Pelly Block
Yukon, Canada

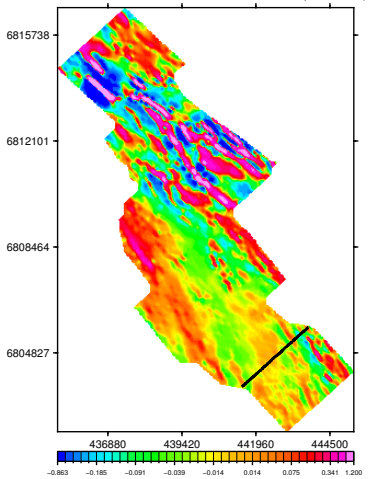
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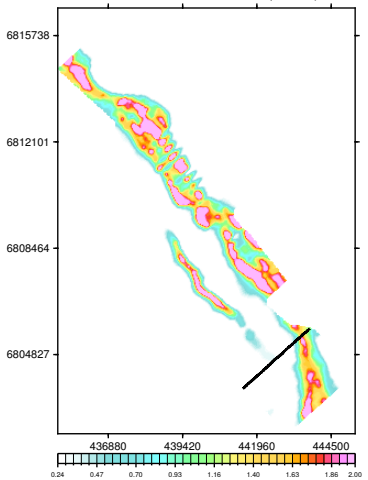
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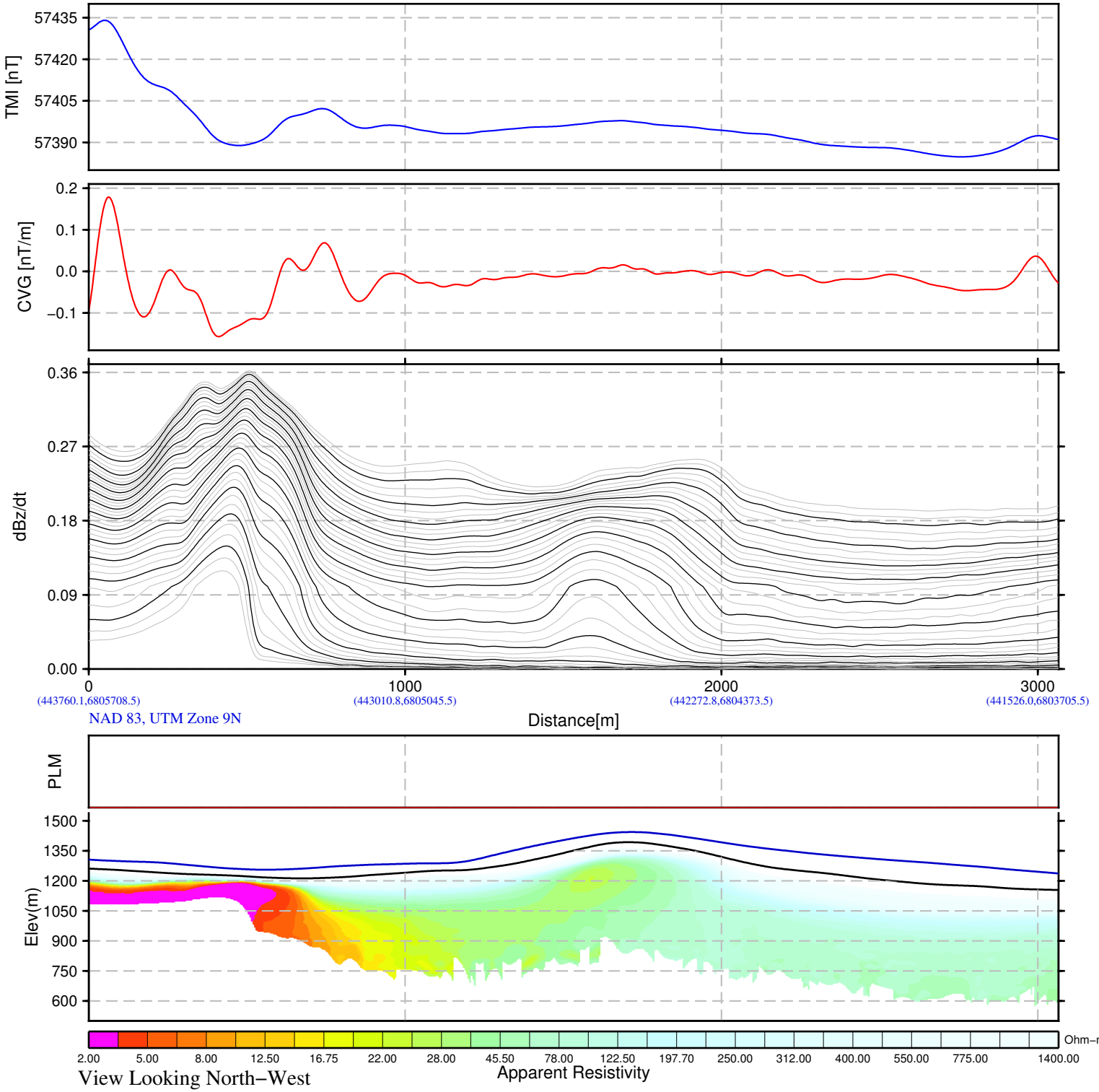
Resistivity Depth Image (RDI) for Line 4826

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

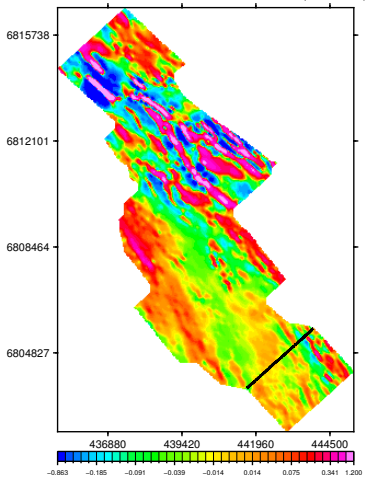
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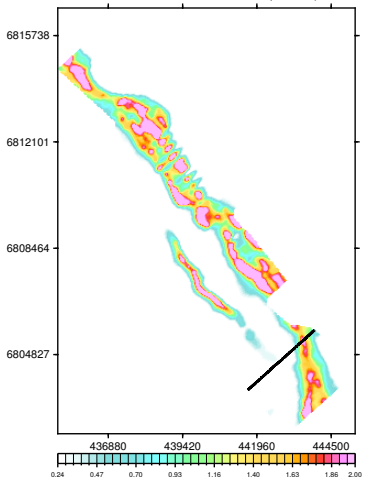
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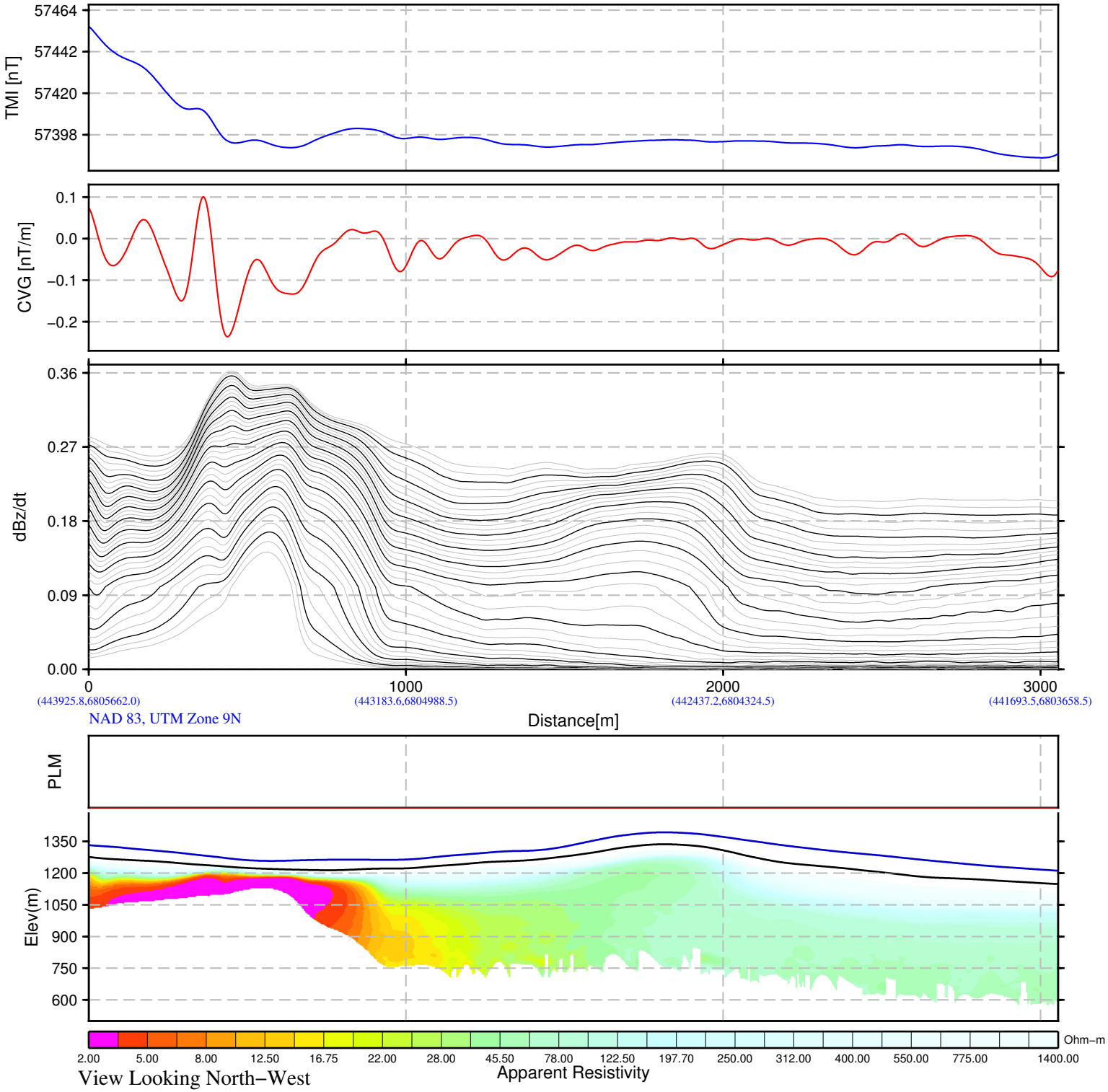
Resistivity Depth Image (RDI) for Line 4835

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

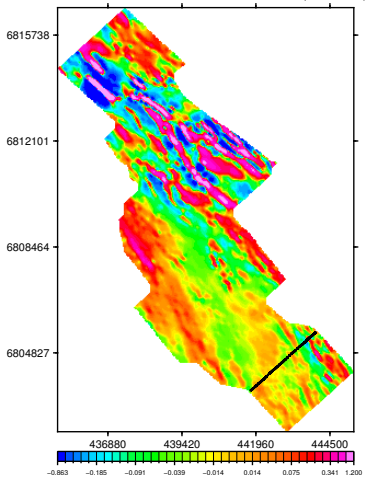
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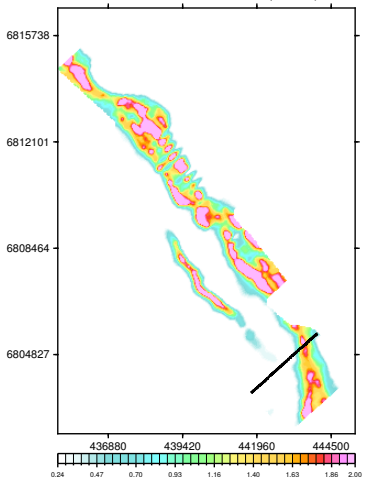
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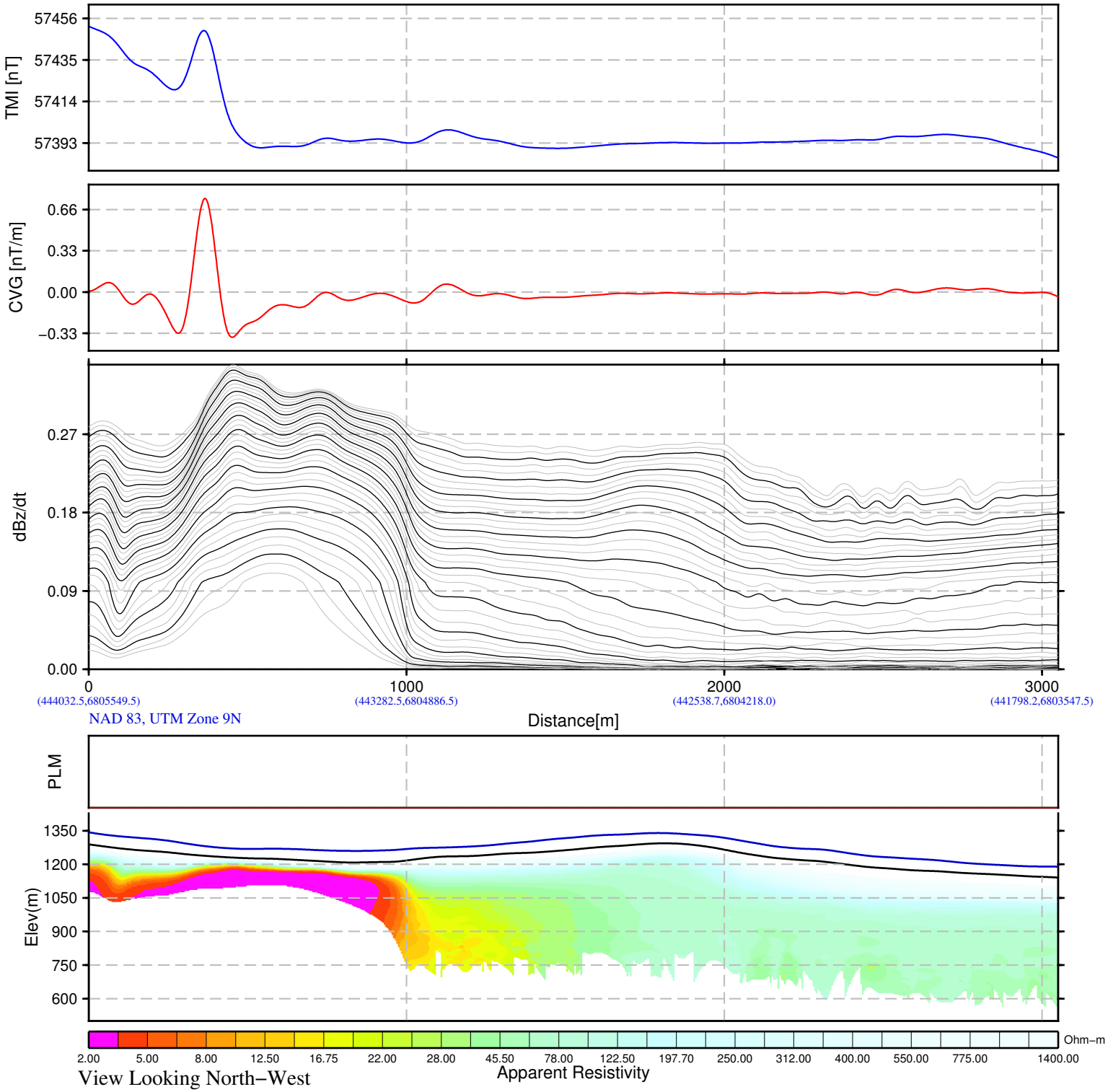
Resistivity Depth Image (RDI) for Line 4840

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

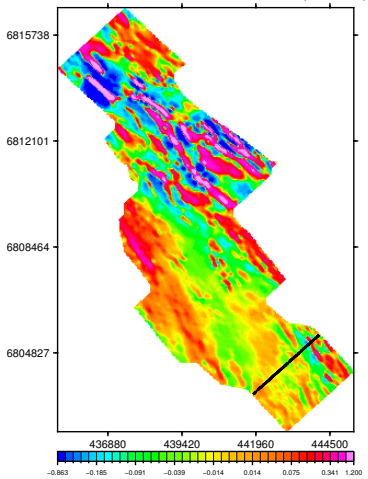
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Job Number:GL160037
Resistivity Depth Image (RDI)
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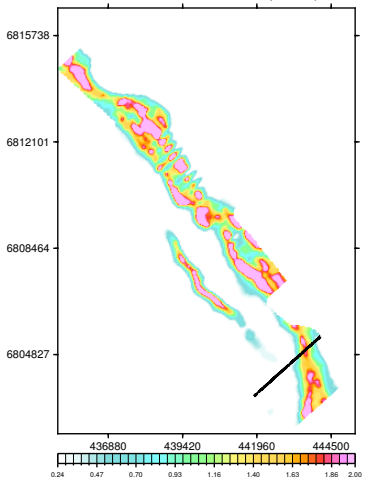
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

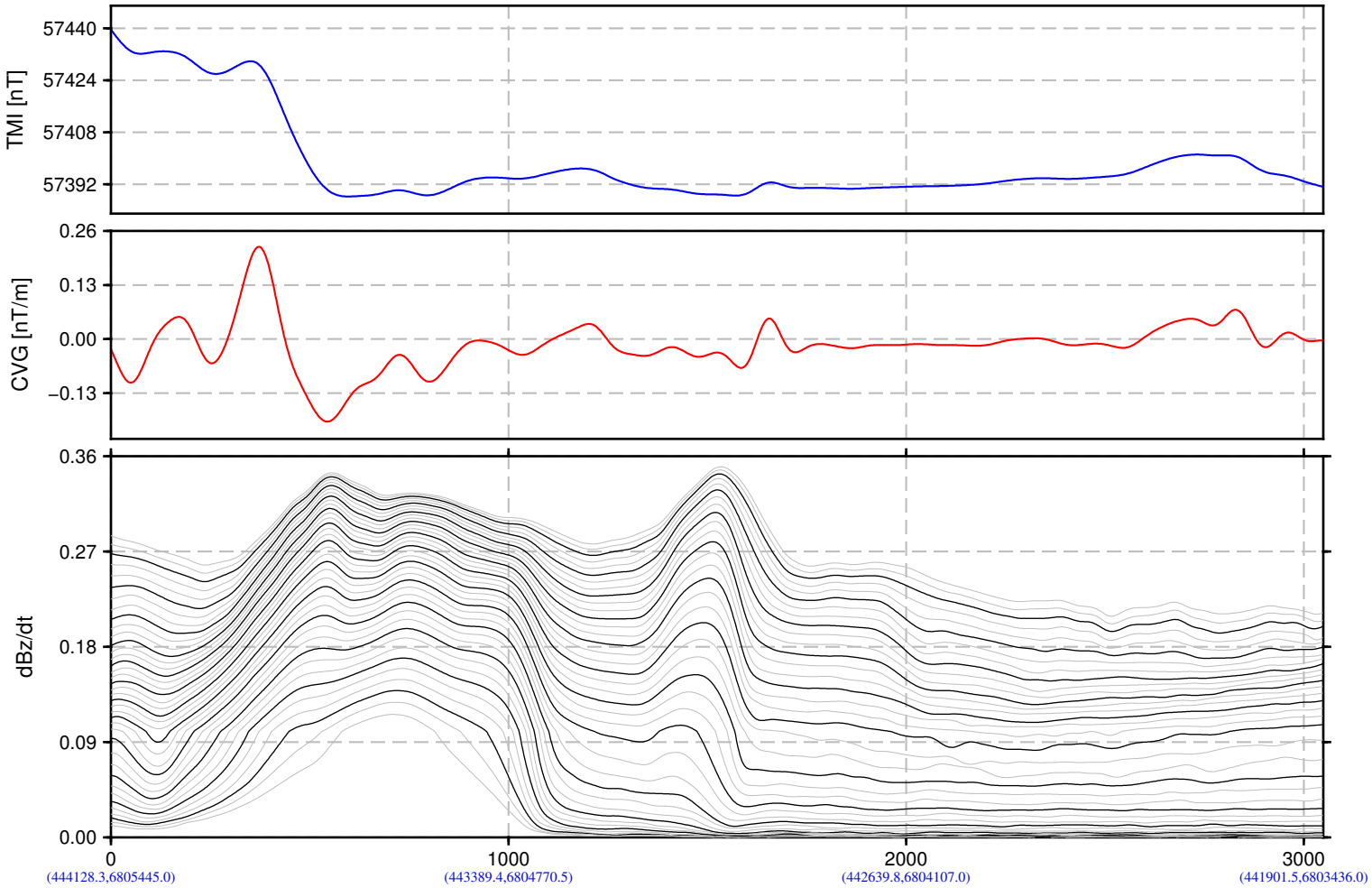
Resistivity Depth Image (RDI) for Line 4850

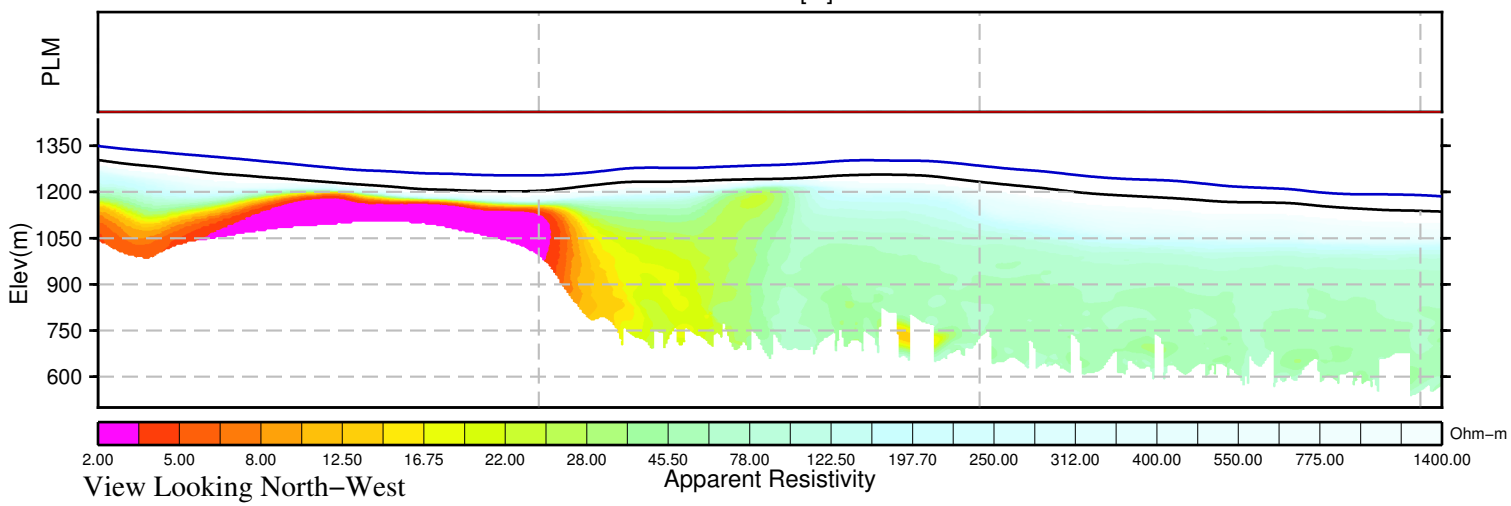
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

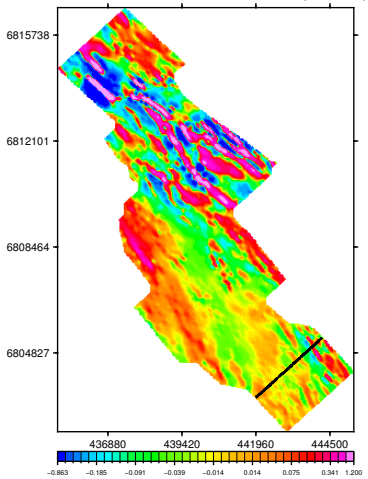
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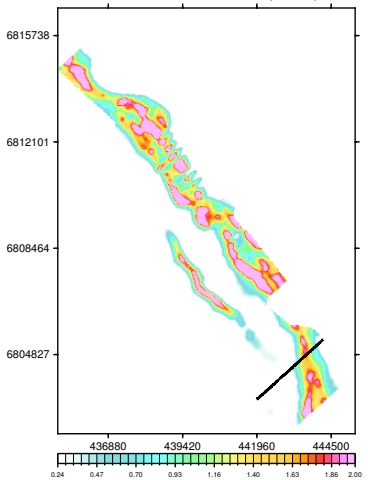
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AIRBORNE GEOPHYSICAL SURVEYS

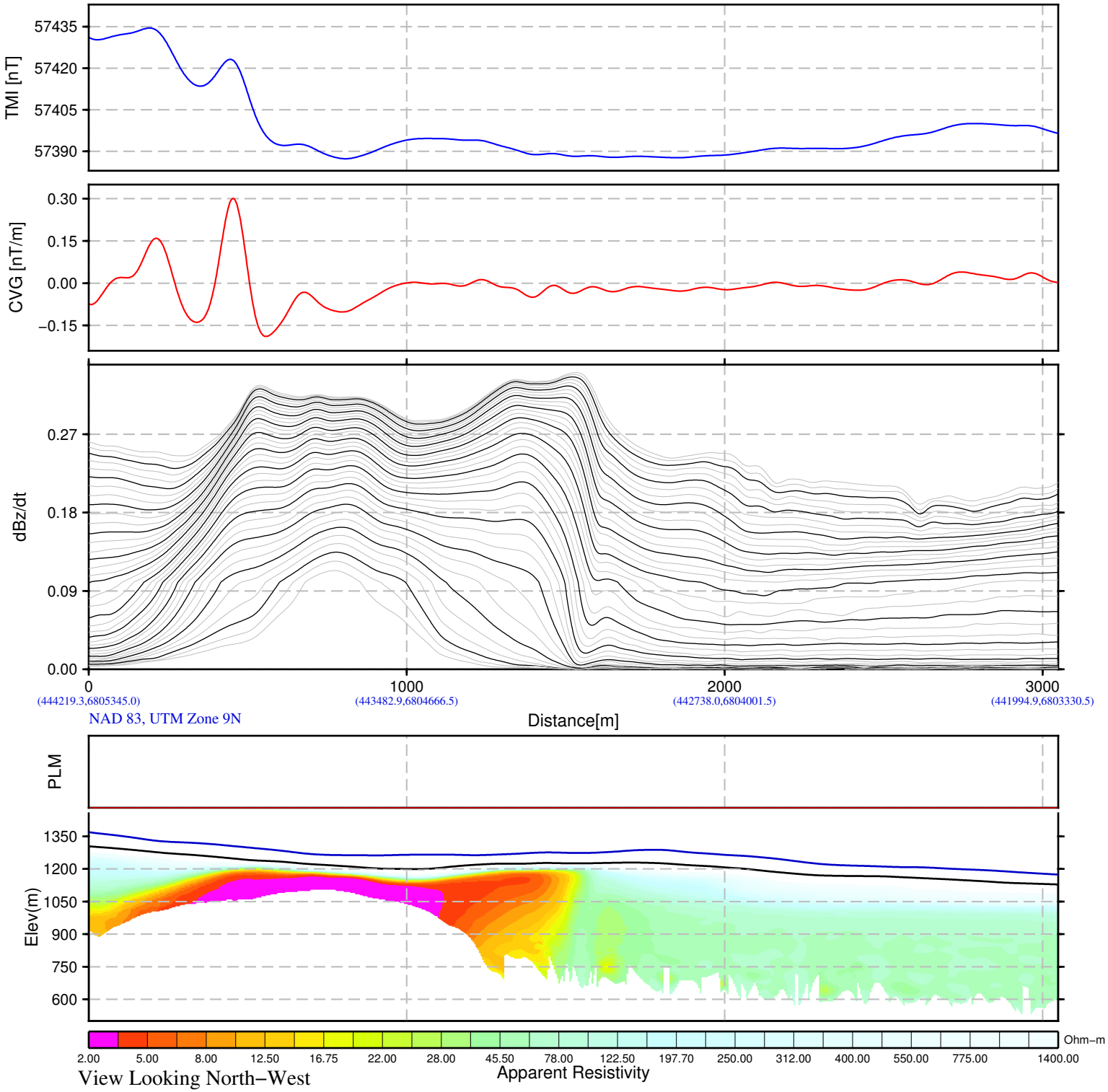
Resistivity Depth Image (RDI) for Line 4860

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

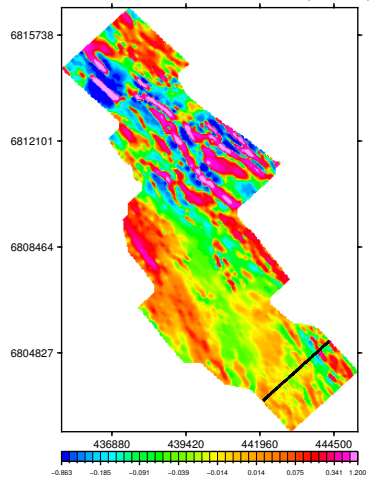
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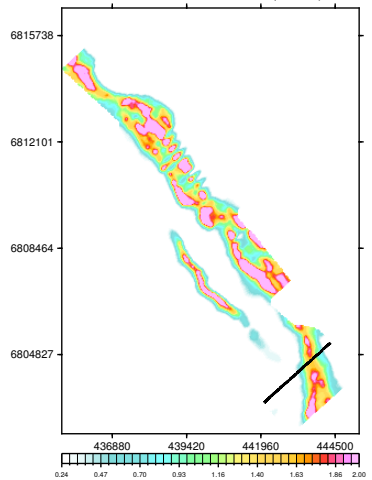
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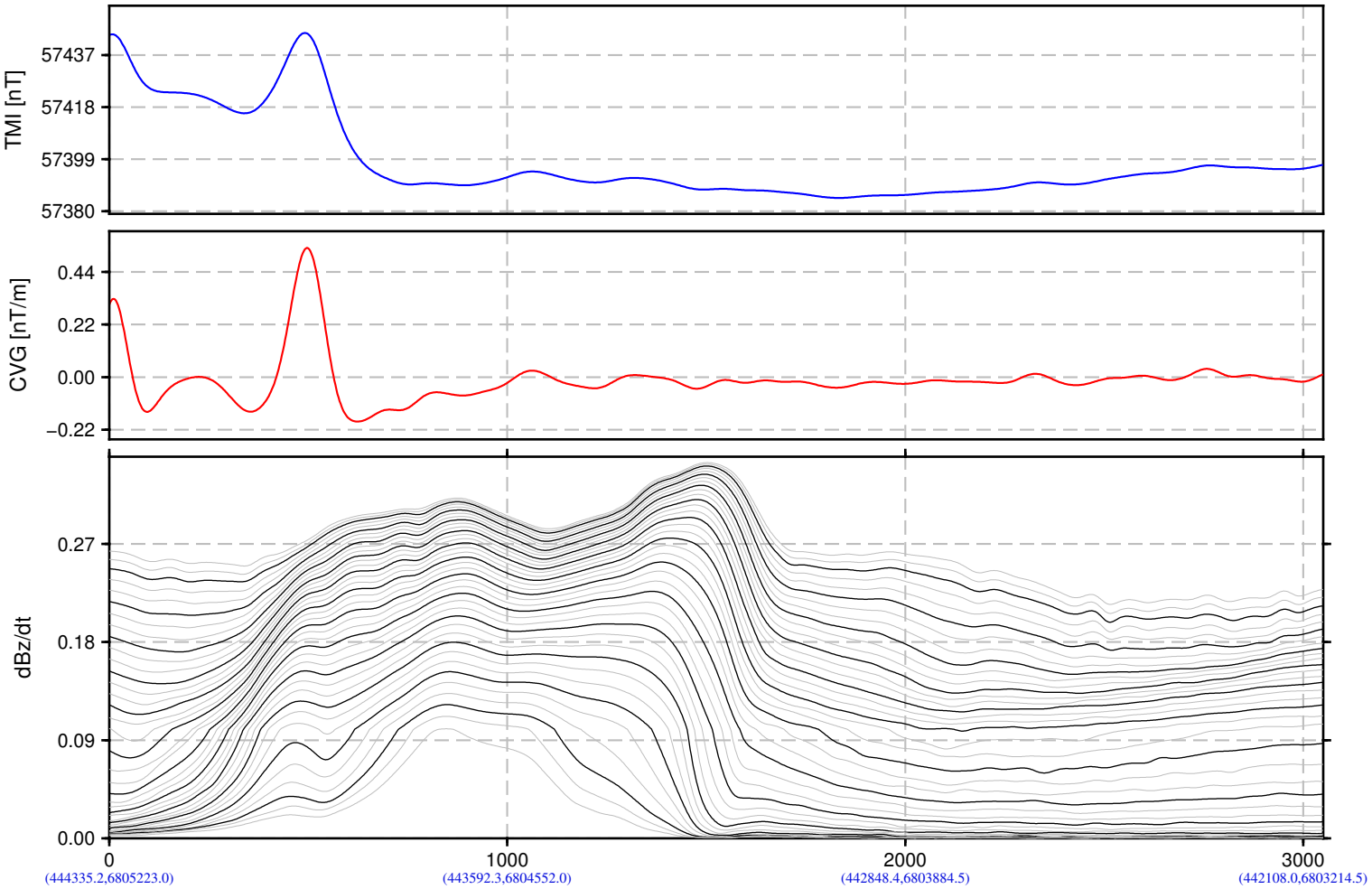
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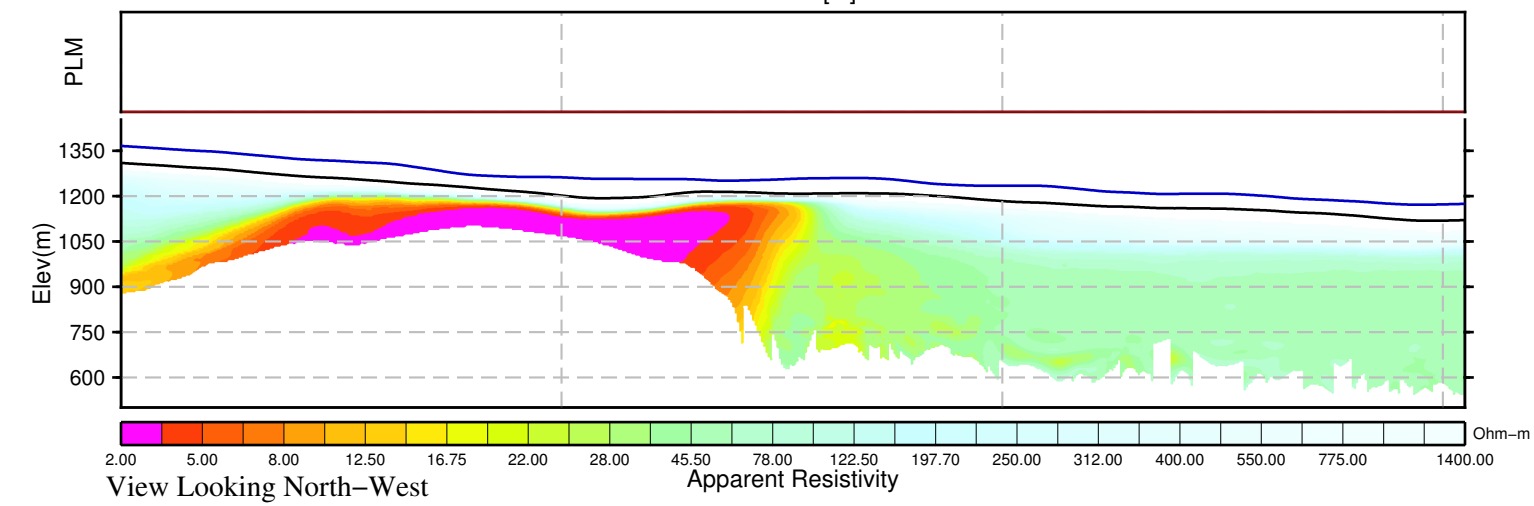
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

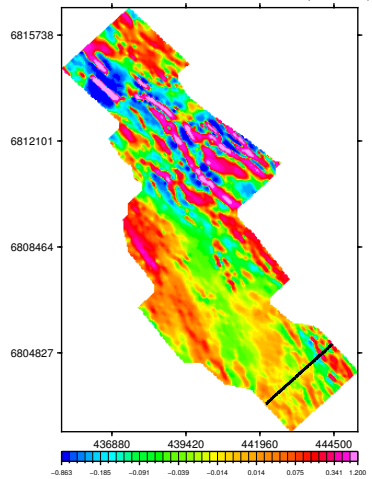
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Job Number:GL160037
Resistivity Depth Image (RDI)
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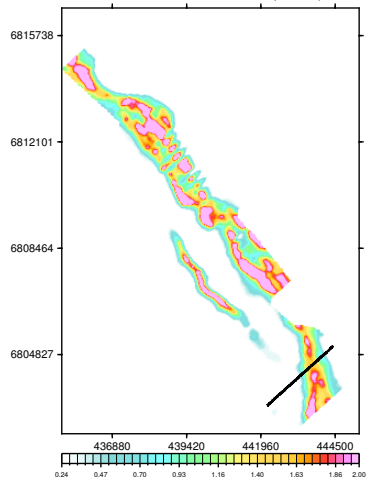
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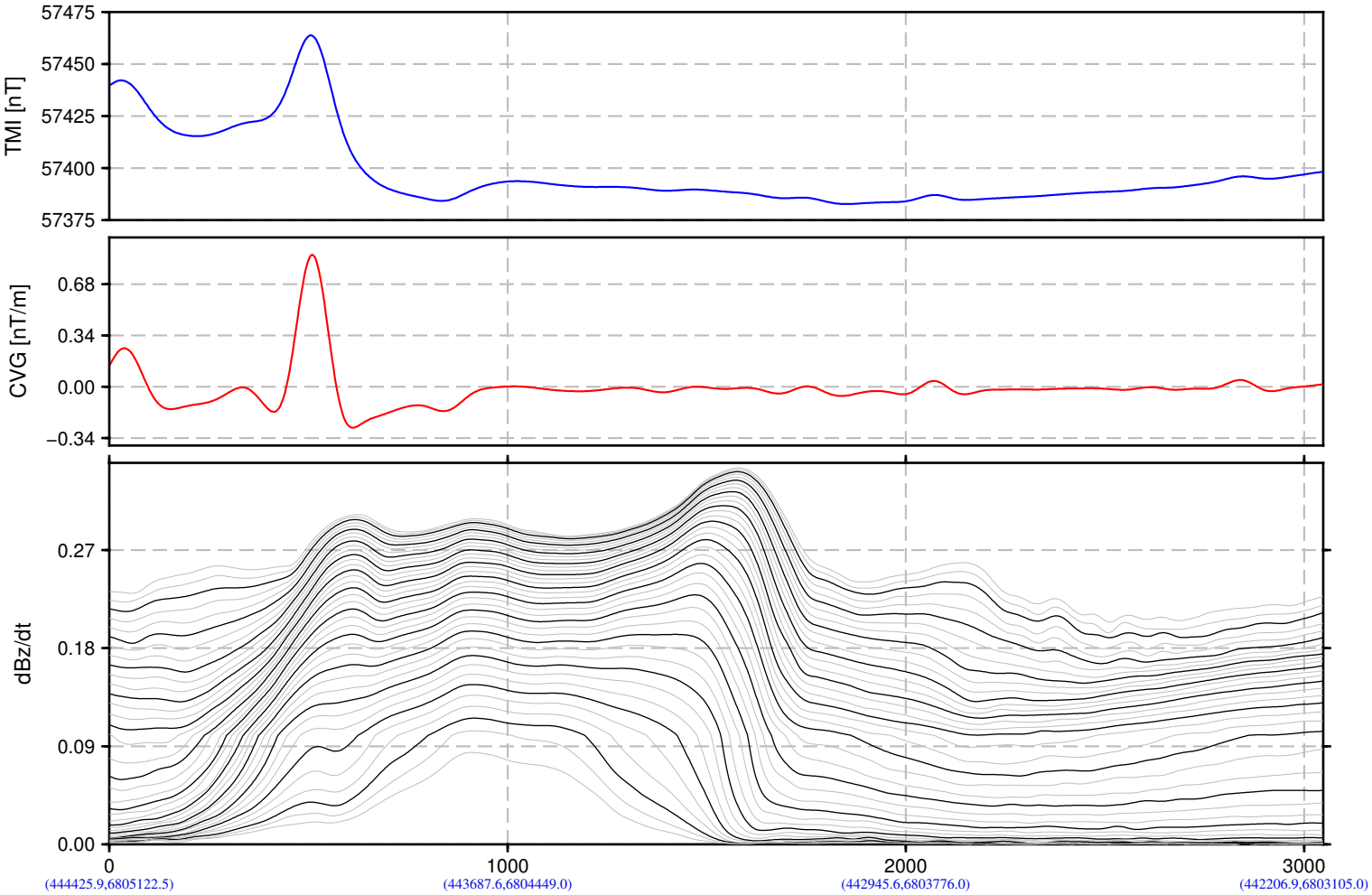
Resistivity Depth Image (RDI) for Line 4880

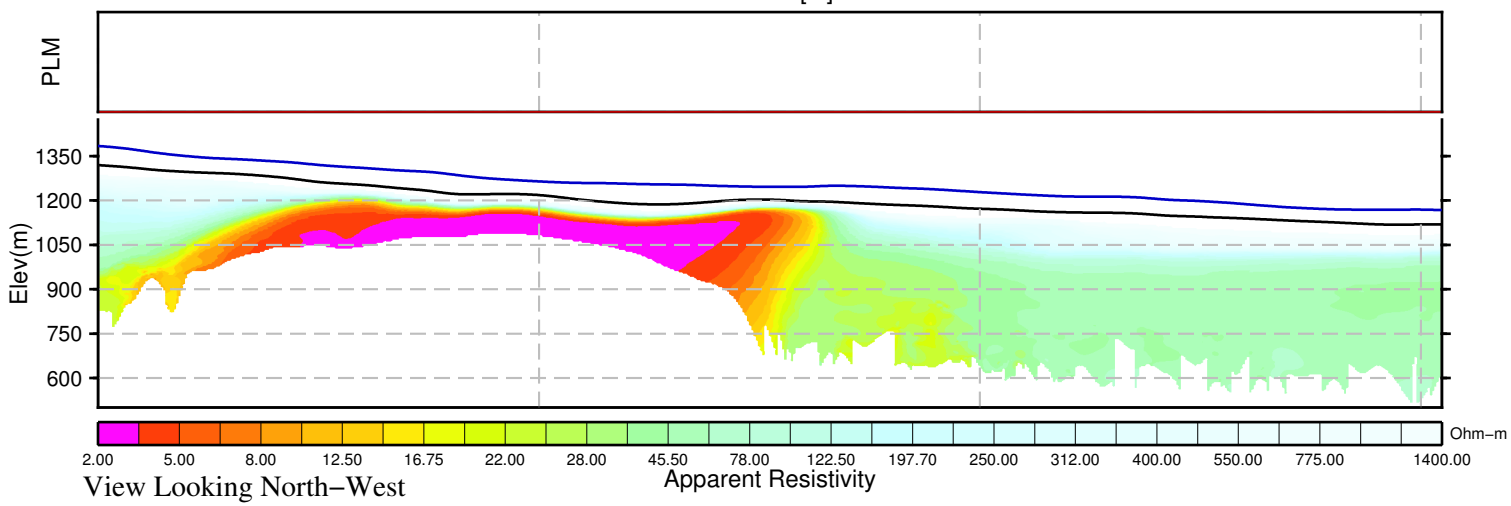
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

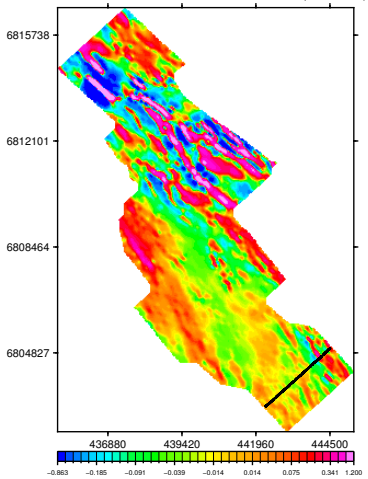
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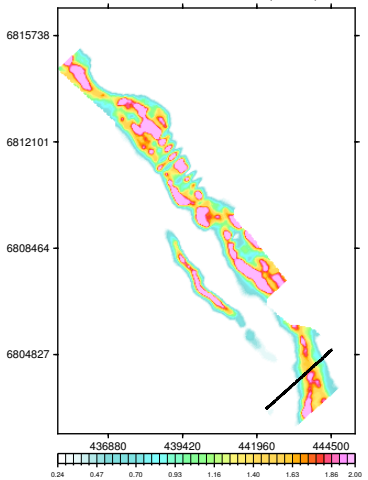
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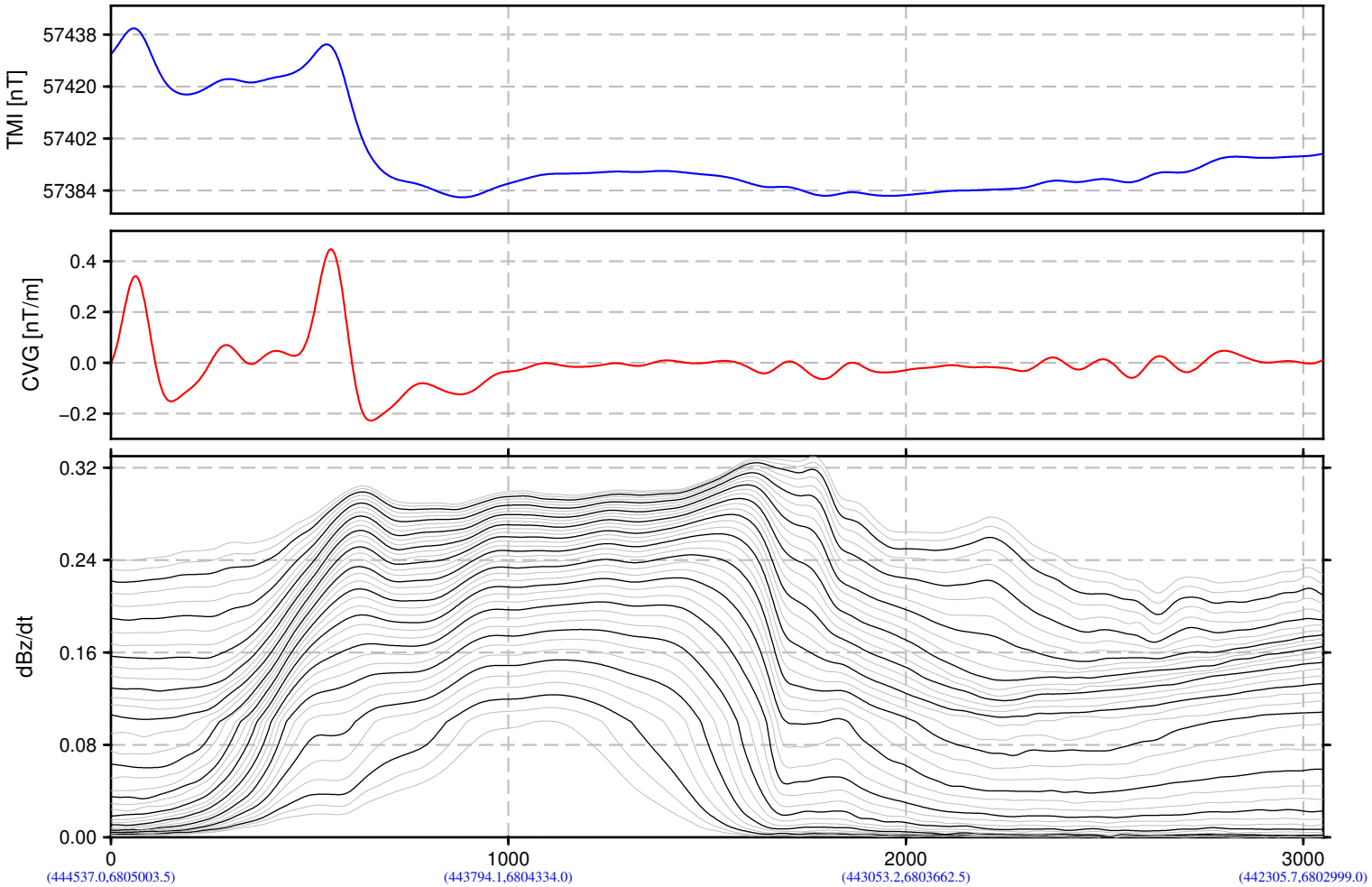
Resistivity Depth Image (RDI) for Line 4890

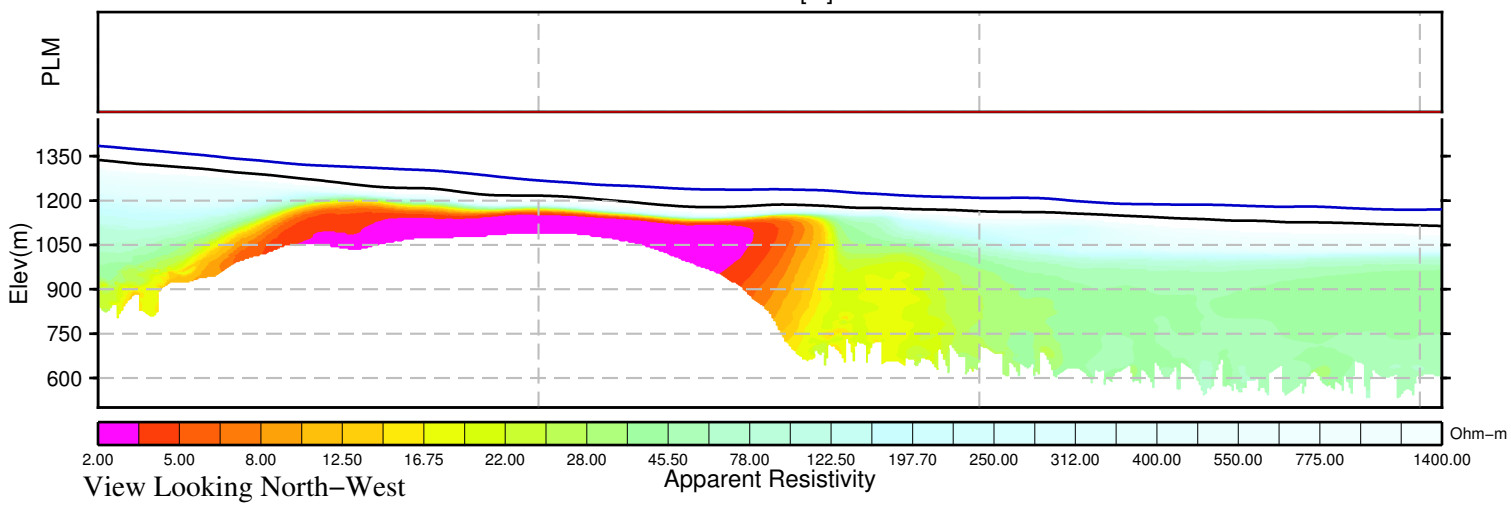
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

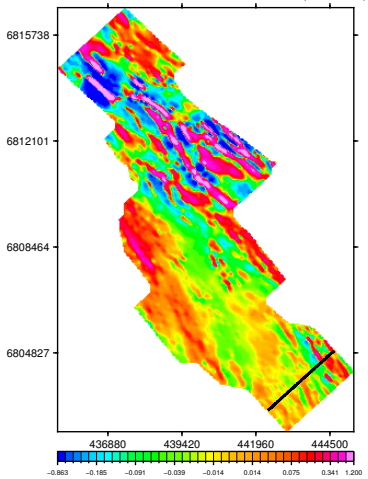
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Job Number:GL160037
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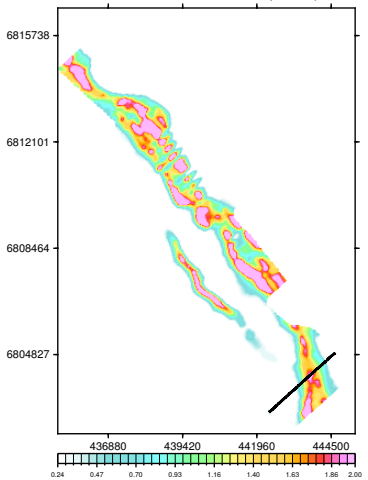
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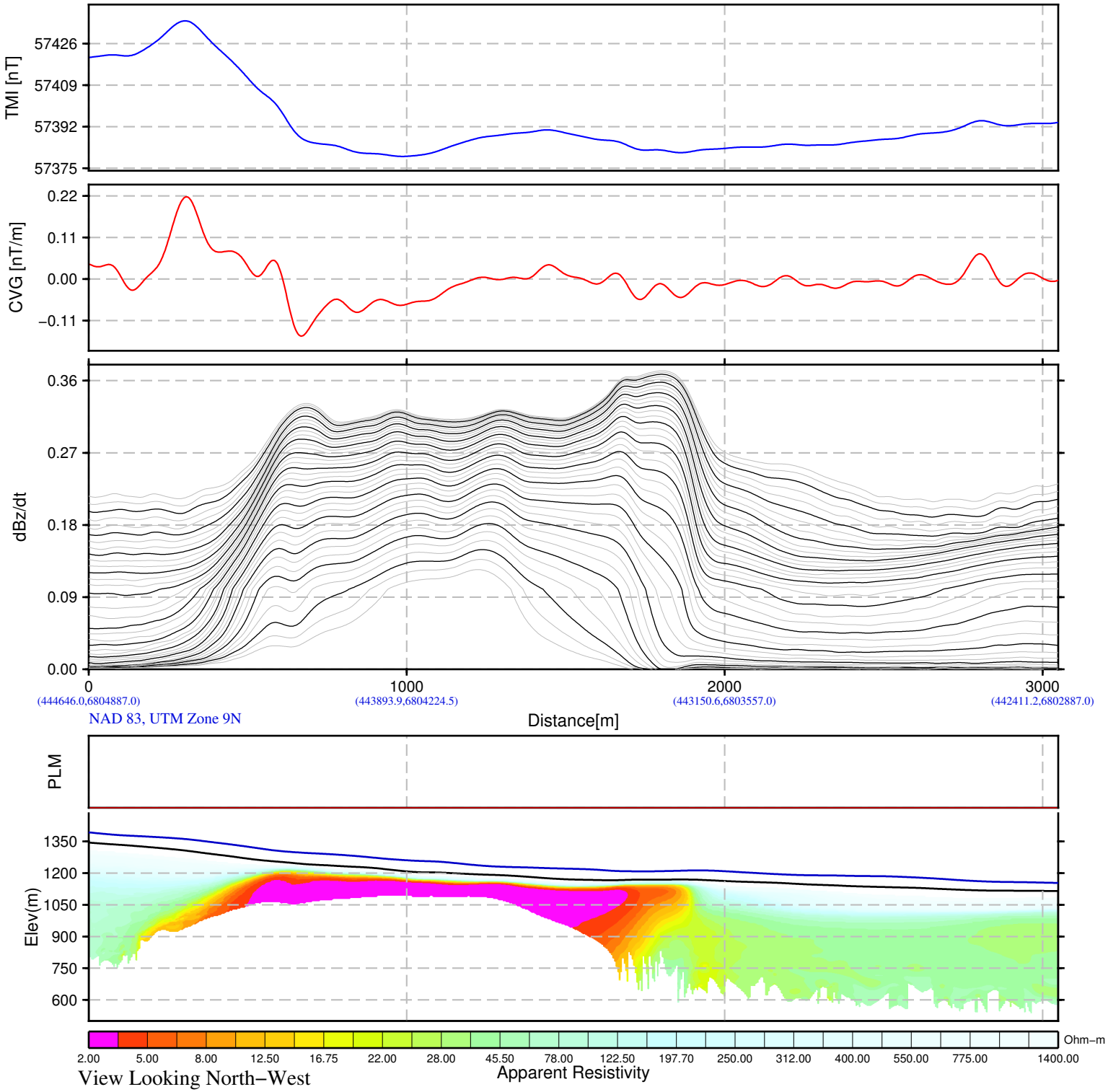
Resistivity Depth Image (RDI) for Line 4905

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

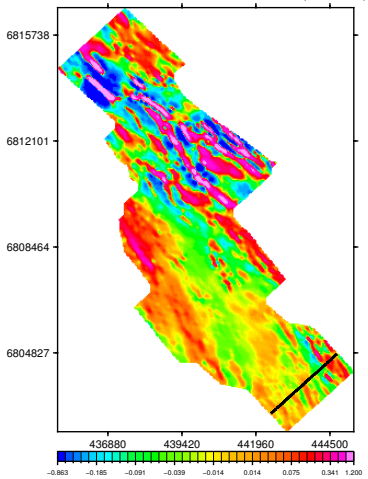
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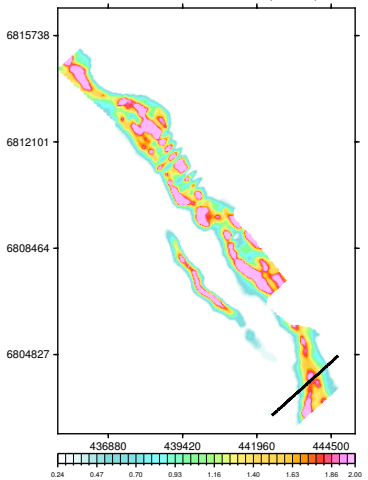
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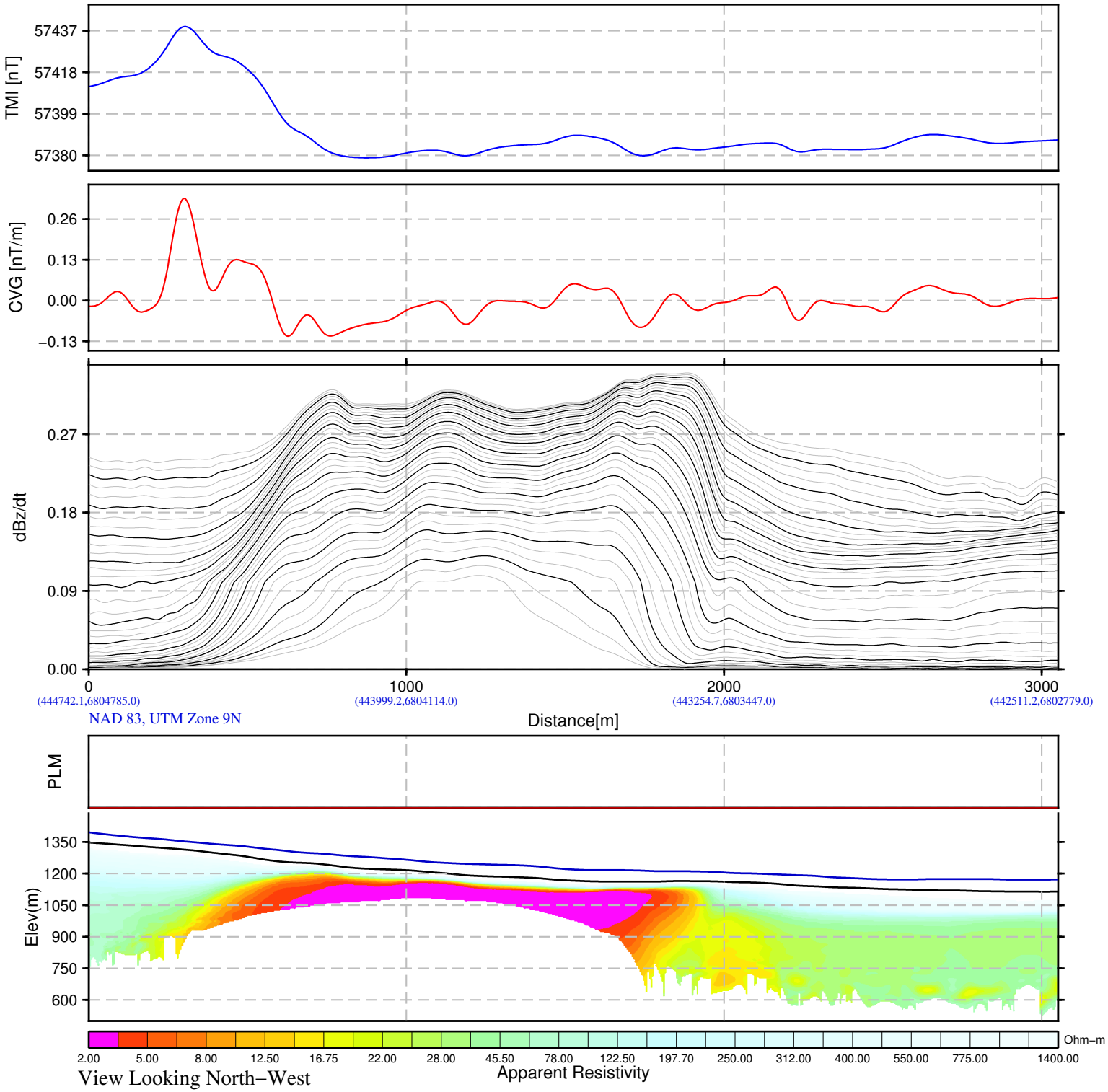
Resistivity Depth Image (RDI) for Line 4910

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





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Pelly Block
Yukon, Canada

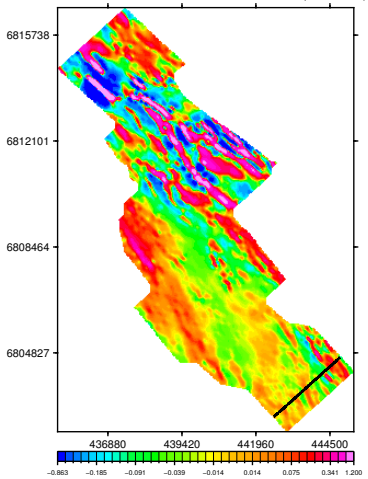
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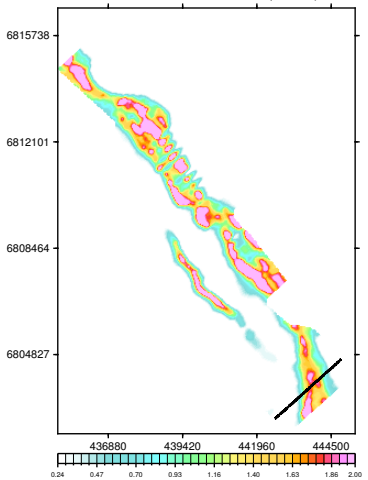
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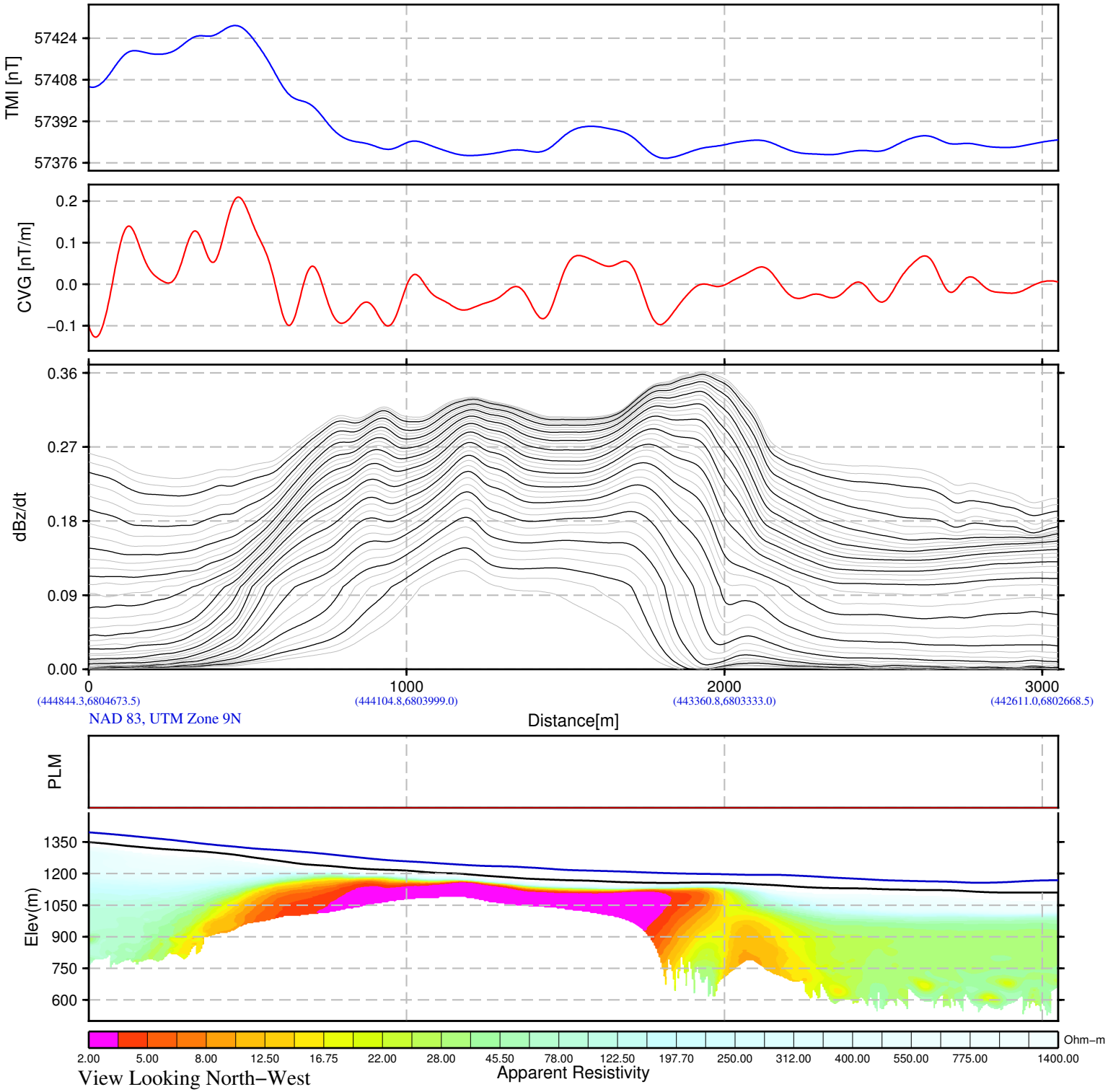
Resistivity Depth Image (RDI) for Line 4925

Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)





BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

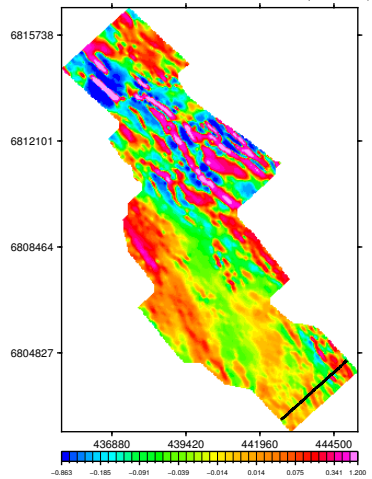
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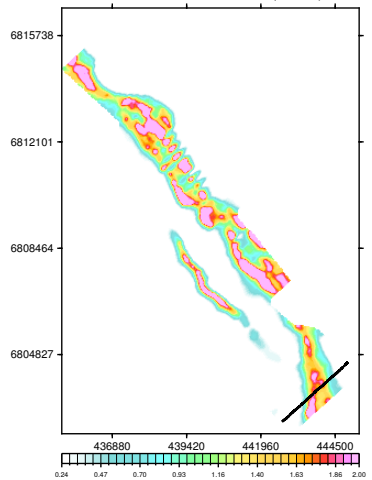
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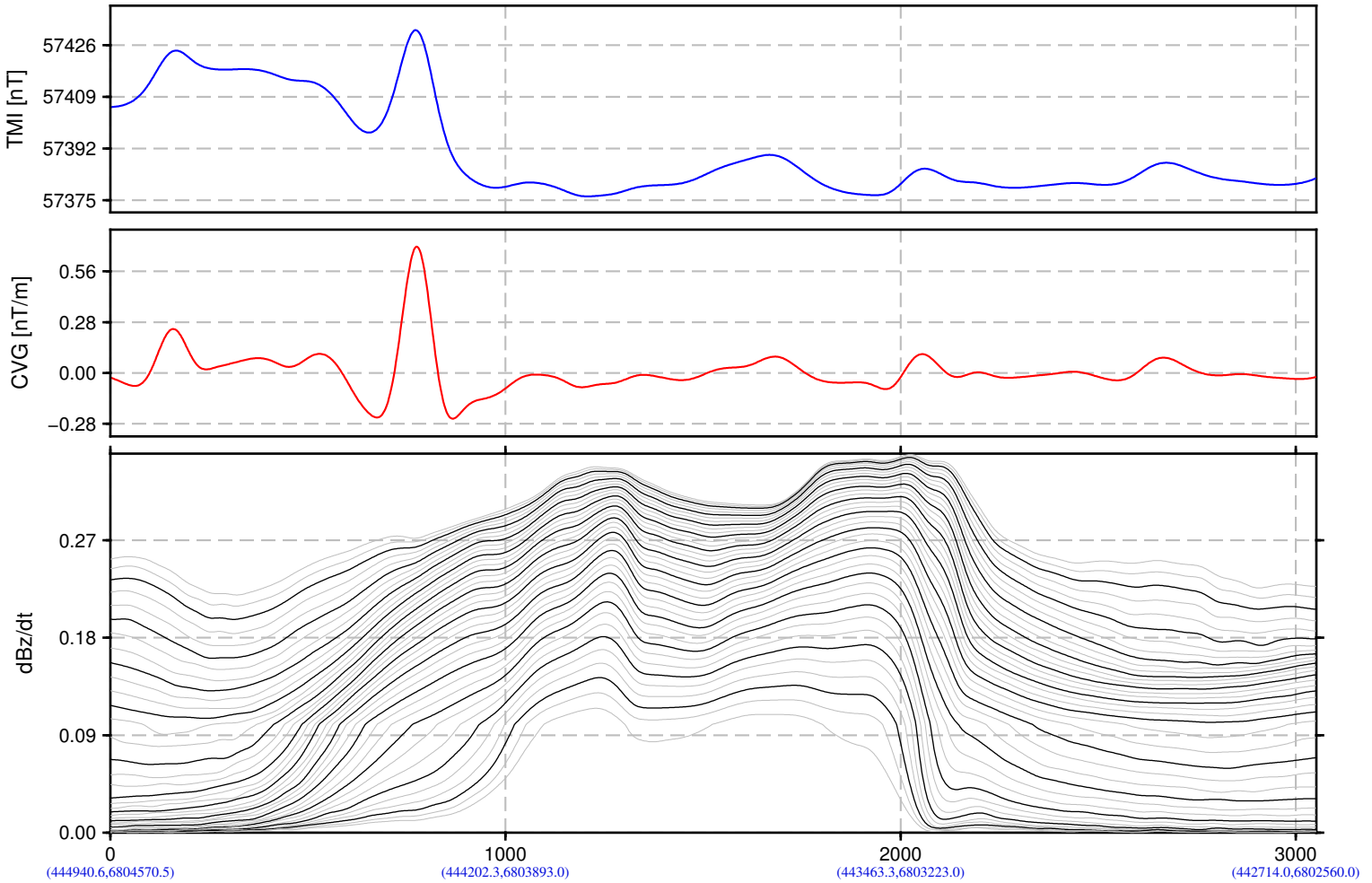
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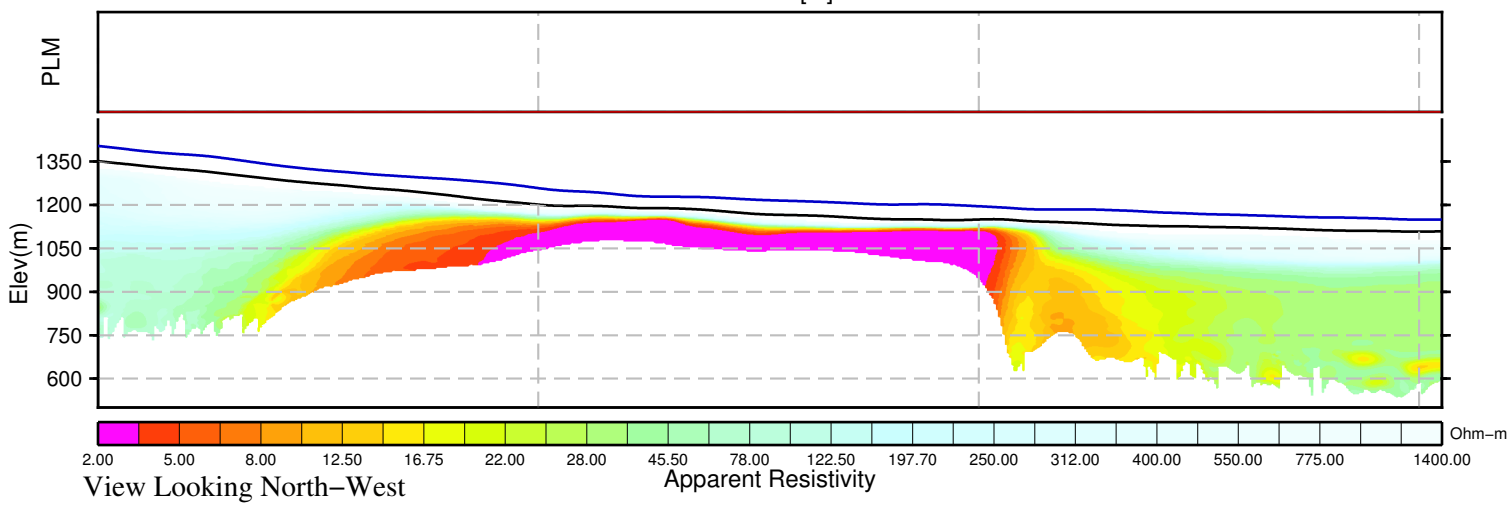
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

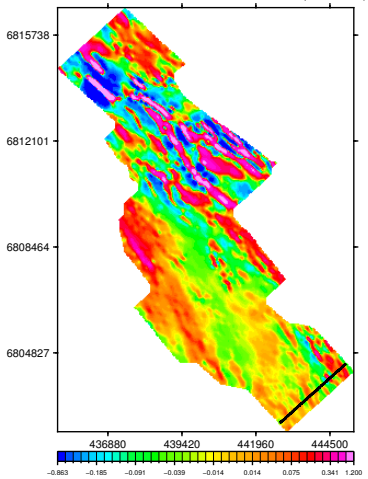
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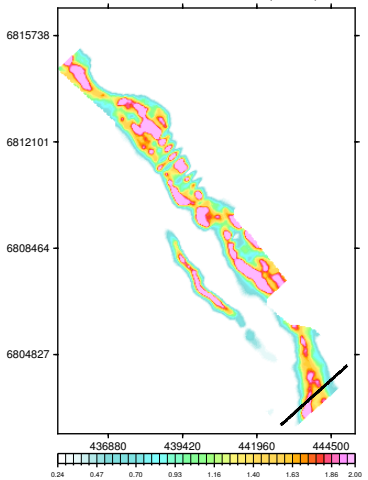
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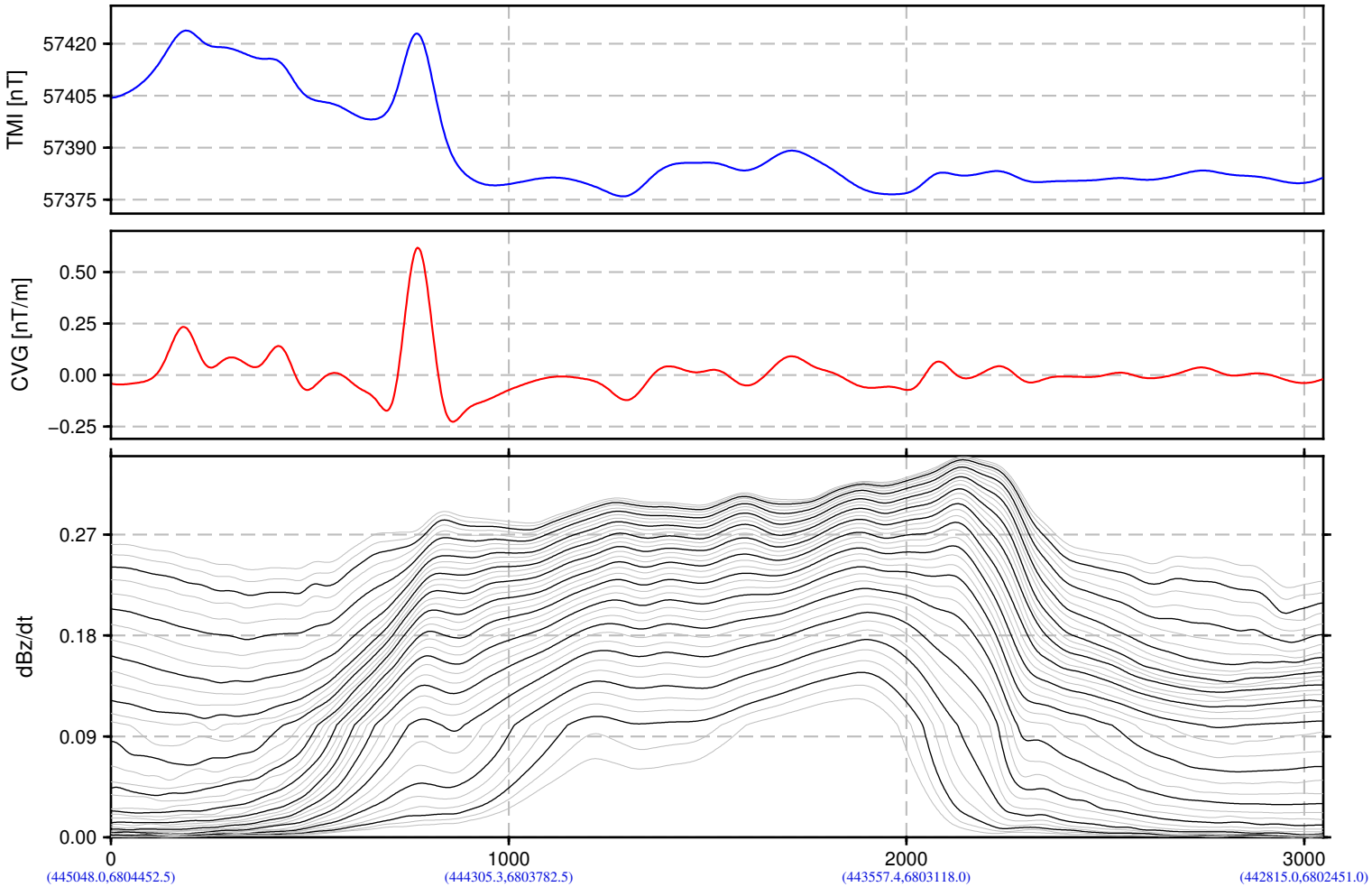
Resistivity Depth Image (RDI) for Line 4940

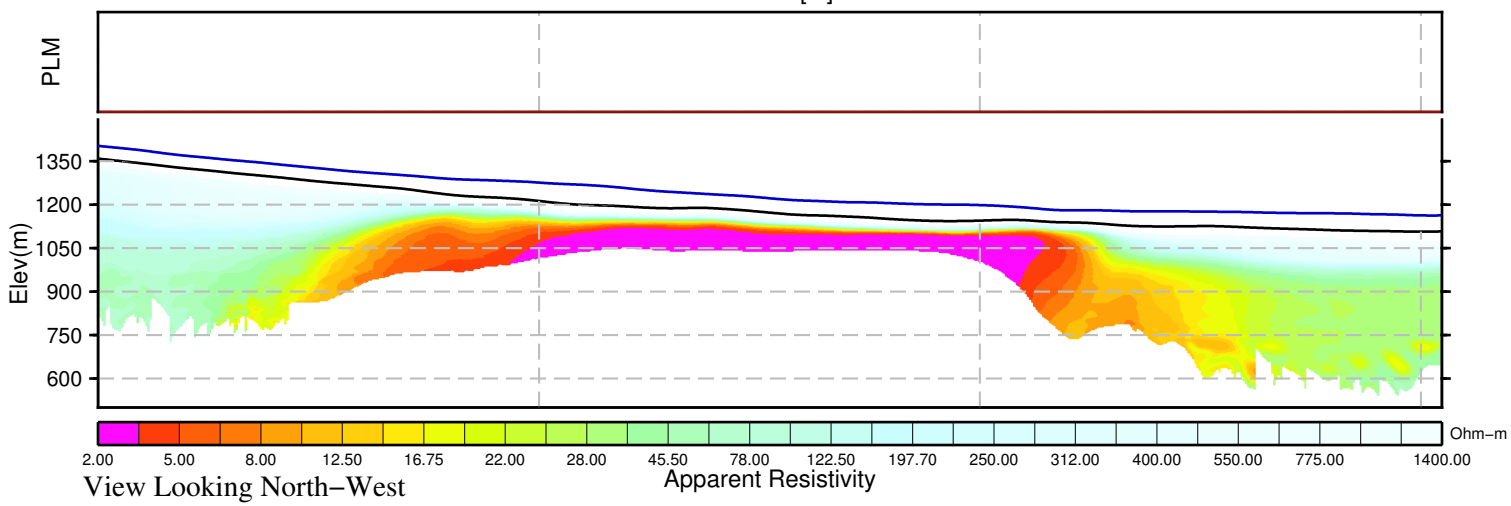
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

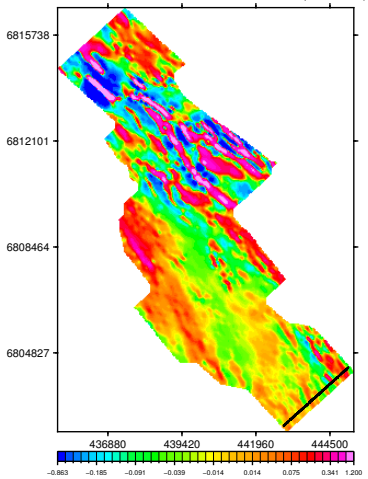
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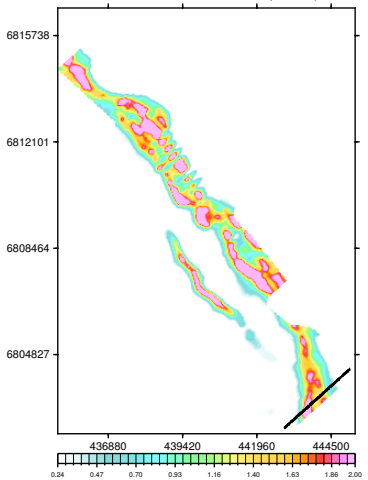
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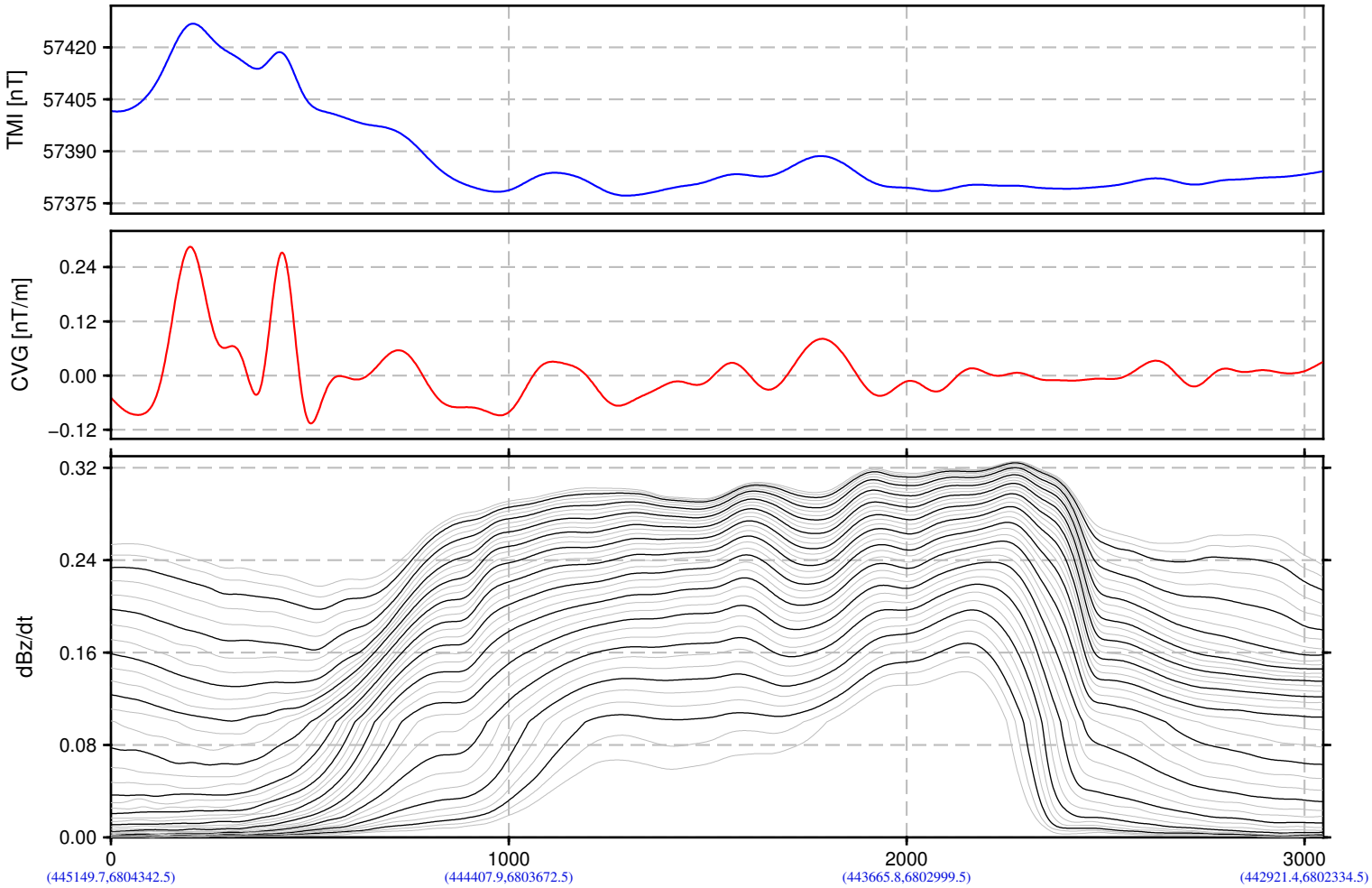
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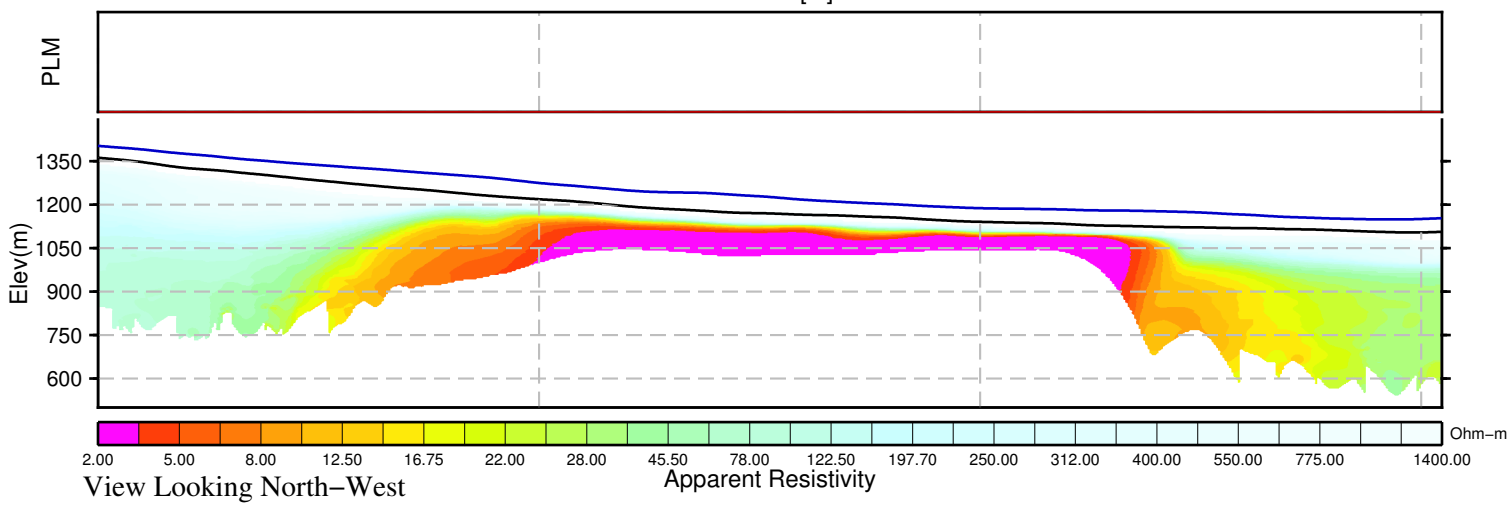
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

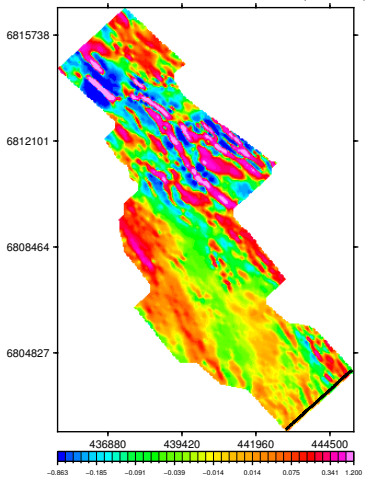
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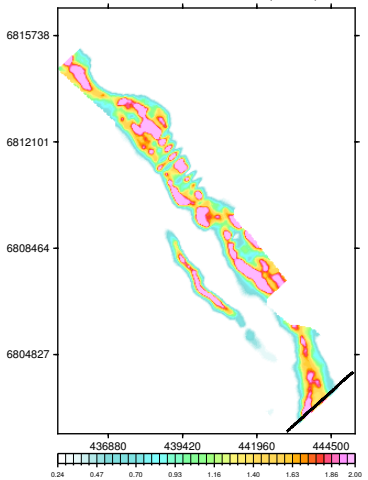
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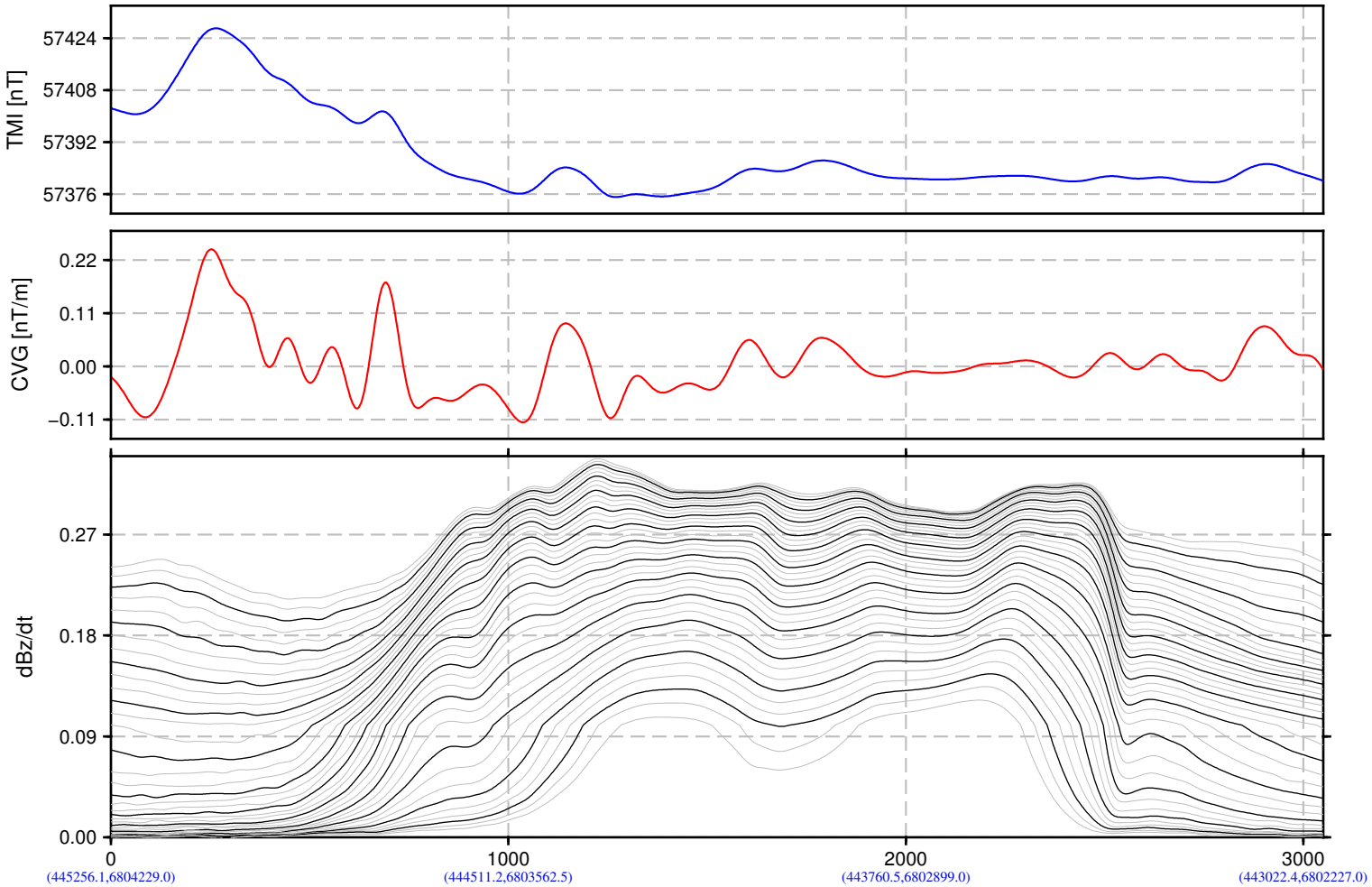
Resistivity Depth Image (RDI) for Line 4965

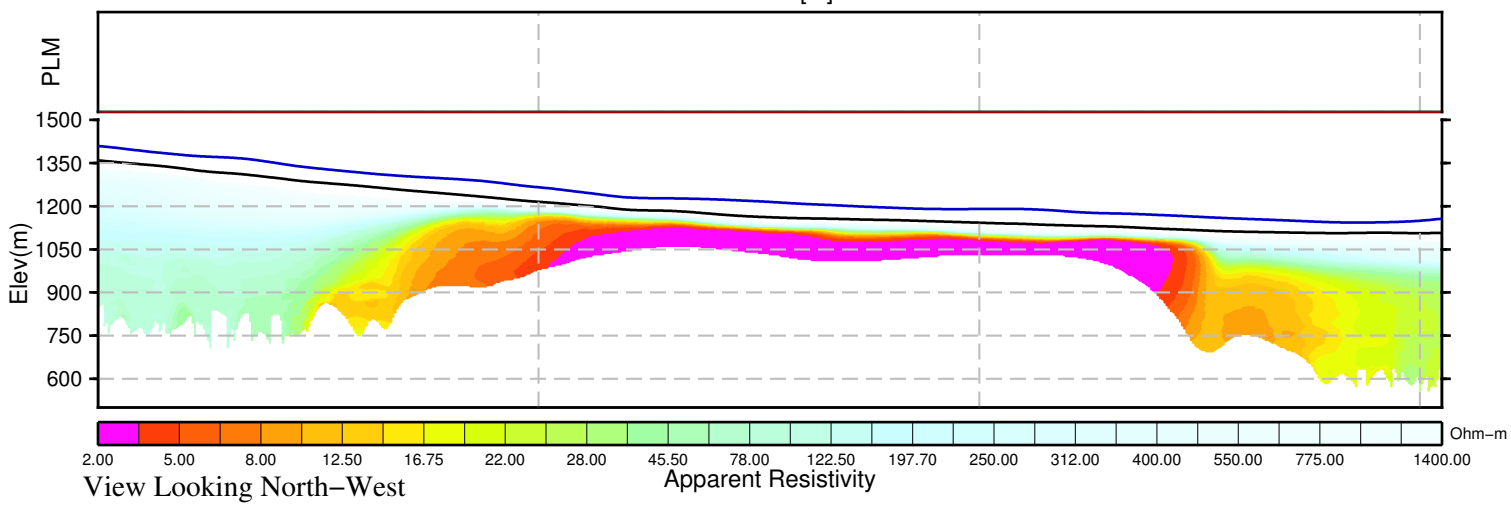
Calculated Vertical Gradient (CVG)



dB/dt Time Constant (Tau)







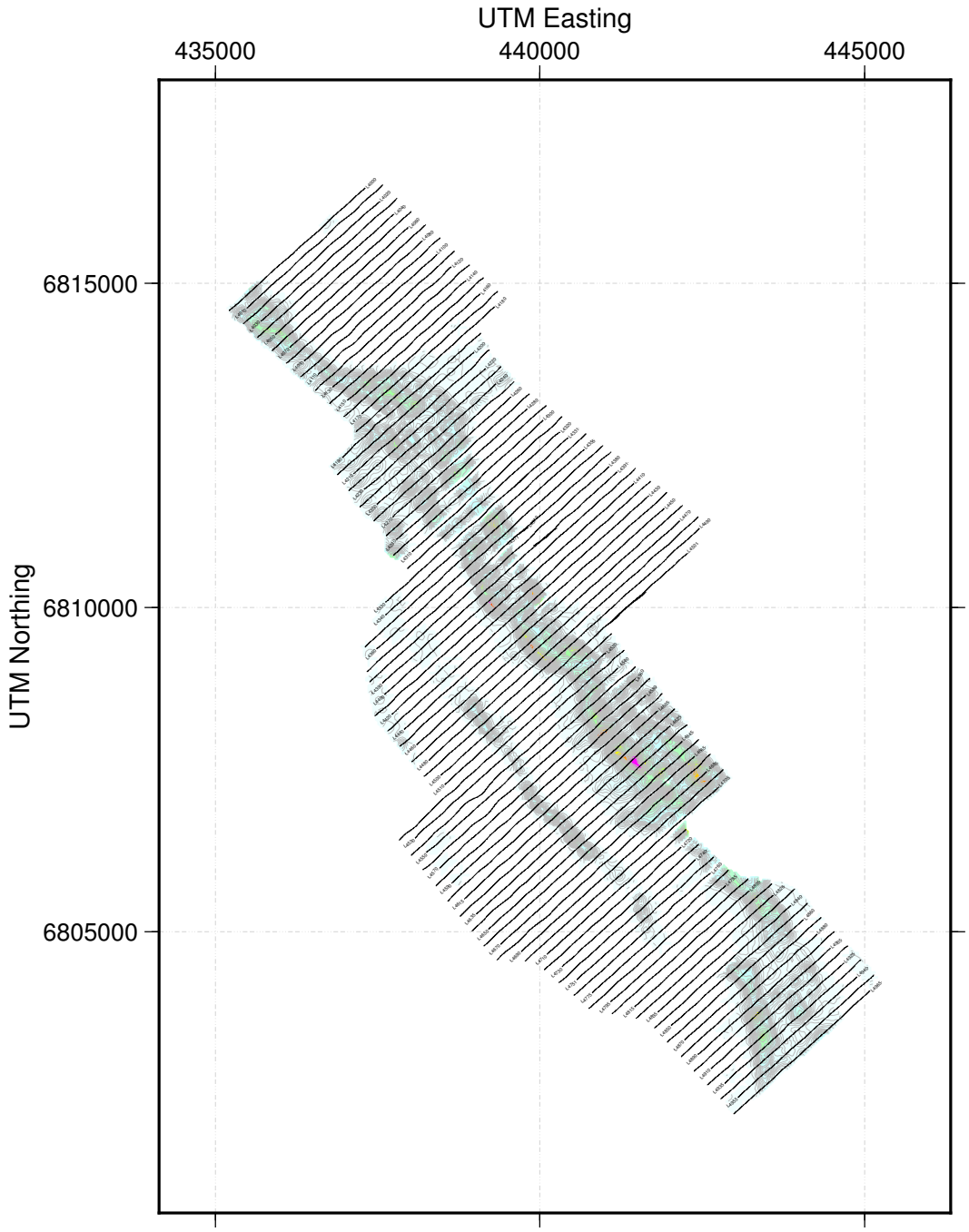
BMC Minerals (N0.1) Ltd.
Pelly Block
Yukon, Canada

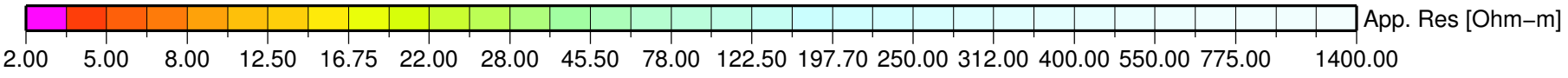
VTEM System:VTEM31−Plus
Job Number:GL160037
Resistivity Depth Image (RDI)
Flown by Geotech Ltd.
Processed by Geotech Ltd.
245 Industrial Parkway North
Aurora, Ontario, Canada L4G 4C4
www.geotech.ca

2016/ 8/26

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AIRBORNE GEOPHYSICAL SURVEYS

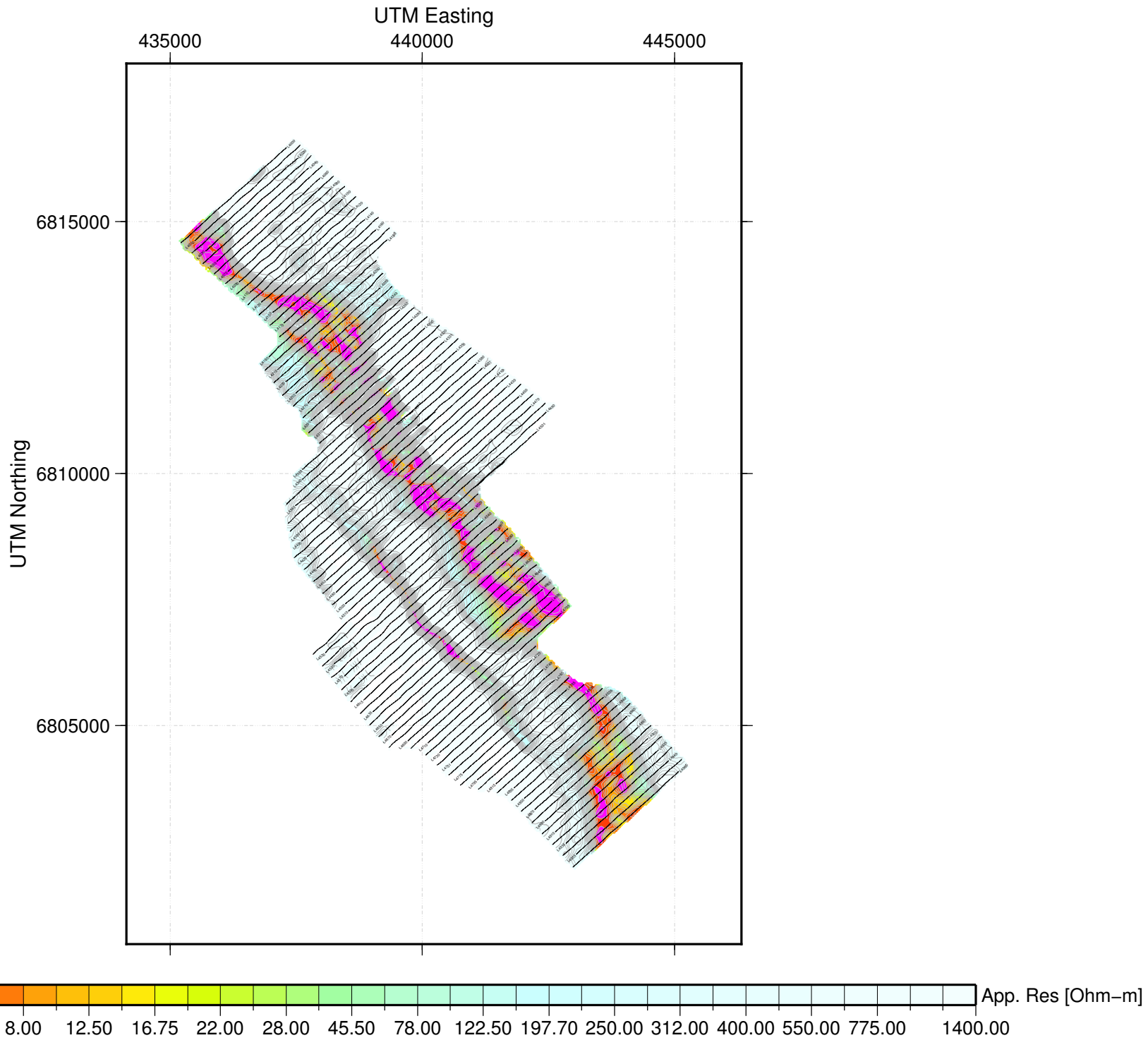
VTEM RDI: Resistivity Depth Slice at 025m of depth





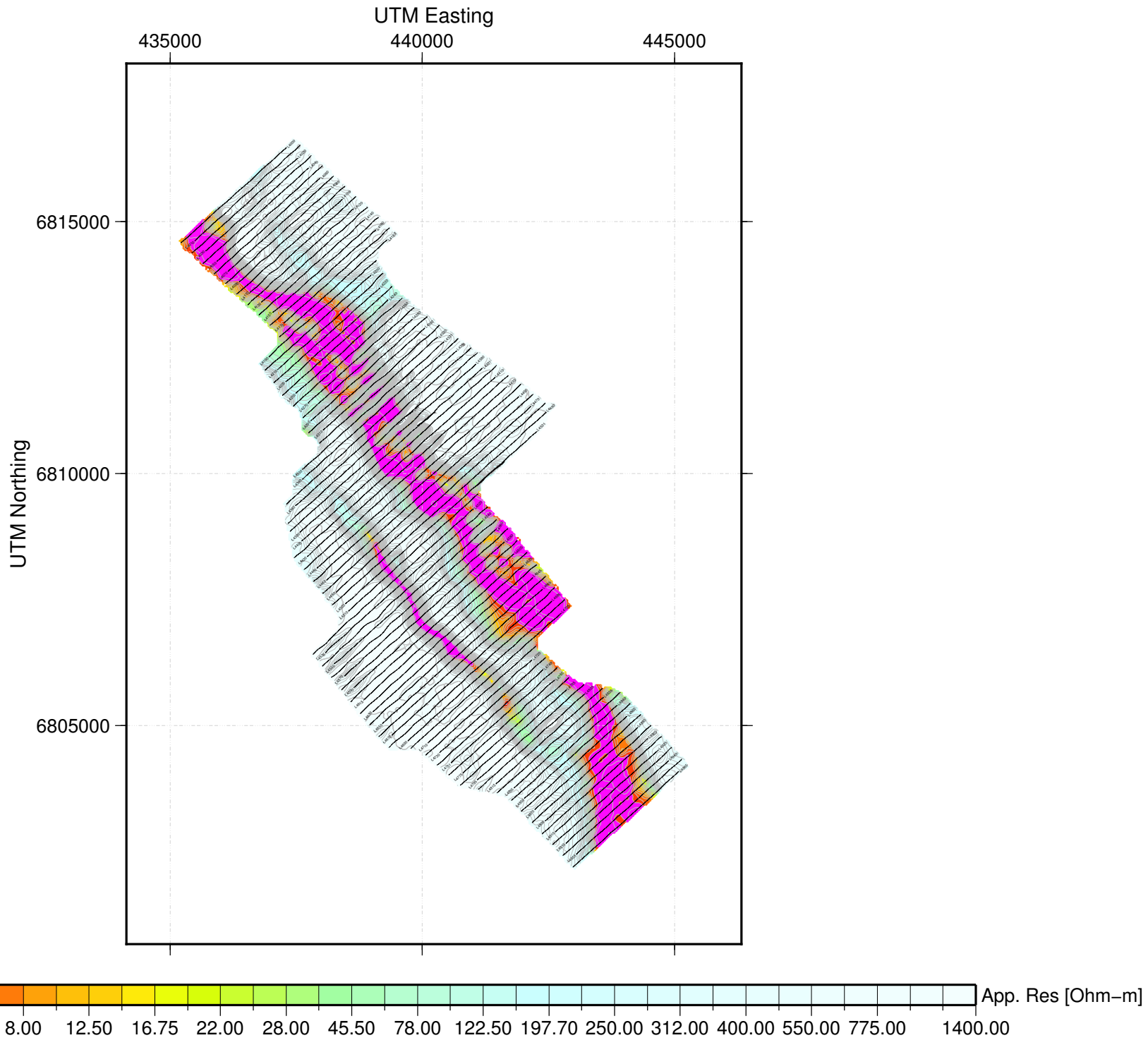
GEOTECH
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VTEM RDI: Resistivity Depth Slice at 050m of depth



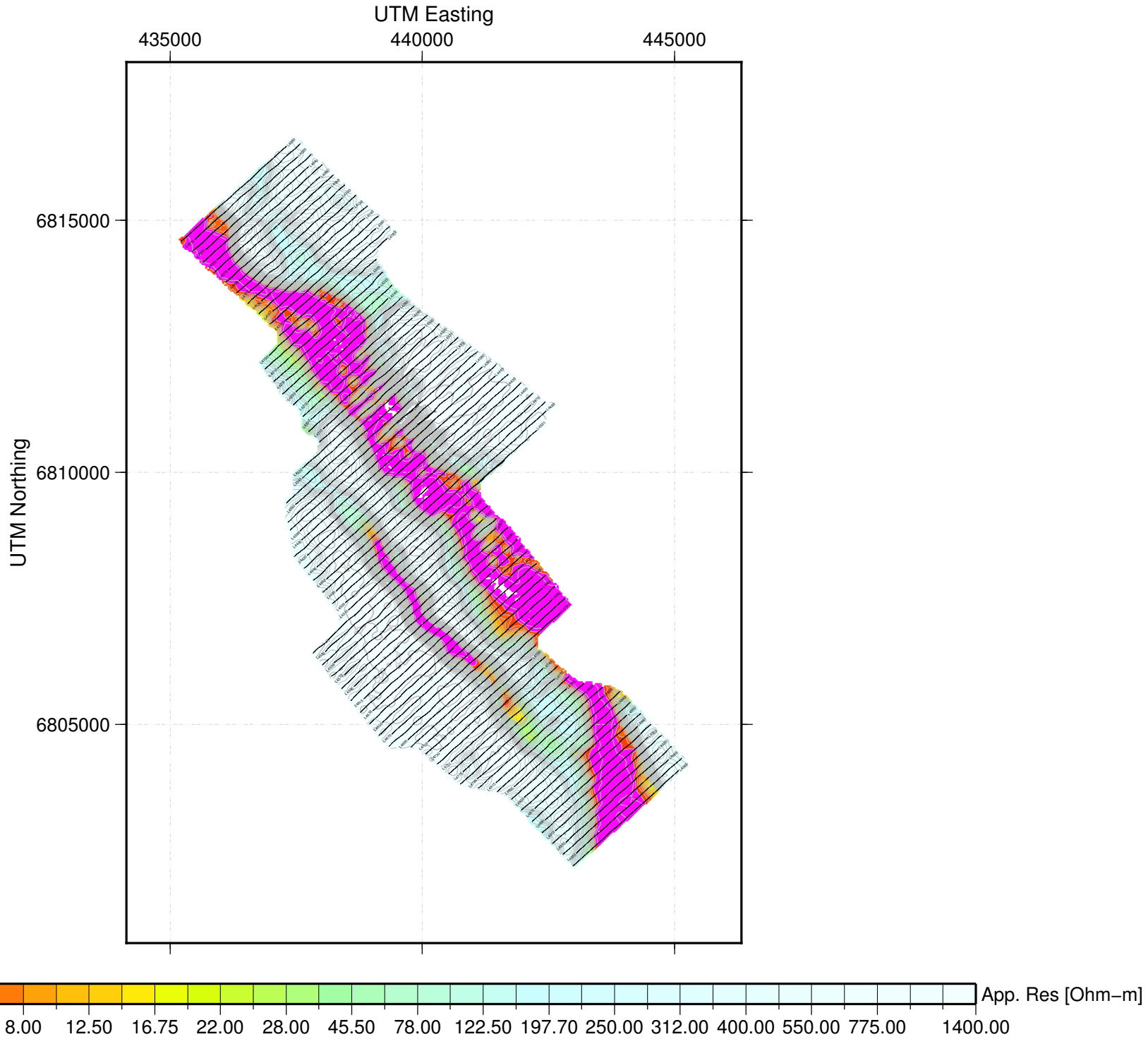
GEOTECH
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VTEM RDI: Resistivity Depth Slice at 075m of depth



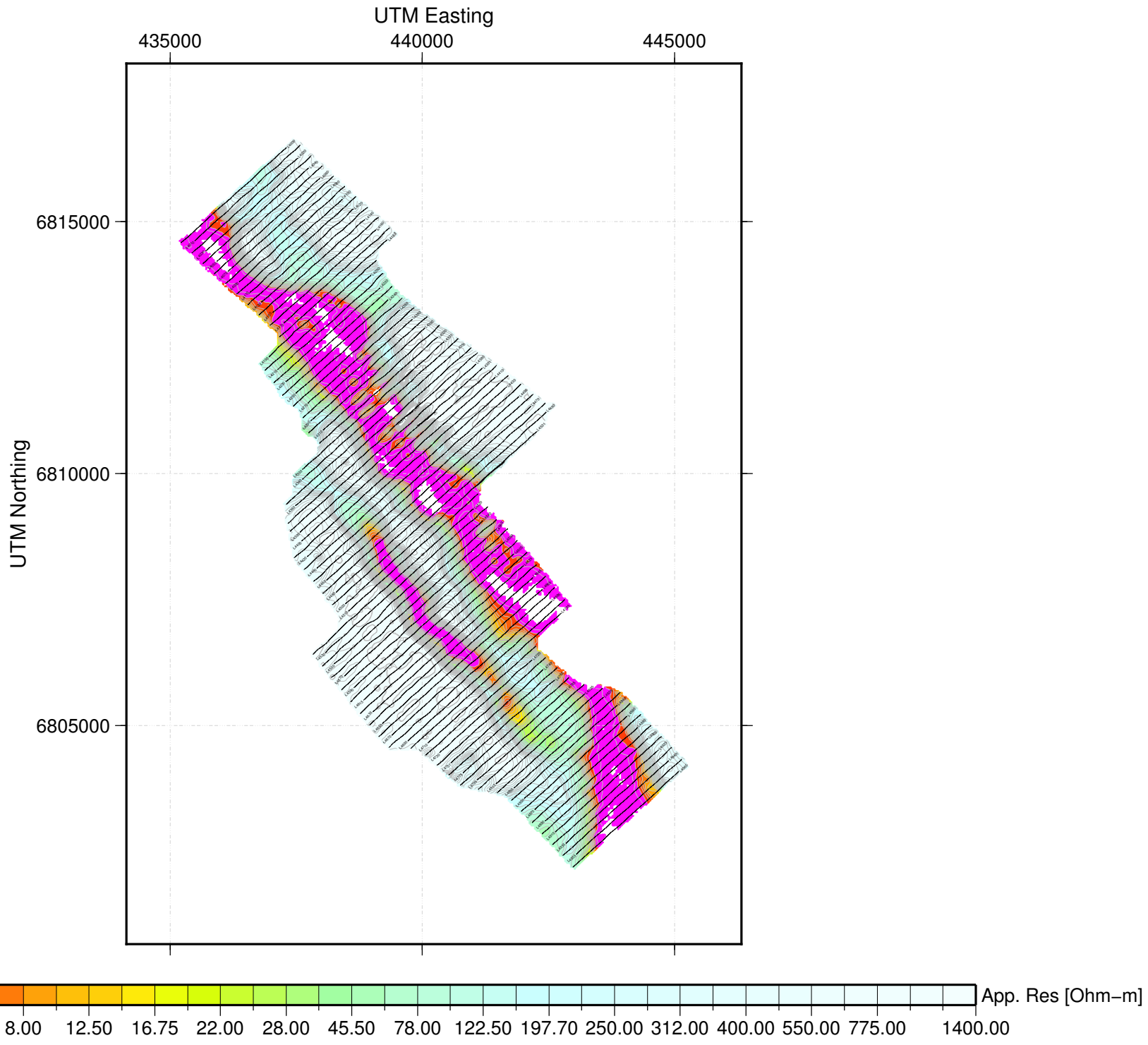
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

VTEM RDI: Resistivity Depth Slice at 100m of depth



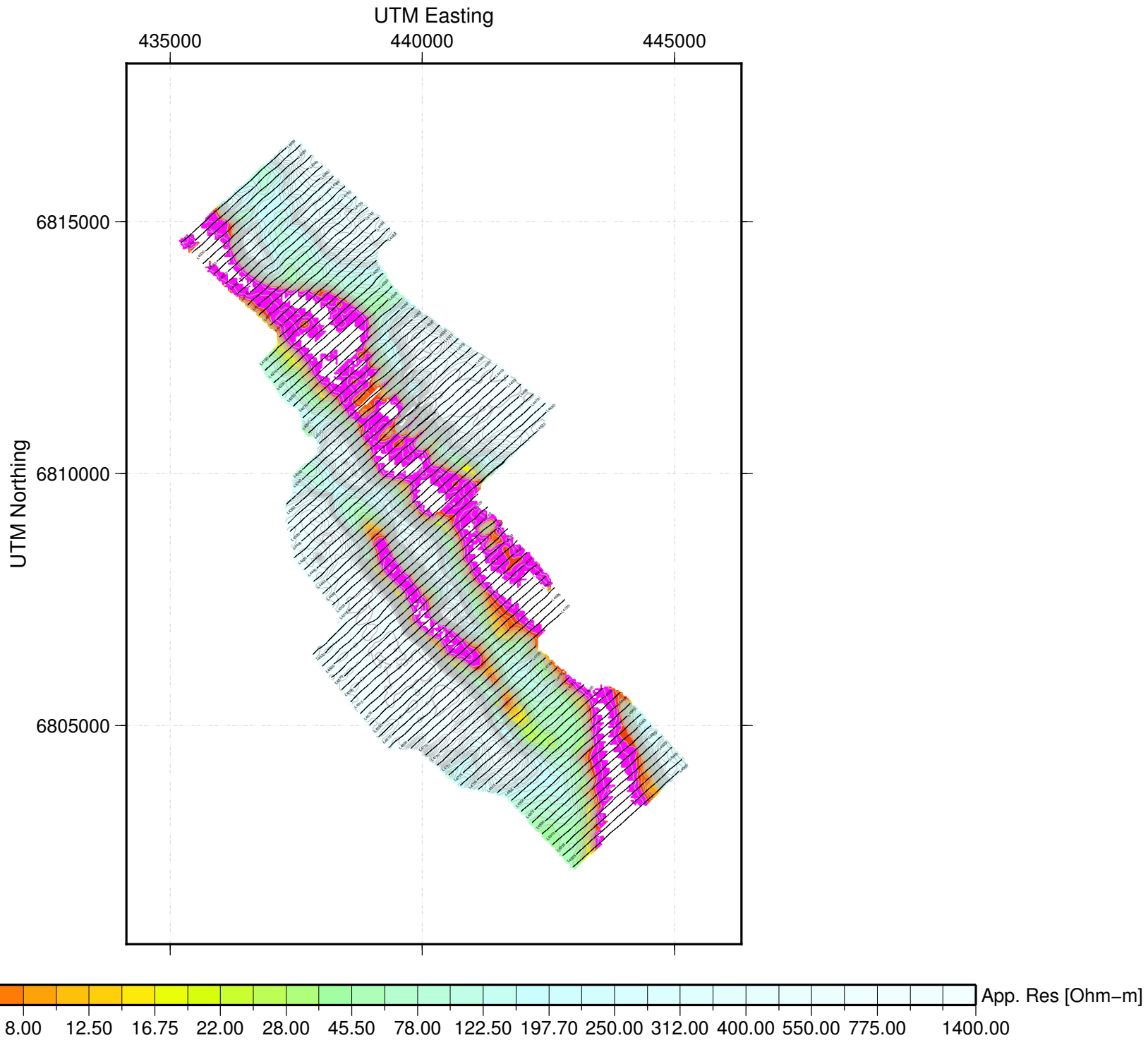
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

VTEM RDI: Resistivity Depth Slice at 125m of depth



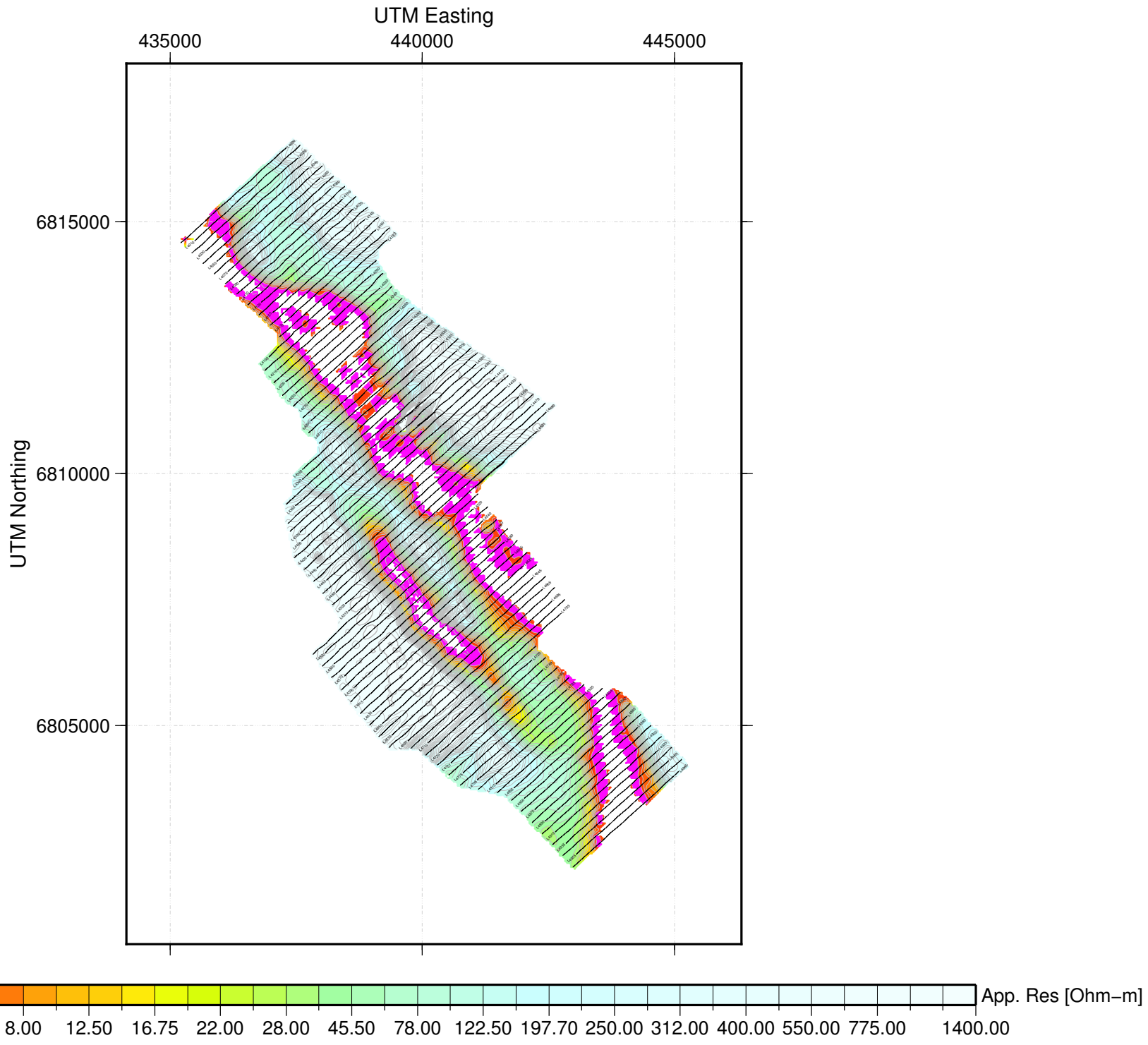
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

VTEM RDI: Resistivity Depth Slice at 150m of depth



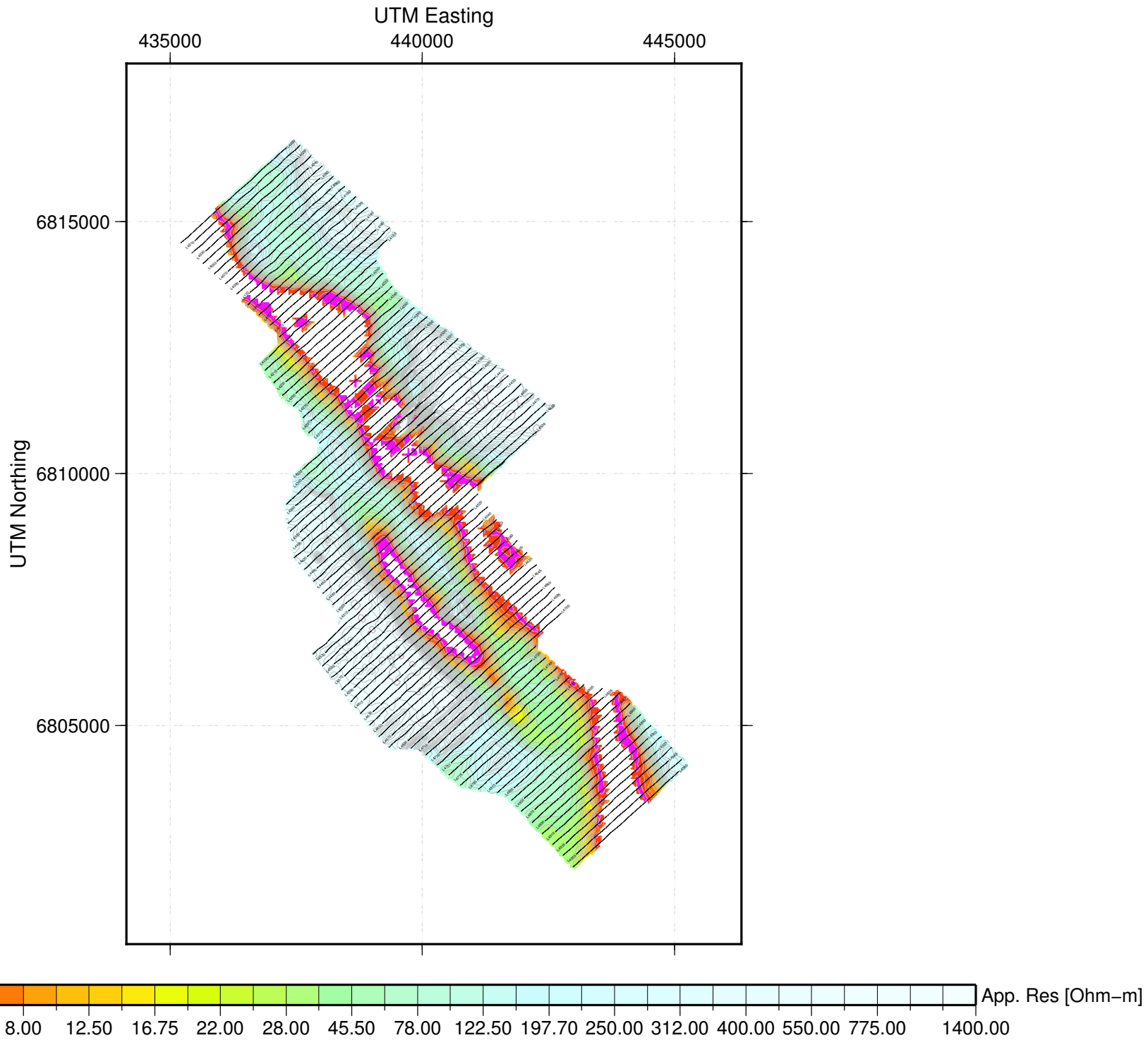
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

VTEM RDI: Resistivity Depth Slice at 175m of depth



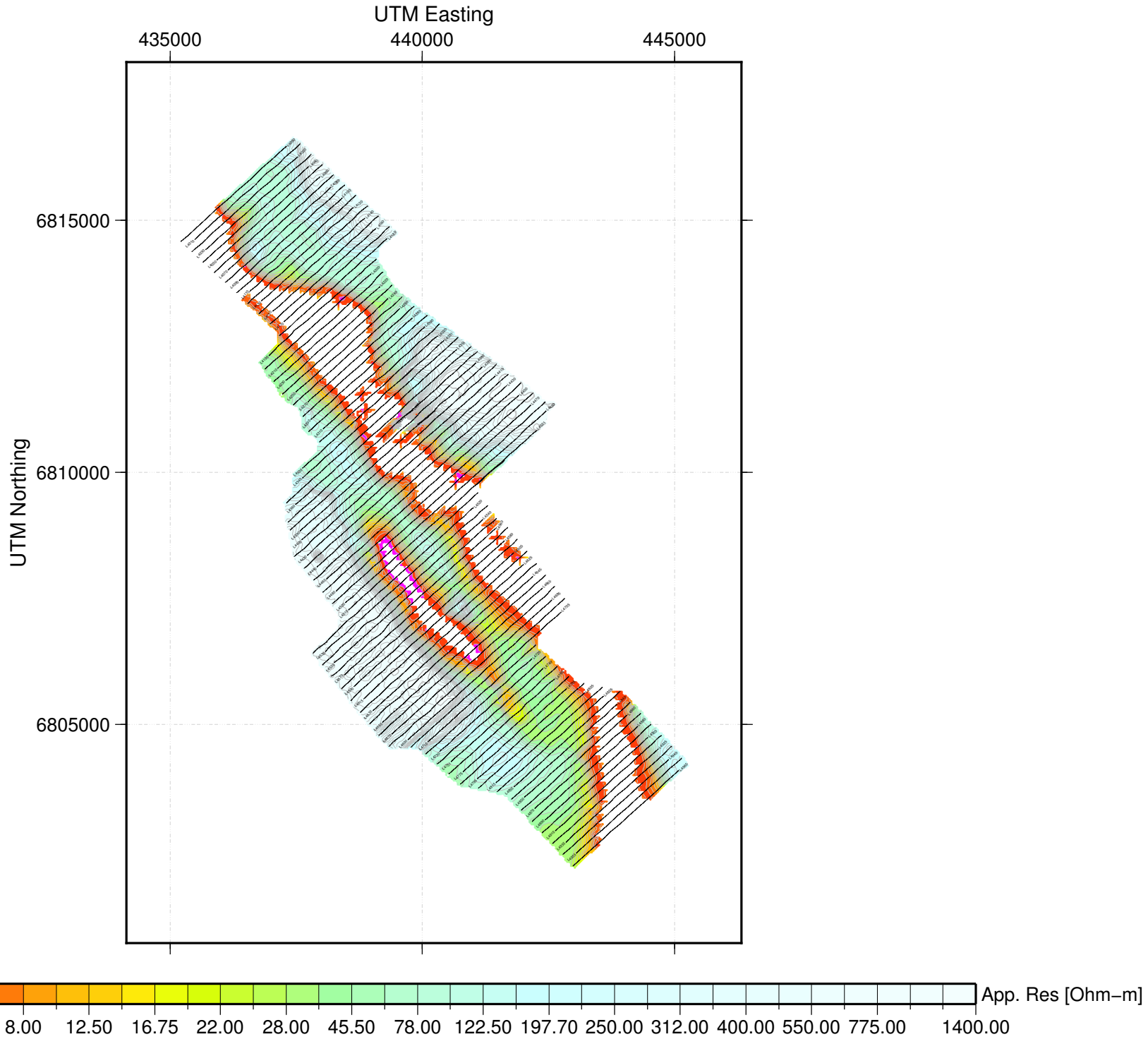
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

VTEM RDI: Resistivity Depth Slice at 200m of depth



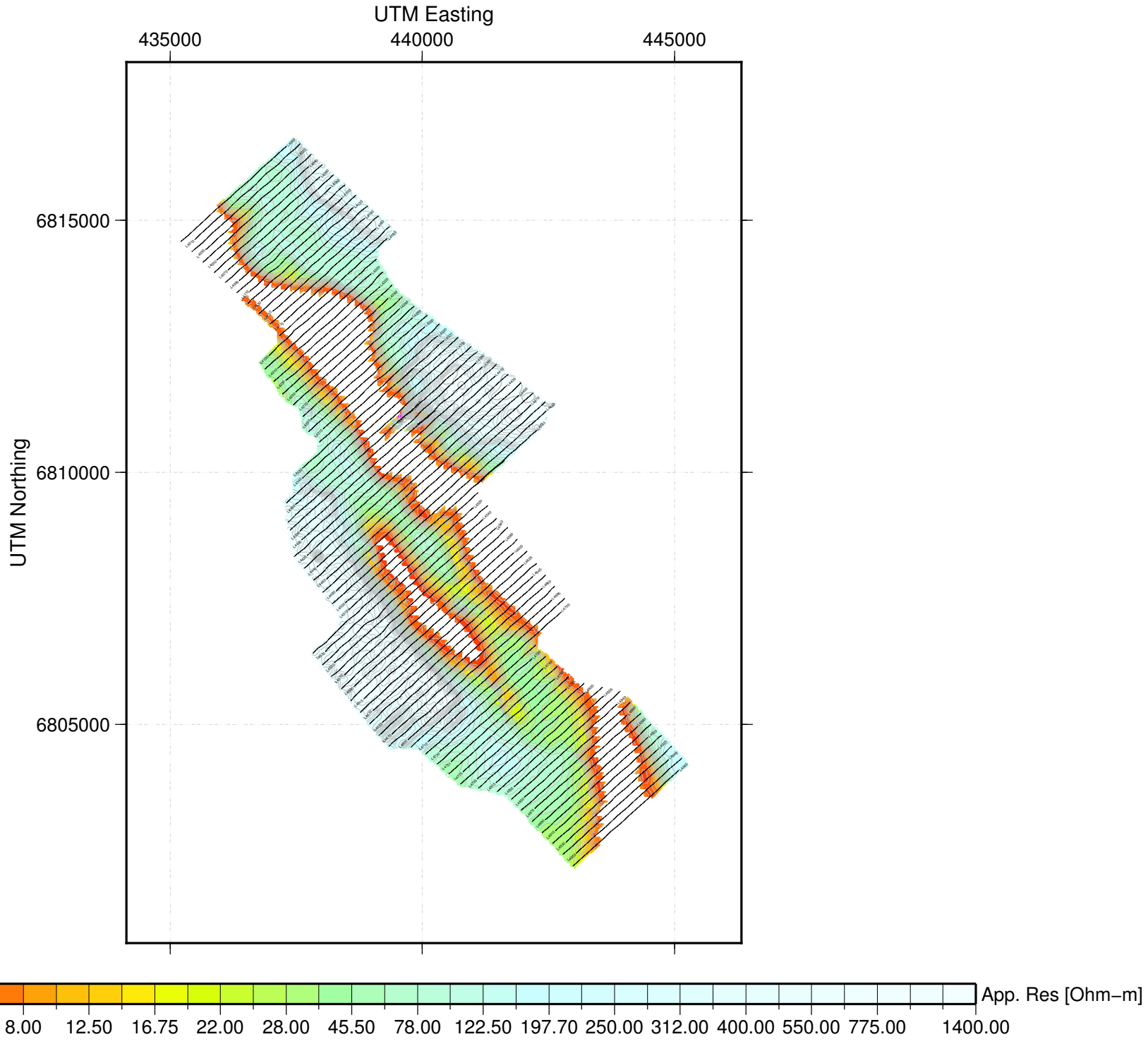
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

VTEM RDI: Resistivity Depth Slice at 225m of depth



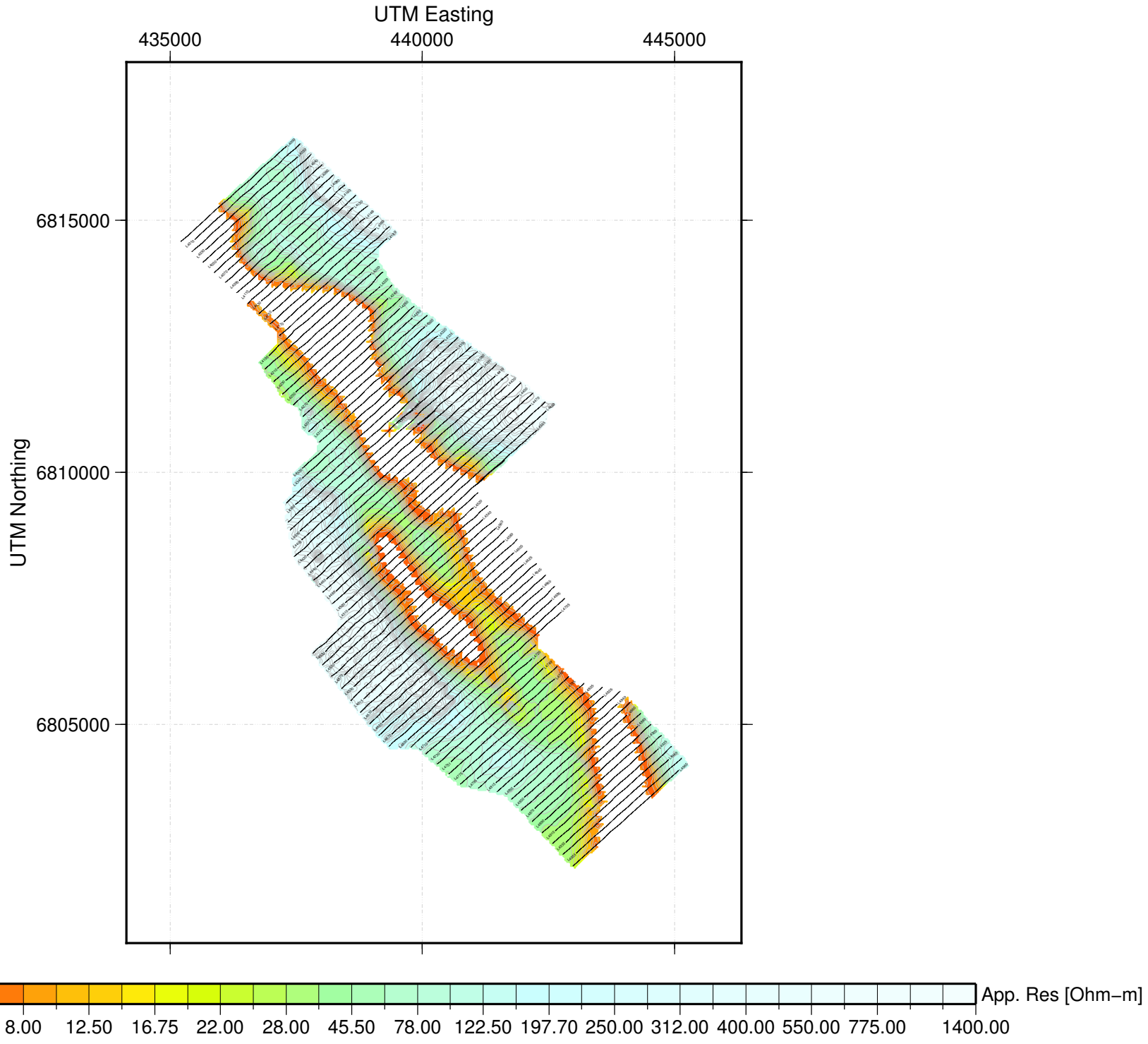
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

VTEM RDI: Resistivity Depth Slice at 250m of depth



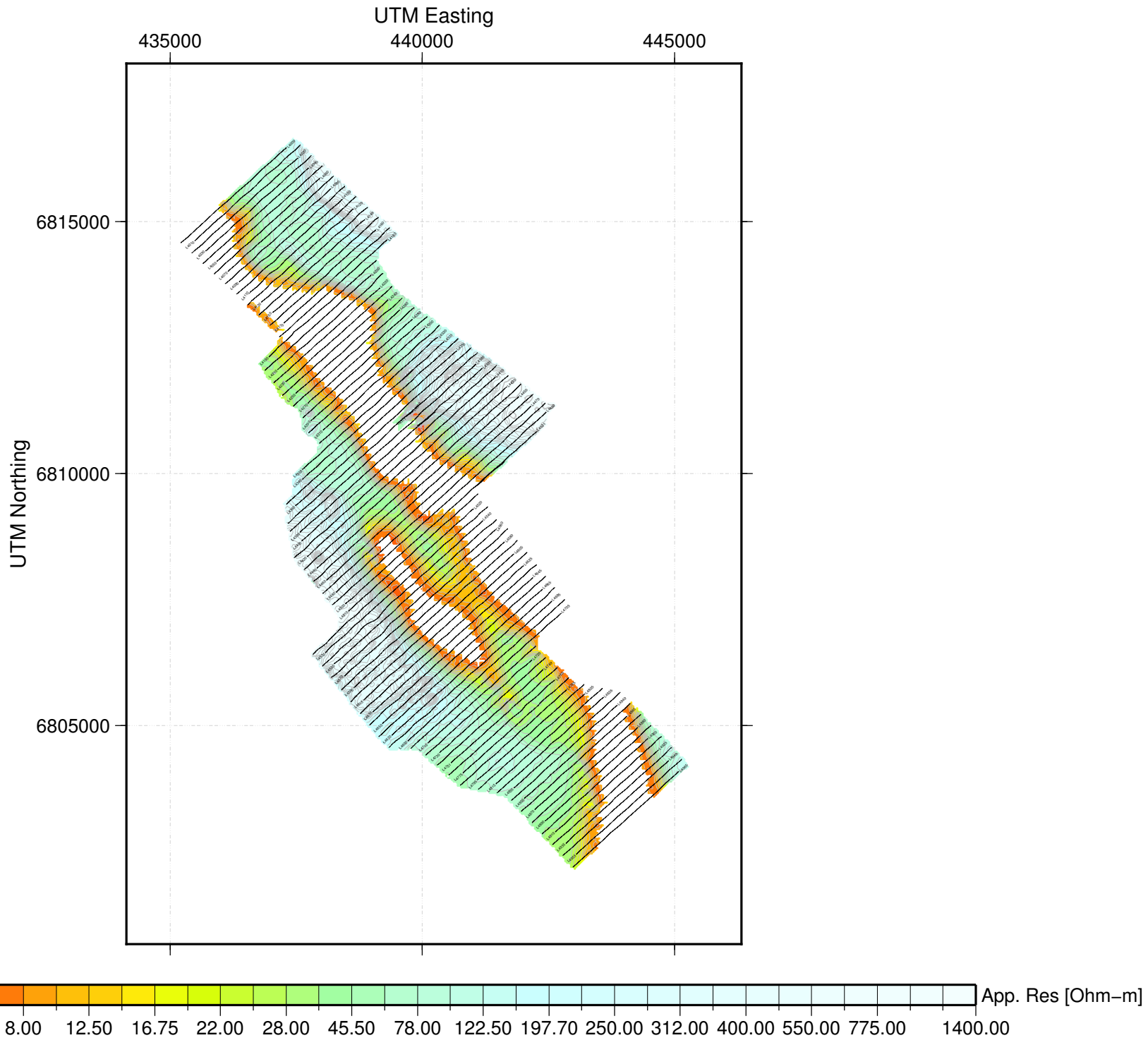
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

VTEM RDI: Resistivity Depth Slice at 275m of depth



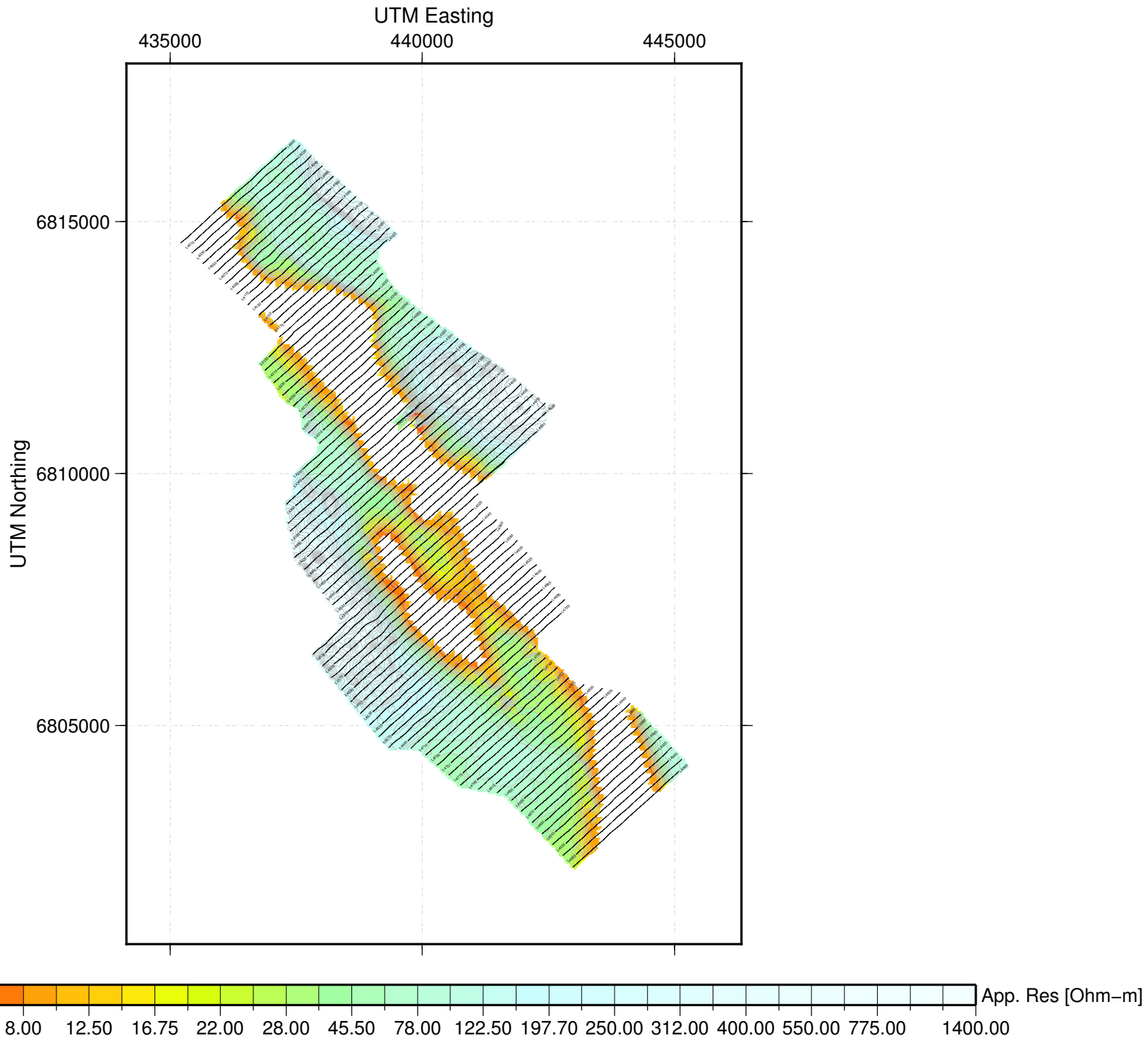
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

VTEM RDI: Resistivity Depth Slice at 300m of depth



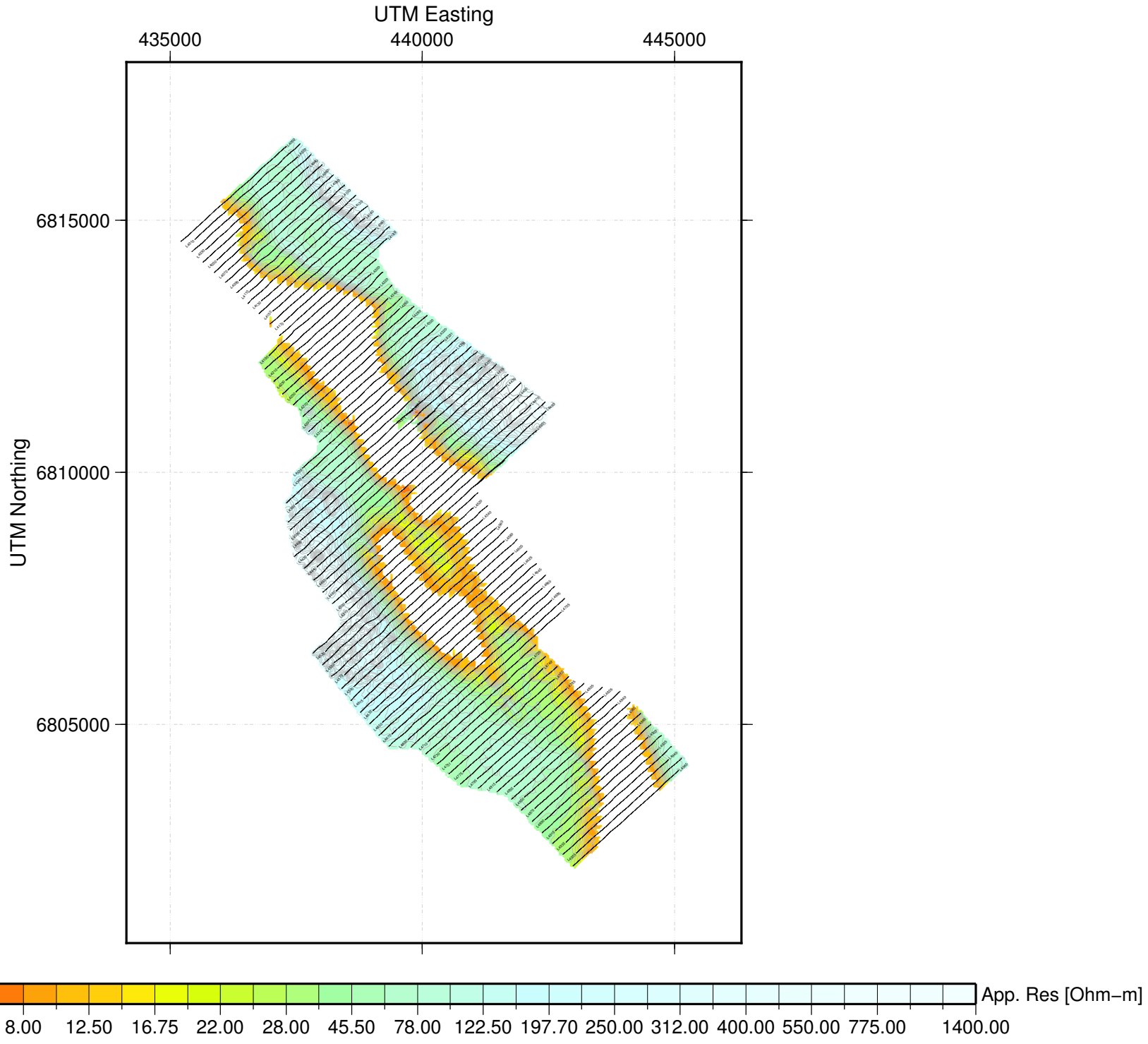
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

VTEM RDI: Resistivity Depth Slice at 325m of depth



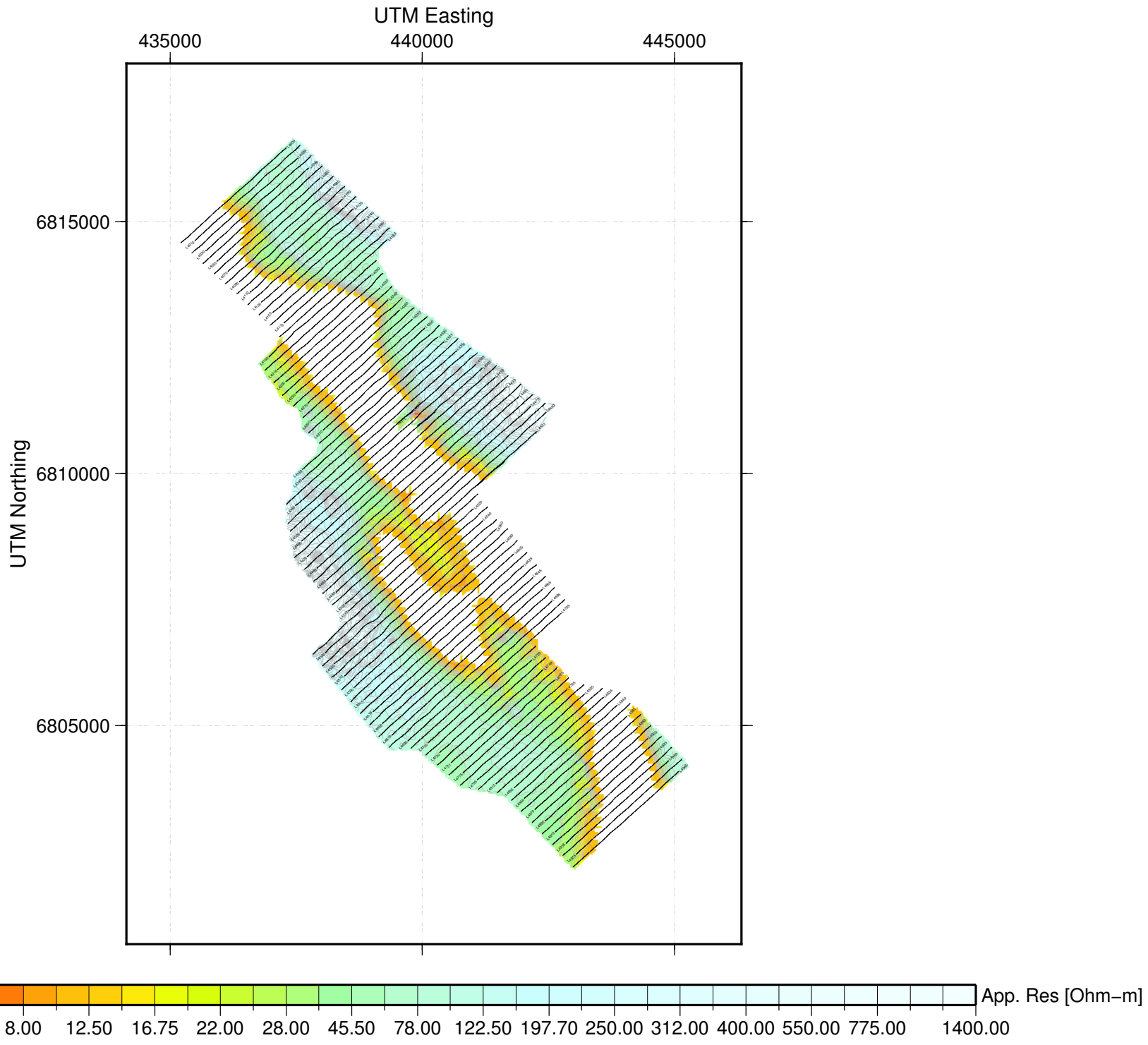
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

VTEM RDI: Resistivity Depth Slice at 350m of depth



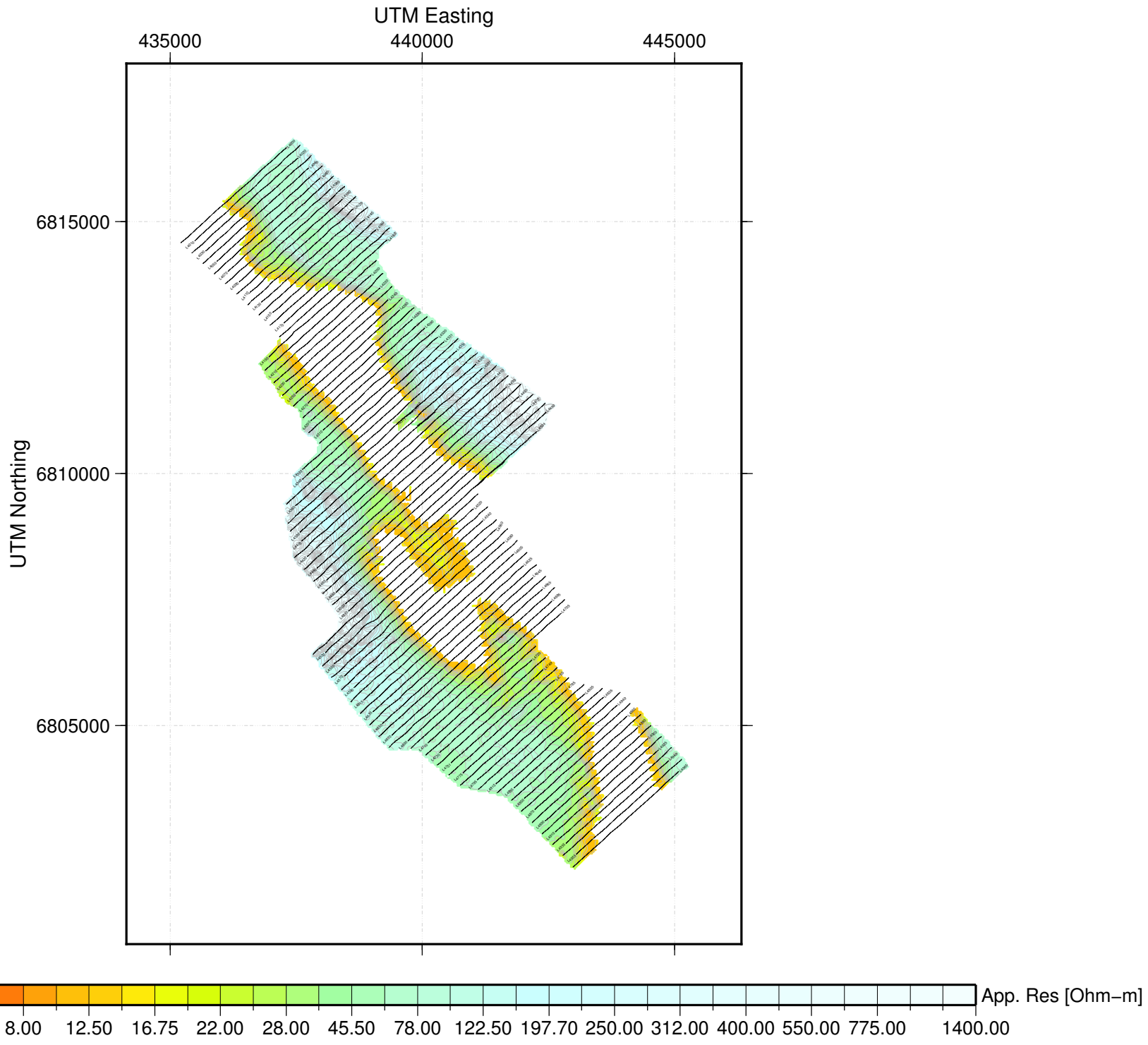
GEOTECH
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VTEM RDI: Resistivity Depth Slice at 375m of depth



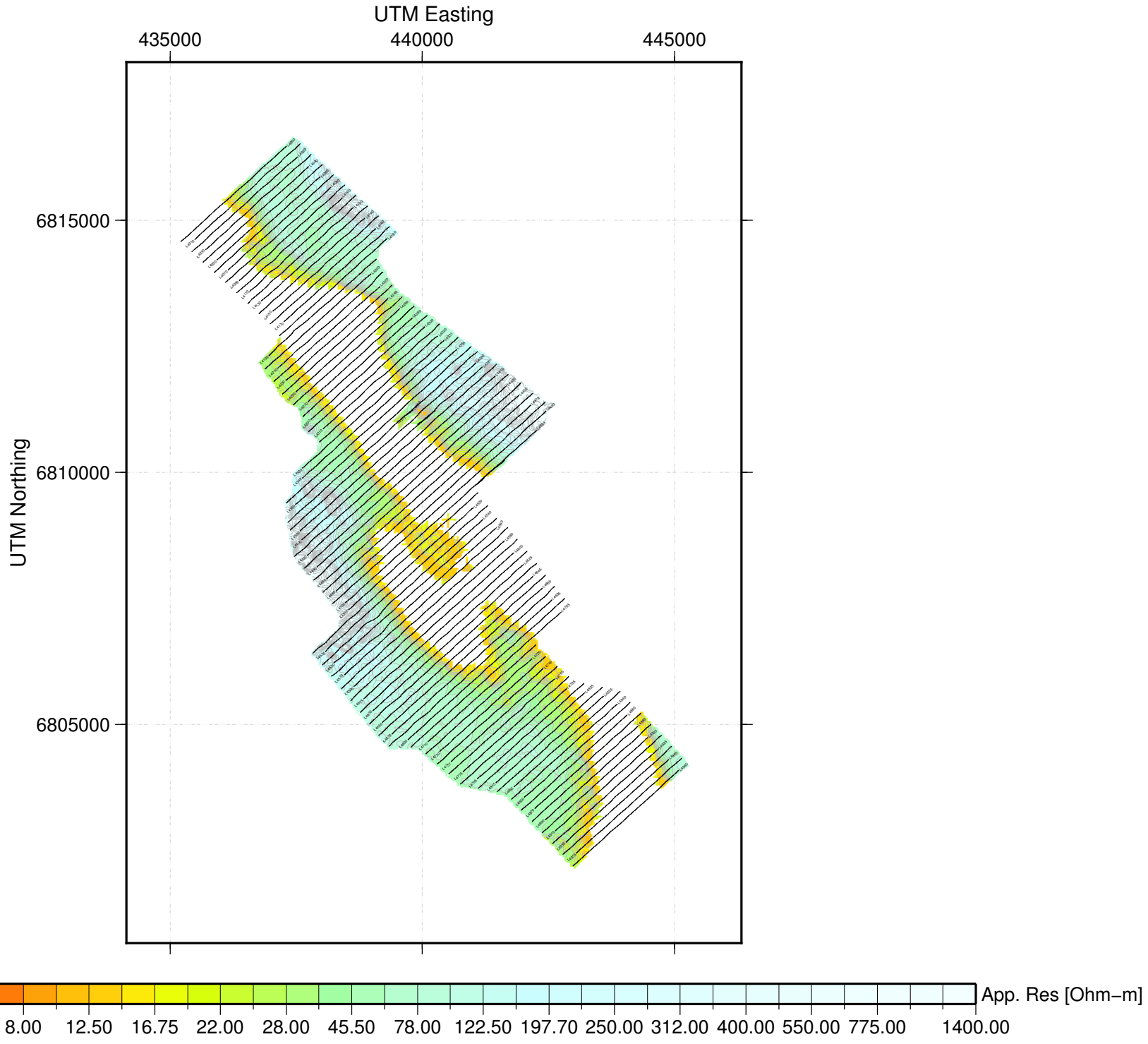
GEOTECH
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VTEM RDI: Resistivity Depth Slice at 400m of depth



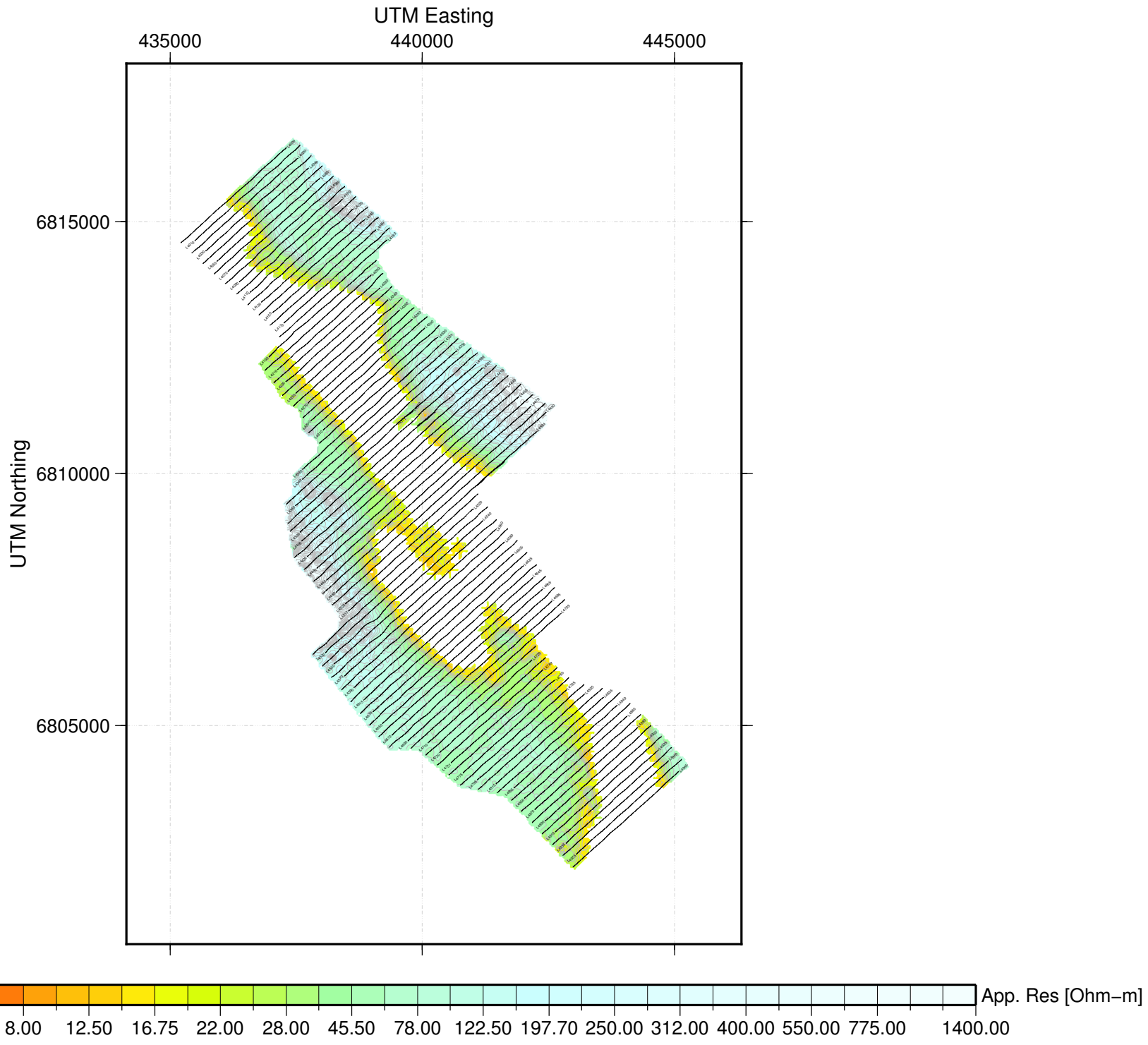
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

VTEM RDI: Resistivity Depth Slice at 425m of depth



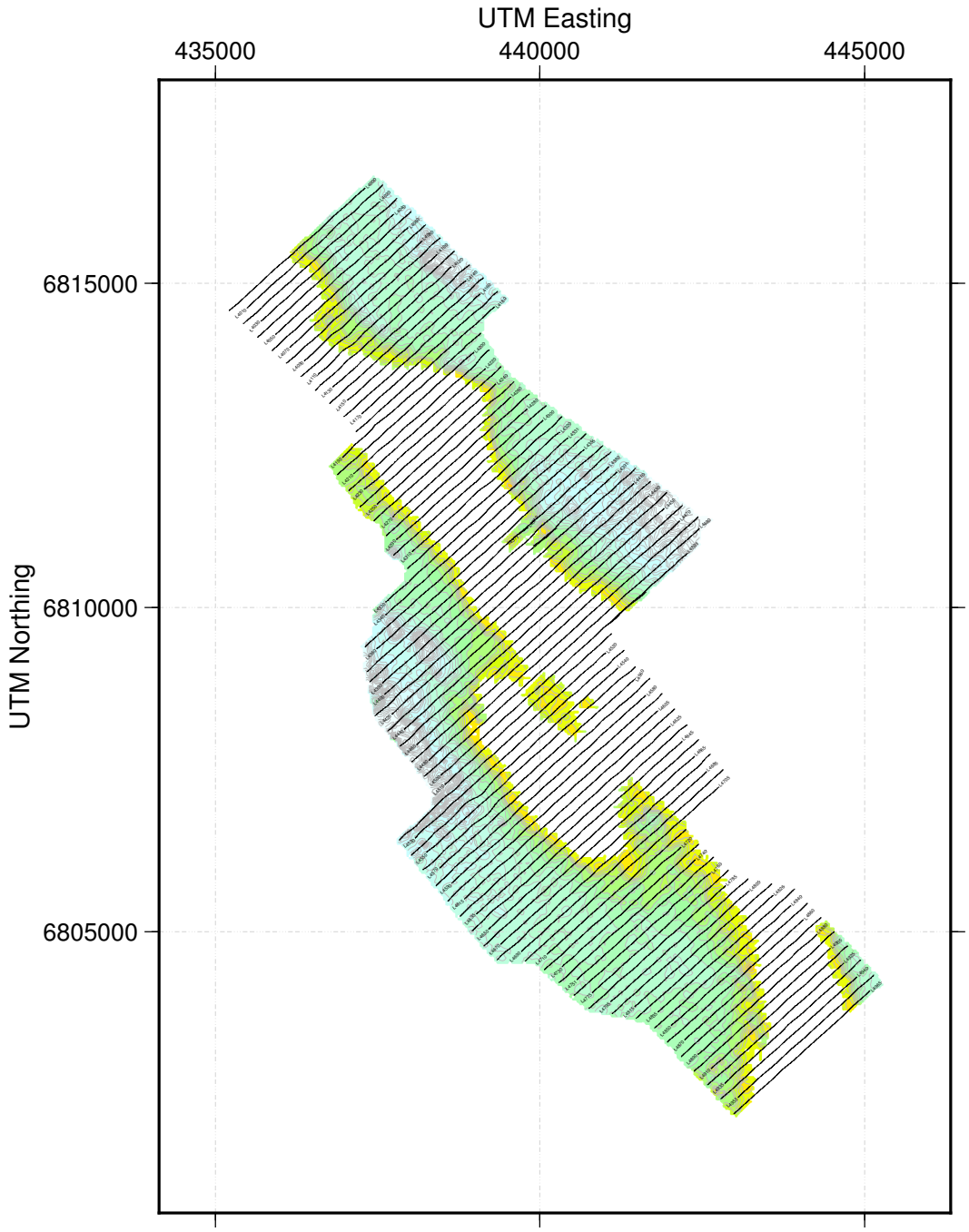
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AIRBORNE GEOPHYSICAL SURVEYS

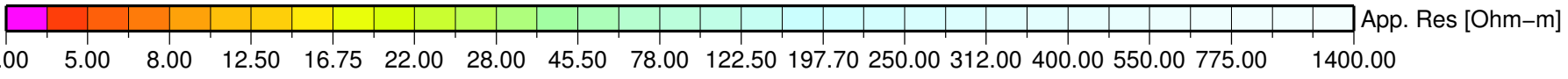
VTEM RDI: Resistivity Depth Slice at 450m of depth



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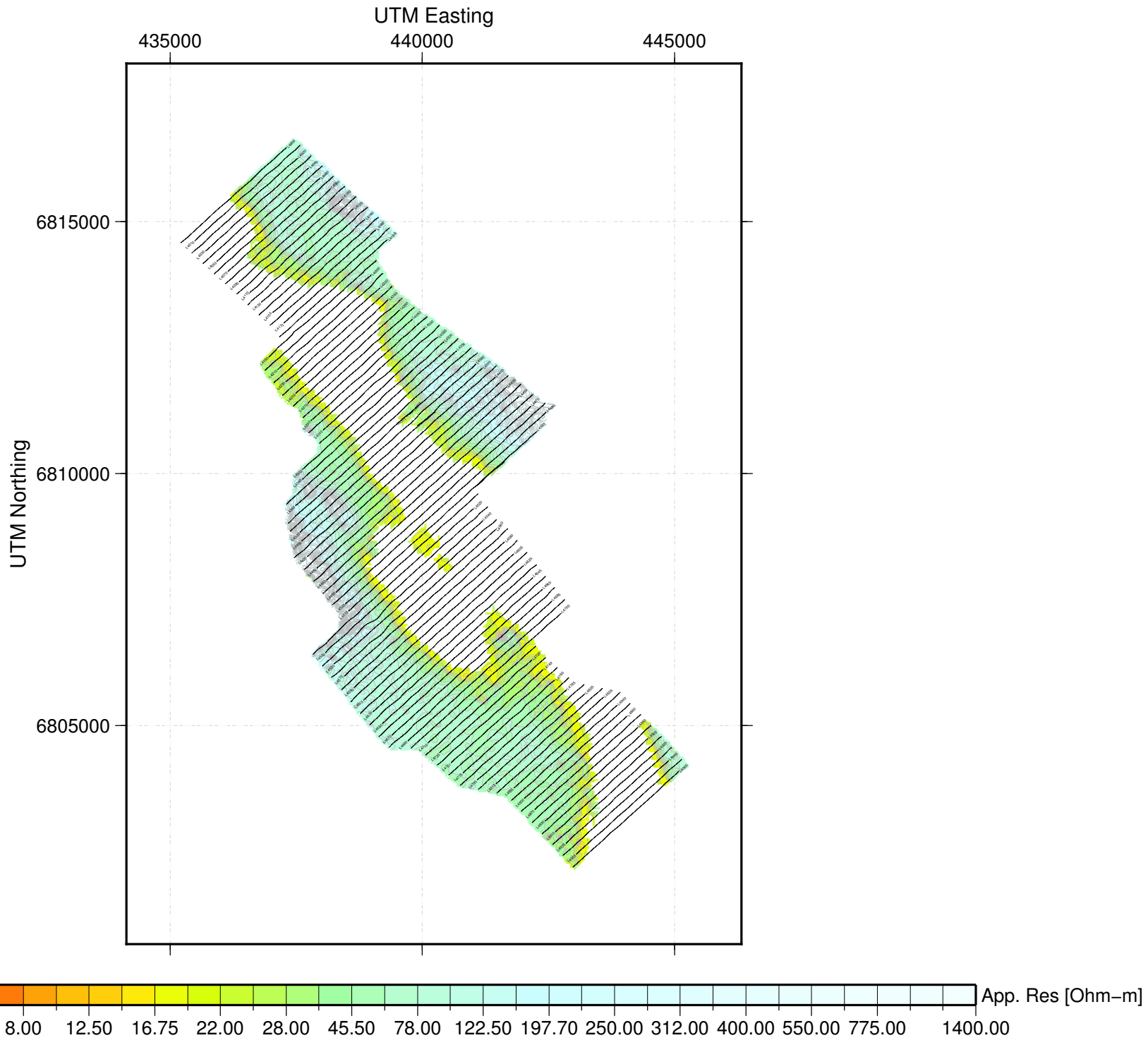
VTEM RDI: Resistivity Depth Slice at 475m of depth





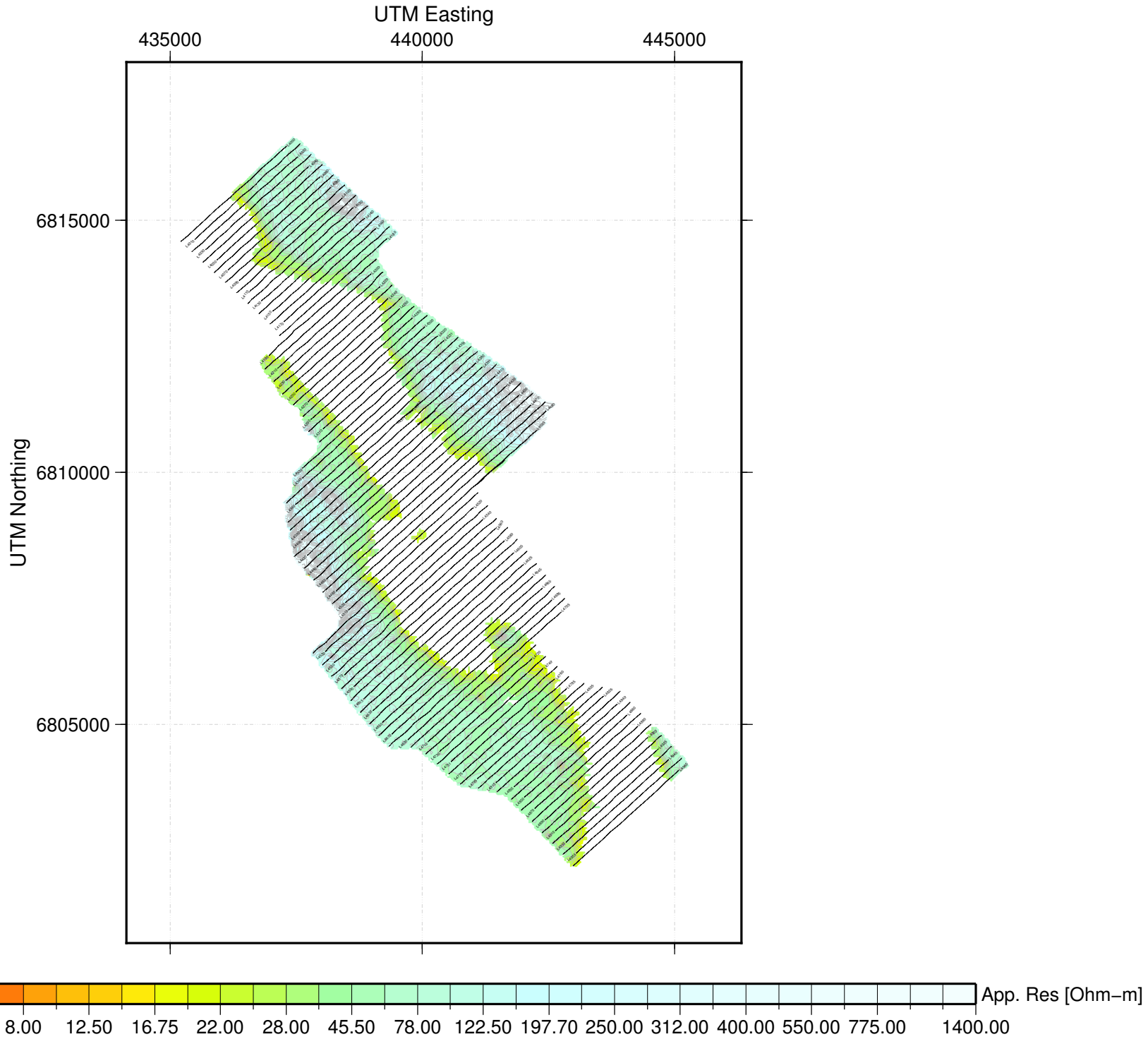
GEOTECH
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VTEM RDI: Resistivity Depth Slice at 500m of depth



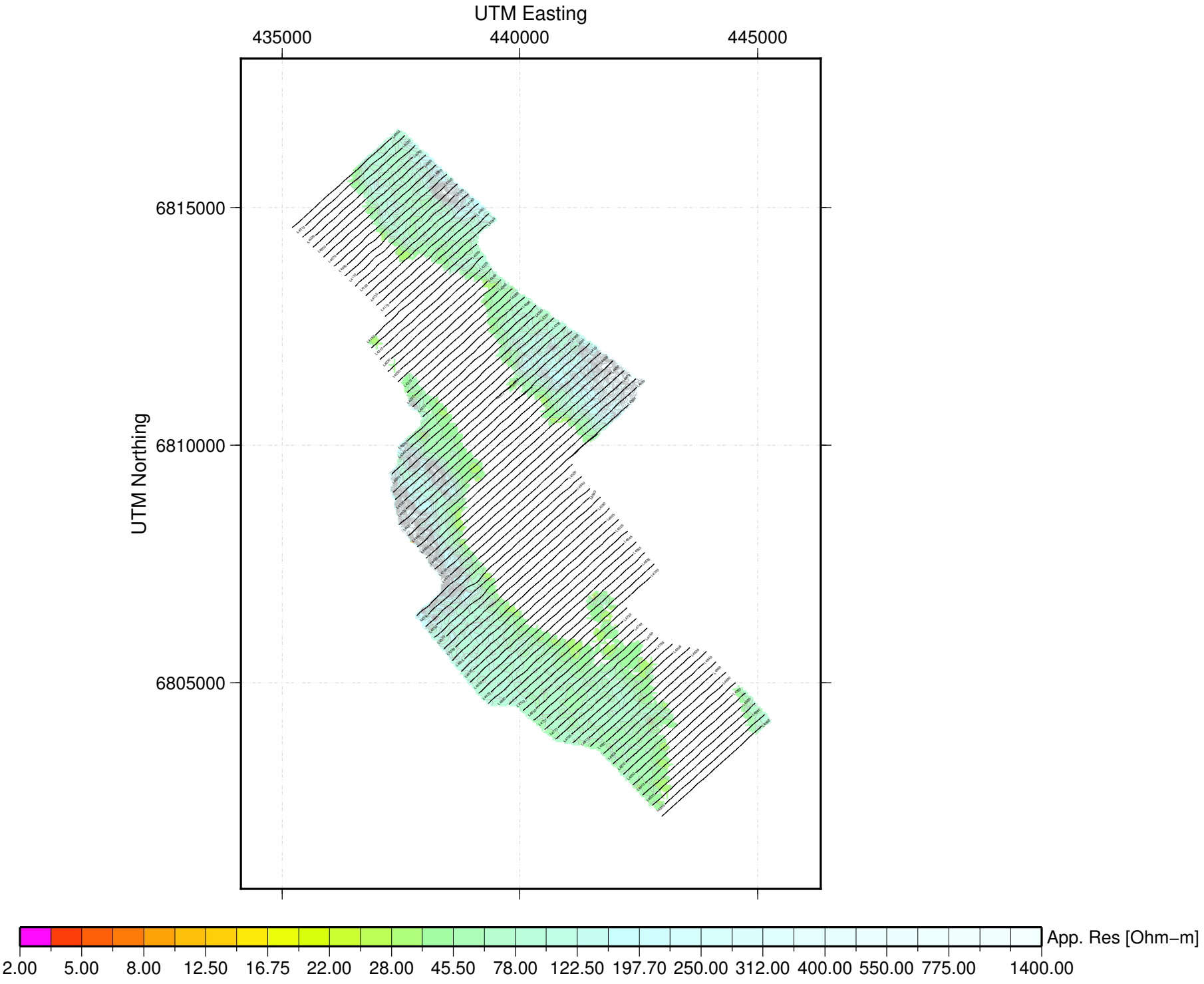
GEOTECH
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VTEM RDI: Resistivity Depth Slice at 525m of depth



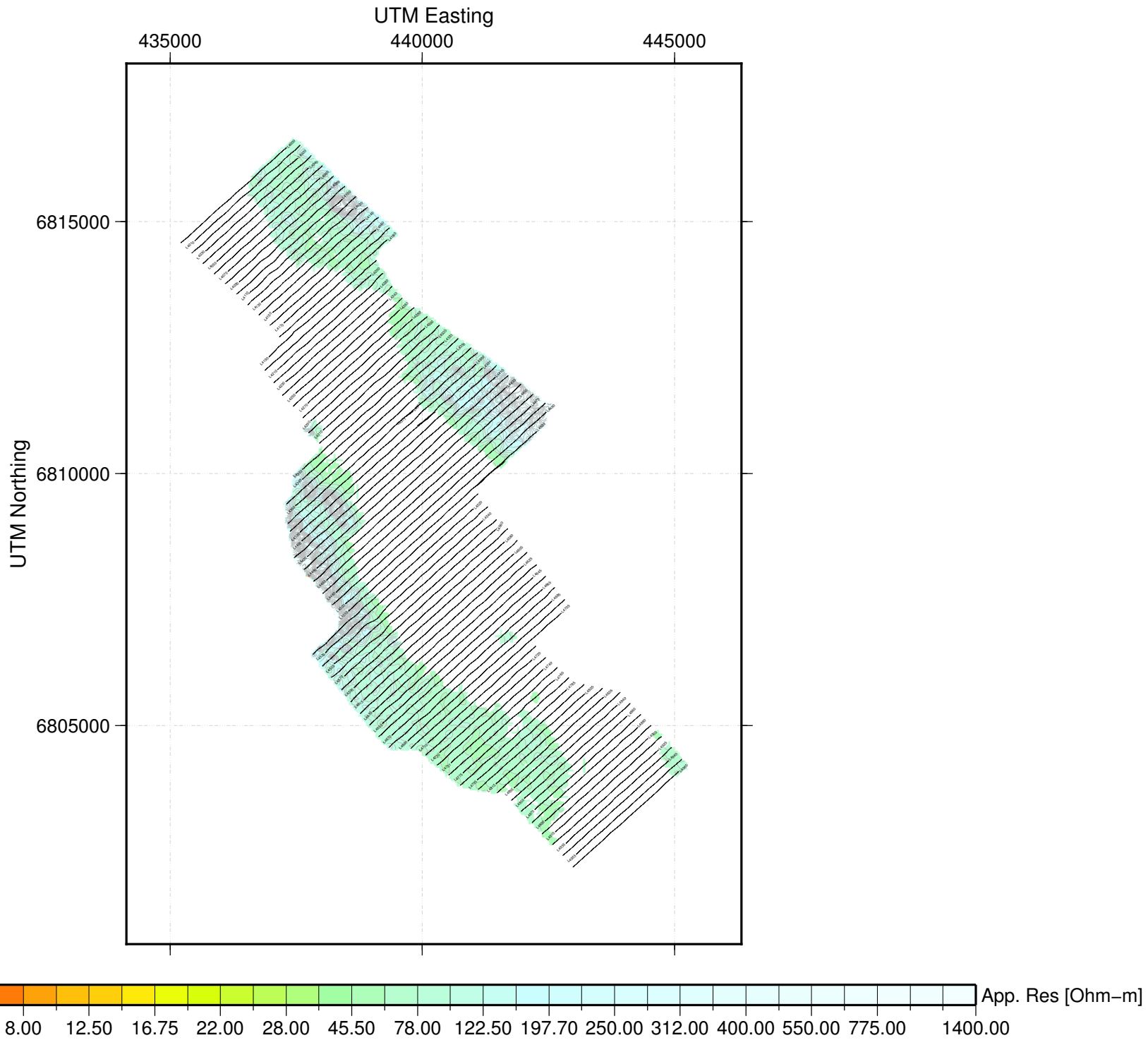
GEOTECH
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VTEM RDI: Resistivity Depth Slice at 550m of depth



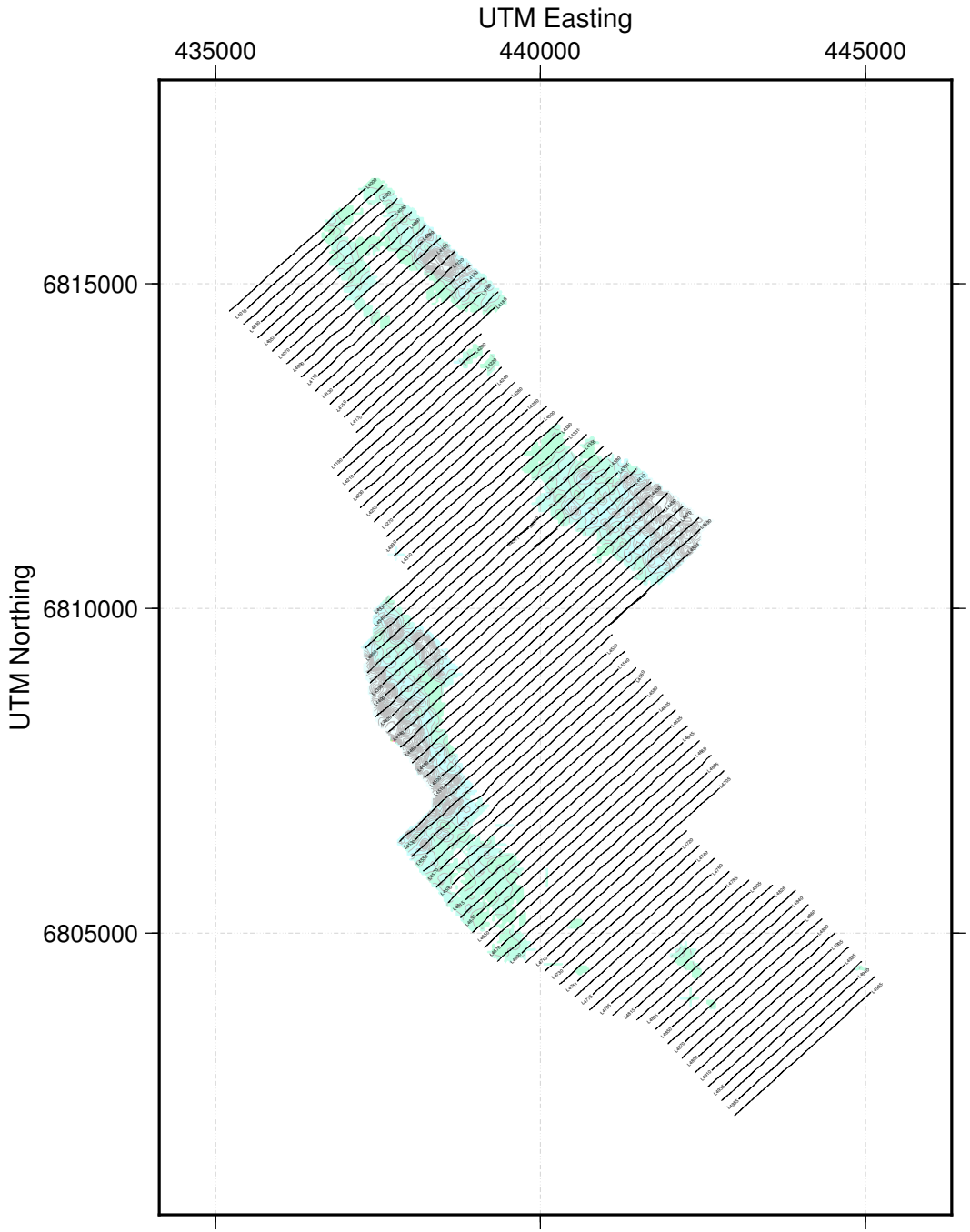
GEOTECH
AIRBORNE GEOPHYSICAL SURVEYS

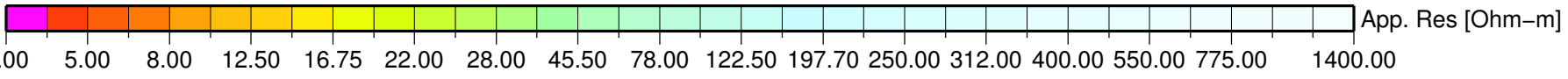
VTEM RDI: Resistivity Depth Slice at 575m of depth



GEOTECH
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VTEM RDI: Resistivity Depth Slice at 600m of depth





Appendix E: Data Disk

Appendix F: Qualified Person's Certificate

GEOLOGIST'S CERTIFICATE

Ronald J. Voordouw
2327 Mary Hill Road
Port Coquitlam, BC, Canada
V3C 3A6

I, **RONALD VOORDOUW**, Ph.D., P.Geo., do hereby certify that:

1. I am presently a Project Geologist with Equity Exploration Consultants Ltd, with offices at Suite 1510, 250 Howe Street, Vancouver, British Columbia, Canada.
2. I graduated from the University of Calgary, Alberta, Canada, with a Bachelor of Science degree in geology in 1999, and with a Doctorate in geology in 2006 from the Memorial University of Newfoundland, Canada.
3. I am a professional geoscientist in good standing (#06962) in the province of Newfoundland and Labrador.
4. Since 2006 I have been involved in natural resource exploration for base metals and gold (2006, 2011 to present); research on PGE deposits (2007, 2008); and regional geological mapping (2009, 2010) in Canada and South Africa.
5. I am the author of the assessment report "*2016 Geophysical Report on the Pelly Property"* prepared for BMC Minerals LTD.
6. I have never visited the Pelly Property but helped manage the 2016 exploration program from the KZK Camp, which is located ~20 km west of the Pelly Property

Dated 21st March 2017, at Vancouver, British Columbia.



Signed and sealed: "*Ronald J. Voordouw*"

Ronald J. Voordouw, Ph.D., P.Geo