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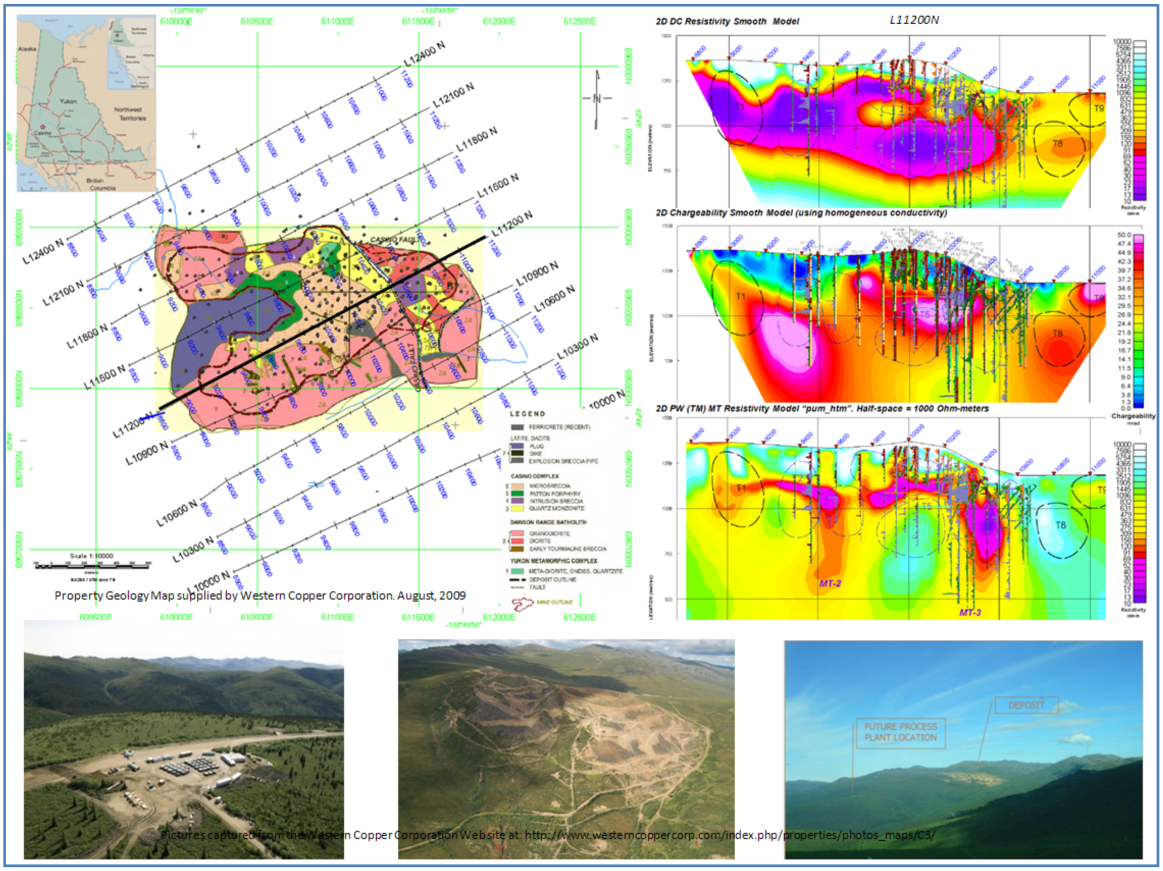
Geophysical Survey Interpretation Report



Property Geology Map supplied by Western Copper Corporation. August, 2009

Pictures captured from the Western Copper Corporation Website at: http://www.westerncoppercorp.com/index.php/properties/photos_maps/C3/

Regarding the Titan-24 Magnetotelluric Direct Current Resistivity and IP Survey over the CASINO PROJECT near Whitehorse, Yukon Territory for WESTERN COPPER CORPORATION Vancouver, BC, Canada

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September, 2009
QGL Project: CA00646T

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EXECUTIVE SUMMARY

At Casino Project, the Titan-24 survey has successfully identified at least nine geophysical anomalies (T1 to T9) in the DC/IP and MT raw data and inversion models with potential for copper/ molybdenum/silver sulphide and gold mineralization from near surface to approximately 700 meters depth. Of all the interpreted DC/IP and MT zones, four anomalies (T4, T5, T6 and T8) have been classified as high priority targets, and five zones (T1, T2, T3, T7 and T9) are classified as second priority targets.

The MT inversion models show good resolution of the anomalies to about 2000 meters depth. Four MT resistivity low anomalies (MT-1 to MT-4) have been delineated as significant targets for deep exploration in the property.

The interpreted deep MT resistivity low anomalies bellow and in the vicinity of the shallower Titan anomalous zones suggest the presence of significant sulphide mineralization and/or alteration zones within feeder channels at depths from 500 to >1200 meters. These deep MT responses are expected to be geologically and structurally controlled.

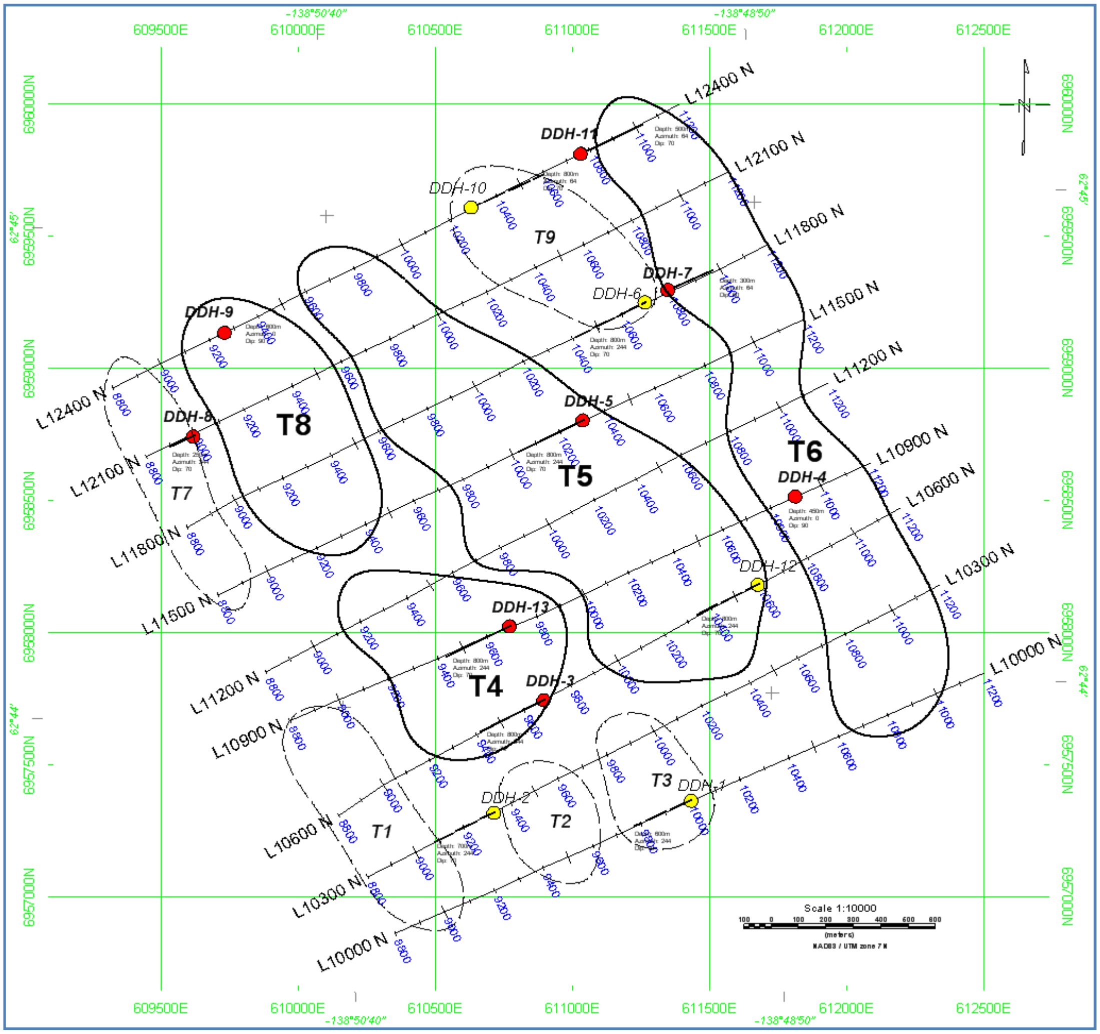
A second priority was assigned to the deep MT anomalies due to the depth of the targets, the limited coverage of the DC resistivity and IP chargeability at depth and the inexistence of drillhole and/or geophysical data to corroborate the interpretation. In cases where the low MT resistivity responses are an extension of the shallower DC/IP chargeability, a higher priority may be assigned to these responses if significant results are intersected by the recommended drill holes.

The DC/IP & MT interpretation could possibly be affected by 3D and other linear structures (faults, veins, dykes, etc), which may run parallel and/or sub-parallel to the survey lines. The DC/IP and MT model interpretation and target prioritization was mainly based on the anomaly amplitude, extent and multi-parameter association.

The interpreted anomalies, particularly to the west and east from the Casino ore deposit may not necessarily be directly related to gold and copper/molybdenum/silver sulphide mineralization. Other sources, such as iron-rich formations, graphite and clay fault systems could produce similar DC/IP and MT responses.

The 3D inversions of the 2D DC and IP data was useful for supporting the interpretation based on the 2D inversion results and also for compensating for the effect of 3D and 2D structures sub-parallel to the survey lines.

A total of thirteen (13) drillholes have been recommended to test the first and second priority targets interpreted in the property. The following table (Table 1) and figure (Figure 28) summarize the location and parameters of the proposed drillholes for testing the interpreted anomalous zones.



Interpretation Plan with Recommended Drillhole Targets at Casino Project

Hole_ID	Priority	UTME	UTMN	Elev_m	Depth_m	Azimuth	Dip	Target Zone	Line	Station
DDH-1	2st	611440.61	6957377.72	1220.2	600.00	244	-70	T4, T5	L10000N	1000E
DDH-2	2st	610724.79	6957328.91	1374.3	700.00	244	-70	T2, T4?	L10300N	9334E
DDH-3	1st	610903.74	6957755.15	1322.1	800.00	244	-70	T4	L10600N	9680E
DDH-4	1st	611821.3	6958529.54	1134.3	450.00	0	-90	T8	L10900N	10910E
DDH-5	1st	611046.91	6958815.87	1249.7	800.00	244	-70	T5	L11500N	10314E
DDH-6	2st	611274.67	6959258.38	1275.2	800.00	244	-70	T7, T8	L11800N	10700E
DDH-7	1st	611356.01	6959307.19	1285.5	300.00	64	-60	T9	L11800N	10800E
DDH-8	1st	609625.02	6958760.56	1237.9	250.00	244	-70	T1	L12100N	9000E
DDH-9	1st	609742.16	6959151.01	1227.9	600.00	0	-90	T2, T3	L12400N	9264E
DDH-10	2st	610640.19	6959619.55	1346.5	800.00	64	-70	T7, T8	L12400N	10300E
DDH-11	1st	611037.15	6959824.53	1468.9	500.00	64	-70	T9	L12400N	10760E
DDH-12	2st	611674.4	6958186	1149.81	800	244	-70	T5	L10600N	10650E
DDH-13	1st	610768.7	6958029	1387.37	800	244	-70	T2, T4	L10900N	9700E

Recommended Drillhole Targets at Casino Project

The following recommendations are derived from the interpretation of the DC/IP and MT survey at Casino Project:

1. Drill-test the top and center portions of the interpreted high priority anomalies, and if favorable drill results are obtained, then drill test the deep portion and unexplored areas in the vicinity of the chargeability anomalies where significant DC and MT resistivity responses are observed.
2. Review and evaluate all the available geophysical, geological and geochemical data in the vicinity of the priority target areas prior to drilling and commencing further exploration of these zones.
3. If mineralization is encountered during drilling the anomalies above the deep MT targets, consider extending the holes to test these responses.
4. When the deep targets are drilled, follow up with downhole BHTEM and consider physical property logging on all the targets in order to delineate the extent of the source and/or identify secondary sources of the anomalies.
5. Evaluate and re-interpret the existing conventional surface and borehole geophysical data to further enhance the interpretation and drill targeting.

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1. INTRODUCTION

Quantec Geoscience Ltd. conducted Titan-24 Direct Current Resistivity (DC), Induced Polarization (IP), and Magnetotelluric Resistivity (MT) surveys over the Casino Project for Western Copper Corporation. The survey data was acquired over a period of 15 days from July 14, 2009 to July 29, 2009.

The Casino property is located approximately 300 kilometers northwest of the capital of Whitehorse, in the Dawson Range Region of Yukon Territory (Figure 1).

The survey at Casino Project consisted of nine (9) Titan-24 DC/IP and MT single spreads, from L10000N to L12400N. The line-to-line interval was approximately 300 meters and the grid azimuth was approximately 64 degrees true North, with a local declination of 25 degrees East.

Figure 1: Casino Project General Location Map[1]

[1] *General Grid Location Map captured from the Western Copper Corporation Web Site at: http://www.westerncoppercorp.com/index.php/properties/casino/project_details/. Accessed on August, 2009. Geological Map supplied by Western Copper Corporation. August, 2009.*

1.1 Survey Objectives

The exploration objective of the Titan-24 survey at Casino Project is to locate DC/IP and MT anomalies primarily related to porphyry Cu/Au/Mo mineralization and alteration zones at depth for drill targeting, delineation and ground condemnation.

In addition, the survey should provide the following:

- Outline anomalous zones to focus drilling on targets that offer the largest tonnage potential.
- Determine the volume potential and direction to depth of anomalies related to mineral showings and to determine the scale of discoveries.
- Mapping the DC resistivity and IP chargeability of the sub-surface to assist geologic interpretation and mineral targeting within the top 500-750 meters based on geologic, topographic and cultural environment.
- Mapping geological structures with MT resistivity contrasts and to delineate deep conductors that may potentially represent alteration and/or mineralization to depths up-to and beyond 1.5 kilometers.

1.2 Titan-24 DC/IP and MT Survey Overview

The Titan-24 system combines Magnetotelluric Tensor (MT) Resistivity measurements capable of high resolution and deep penetration (>1.5 kilometers) with Galvanic Direct Current Resistivity and Induced Polarization (DC/IP) capable of shallow to mid-depth high resolution and penetration (~750 meters).

The system is designed to identify and discriminate between massive and disseminated mineralization and mapping geological contacts and deep conductors that may potentially represent alteration and/or mineralization at depth. Details on DC Resistivity, Induced Polarization and Magnetotelluric theory are available in Appendices C and D.

Titan-24 is a multi-channel Distributed Acquisition System (DAS), (Sheard, N., 1998), which records full-waveform time series for each geophysical event (Direct Current Resistivity, Induced Polarization and Magnetotelluric), enabling the application of sophisticated digital signal processing techniques to ensure the best possible data quality (Figure 2).

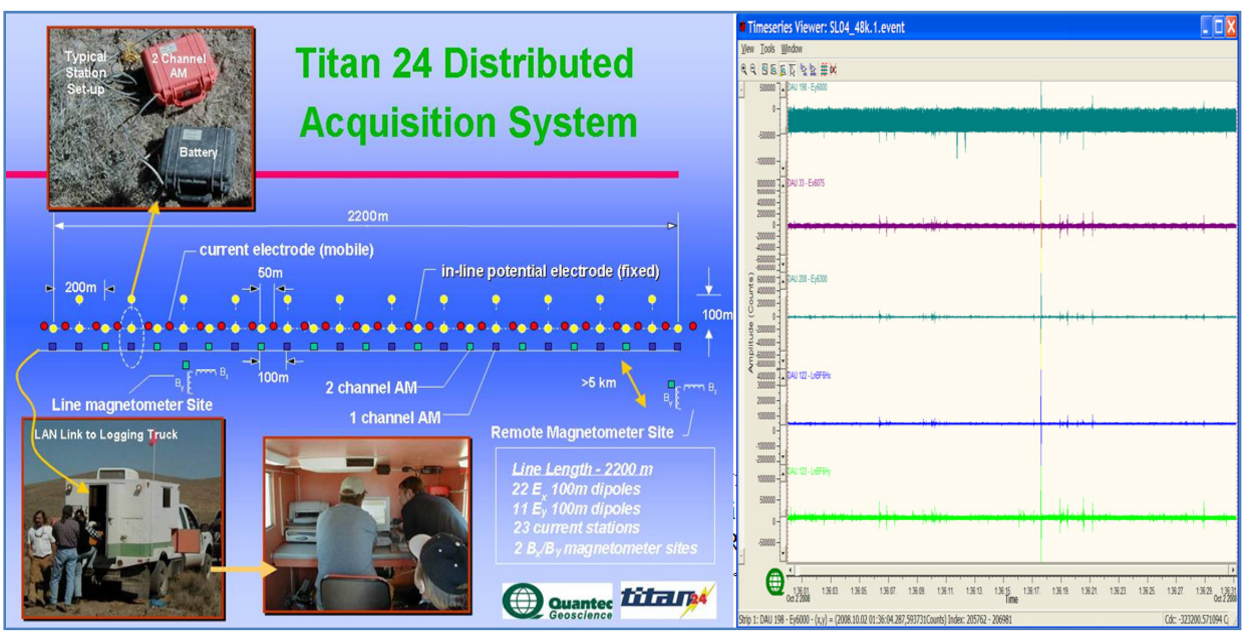

Figure 2: Titan-24 DC/IP and MT Survey Layout and Example of the Acquired Timeseries

For each line, a dipole-pole-dipole configuration (Figure 3) with current injections at every 50 meters was utilized. The current injection points were located midway between the potential dipoles. The inline measuring dipoles have a spacing of 100 meters, and the cross-line dipoles were located every 200 meters with a 100 meters separation between the electrodes. The DC and IP data were acquired from station 8750E to station 11250E, covering a total of 2.5 line kilometers for each line surveyed.

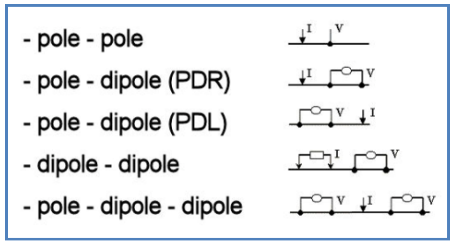

Figure 3: Common DC/IP Survey Layouts

The MT data were acquired over the frequency bandwidth of 0.01 Hertz to 10000 Hertz. The configuration used contiguous 100 meter dipoles measuring the in-line electric field (Ex) and 100 meter dipoles at every second site (every 200 meters) for measuring the orthogonal (cross-line) component (Ey). Two pairs of orthogonal magnetometers, one pair for the high frequency data and one pair for the low frequency data were used to record the Hx and Hy magnetic field.

A remote reference site, located approximately 5-10 kilometers from the survey area, was used for noise reduction and monitoring. The remote reference station consisted of one pair of orthogonal dipoles for measuring the electric field (Ex and Ey) and two pairs of orthogonal magnetometers orientated in the same direction as the survey lines to record the Hx and Hy magnetic field.

The MT data were acquired from station 8800E to station 11200E, covering a total of 2.4 line kilometers for each line surveyed.

Appendices C, D, and I, as well as the “Geophysical Survey Logistics Report” submitted previously, provide more information on the survey configuration and parameters (K. Mokubung et al. August, 2009).

The DC/IP and MT data were further processed, inverted and interpreted using a threefold multi-parameter sectional view of the results, as presented later in the report. For each line surveyed, three independent 2D earth models (IP Chargeability, DC and MT PW Resistivity) are calculated and presented for interpretation and targeting. Additional inversion models (for both the DC/IP and MT data) are available for review in Appendix E, and on the digital archive supplied along with this interpretation report.

2. SURVEY DESCRIPTION

2.1 GENERAL SURVEY DETAILS

- **Quantec Project Number:** CA00646T
- **Client:** Western Copper Corporation
- **Client Address:** 2050 – 1111 West Georgia Street
Vancouver, BC
Canada
V6E 4M3
- **Survey Period:** 15 days from July 14th to July 29th, 2009
- **General Location:** Dawson Range Region
- **District/Province:** Yukon Territory
- **Nearest Settlements:** Whitehorse, Yukon
- **Coordinate System:** Universal Transverse Mercator
- **Datum & Projection:** NAD 83, Zone 07V
- **Latitude/Longitude:** ~ 62°44'21.54N, 138°49'45.86W (L11200N, 10000E)
- **Grid Reference Position:** ~ 610910E, 6958413N (L11200N, 10000E)[2]

2.2 ACCESS

- **Base of Operations:** Casino Camp, Yukon Territory
- **Mode of Access to Grid:** Trucks and ATVs
- **Mode of Access to Lines:** Trucks, ATV and by foot

2.3 SURVEY GRID

- **Established by:** Western Copper Corporation
- **Lines Azimuth:** ~ 64°True
- **Declination:** ~25° East
- **Station Interval:** ~100 meters
- **Coordinate Reference System:** Survey Grid referenced to UTM (NAD 83, Zone 07V)
- **Method of Chaining:** Metric, slope distance, pickets GPS surveyed

2.4 SURVEY WORK UNDERTAKEN

- **Number of Lines Surveyed:** 9 lines (Figure 4)
- **Survey Coverage:** DC/IP survey: 22.5 kilometers
MT survey: 21.6 kilometers

[2] *GPS Reference Coordinates supplied by Western Copper Corporation. August, 2009.*

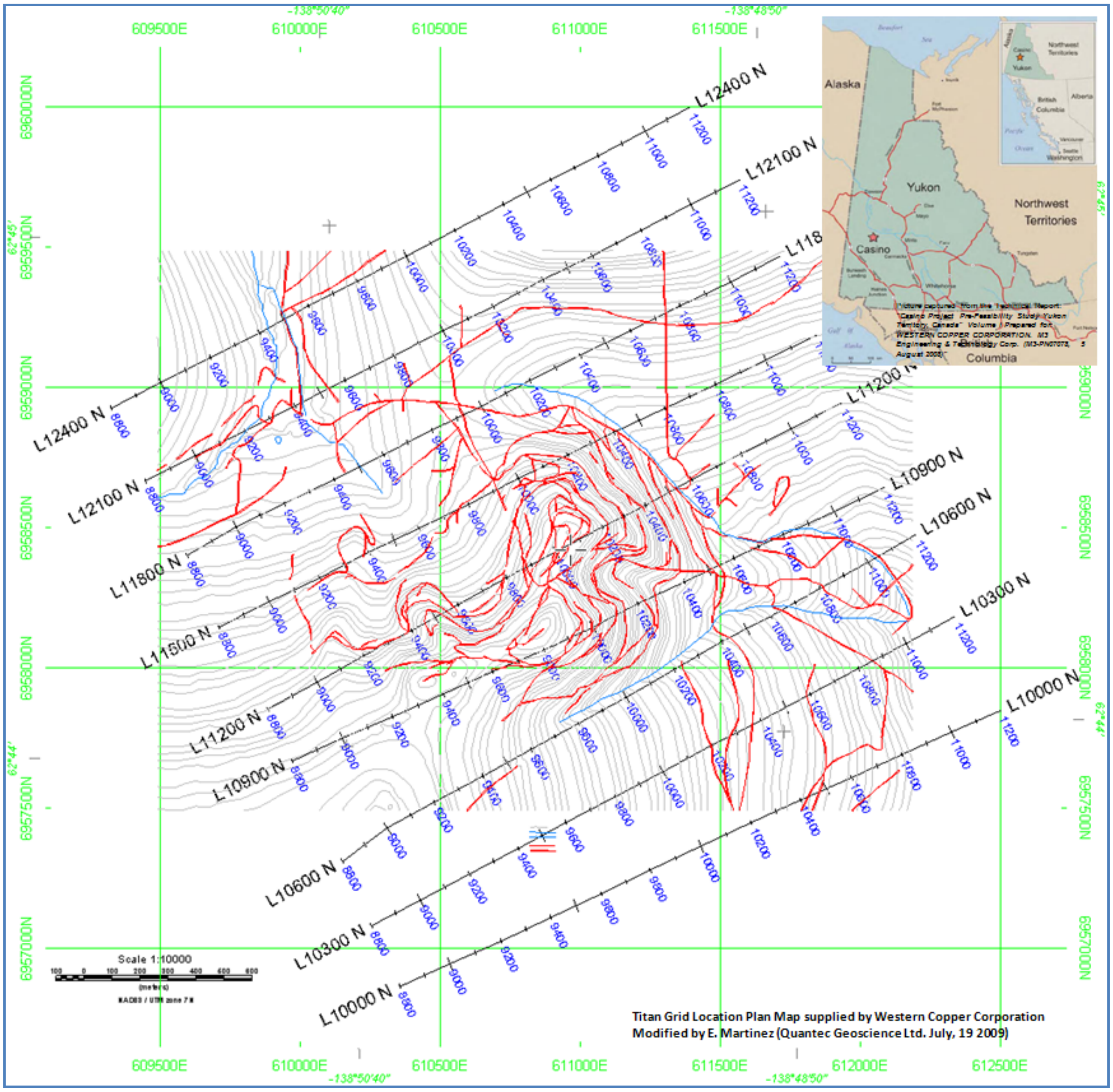

Figure 4: Titan-24 Line Location Map

2.5 General Geology[3]

The Casino deposit occurs in an overlapping zone of the Yukon Cataclastic Terrane to the north and the Yukon Crystalline Terrane to the south (Templeman-Kluit, 1976). An elongate band of ultramafic rocks 1 km north of the Casino deposit may occur along a major tectonic suture, which separates the two terranes (Figure 5).

The southern terrane contains the Dawson Range Batholith with scattered roof-pendants and blocks of the Yukon Metamorphic Complex. The northern terrane is dominated by rocks of the Yukon Metamorphic Complex with scattered intrusions of the Coffee Creek Suite which are petrographically distinct from the Dawson Range Batholith.

[3] *The information presented in this section was obtained from the Western Copper Corporation Web Site and from the "Technical Report on the "Casino Project Pre-Feasibility Study Yukon Territory, Canada (Volume I)". Report prepared for Western Copper Corporation. M3 Engineering & Technology Corp. (M3-PN07078, 5 August 2008).*

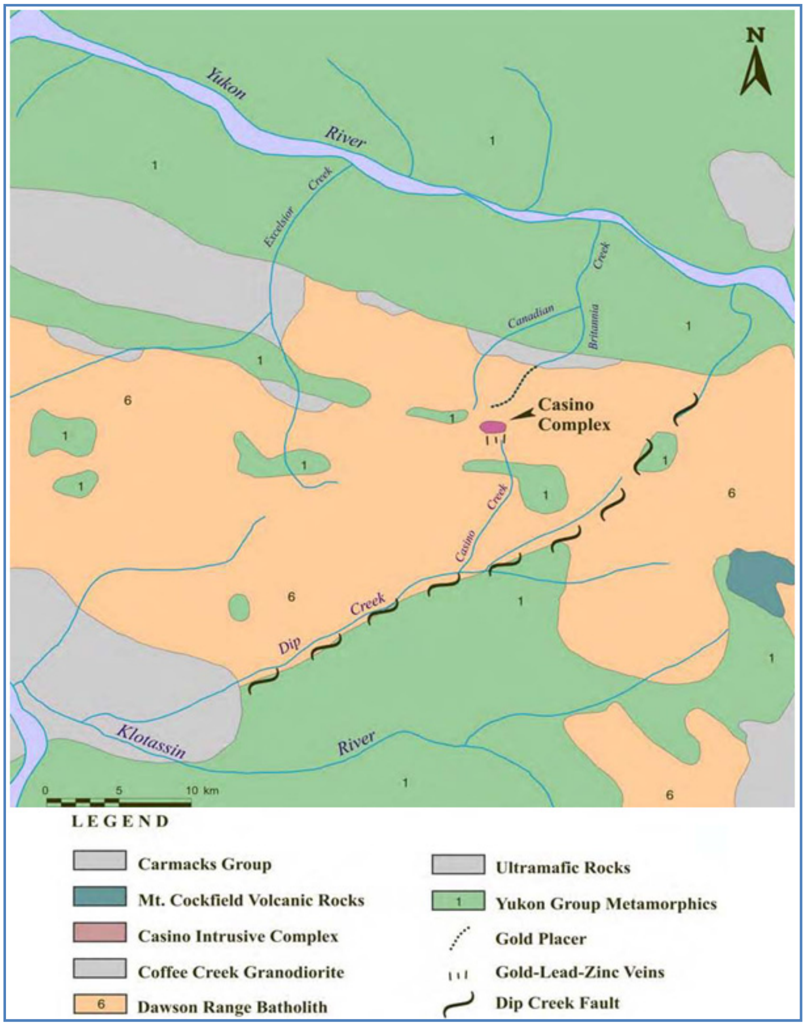

Figure 5: General Geology Map

2.6 CASINO PROPERTY GEOLOGY[4]

The Casino deposit is centred in a complex of quartz monzonites, intrusion breccias, shallow porphyritic intrusions, and a central breccia to microbreccia body. All of the Casino Intrusions are of Upper Cretaceous age (Figure 6 and Figure 7).

The Casino Intrusions are stocks up to 5 km across which intrude the Dawson Range Batholith and are concentrated in a west-northwest trending belt along the Big Creek Lineament and its northwestern extension. Leucocratic quartz monzonite is prominent just west of the Casino Fault. Heterolithic intrusion breccia occurs in the northern and eastern part of the deposit. The Patton Porphyry (72-74 Ma) represents two or more episodes of high-level intrusion of porphyritic hypabyssal dacite to rhyodacite. The intrusive microbreccia forms an irregularly shaped, subvertical pipe approximately 400 m in diameter in the core of the deposit and also forms a series of smaller irregular bodies to the southwest.

Late dikes, sills, and an explosion-breccia pipe, of probable late Cretaceous/Tertiary age, are latitic to dacitic in composition. Most dikes are steeply dipping and strike between 130° and 160°. The late dikes, sills and breccias were intruded after the main hydrothermal event and contain only minor base- and

[4] The information presented in this section was obtained from the Western Copper Corporation Web Site and from the "Technical Report on the "Casino Project Pre-Feasibility Study Yukon Territory, Canada (Volume I). Report prepared for Western Copper Corporation. M3 Engineering & Technology Corp. (M3-PN07078, 5 August 2008).

precious- metal mineralization, most of which is contained in mineralized and altered clasts of microbreccia. Many types of hydrothermal alteration and sulphide precious-metal mineralization occur in and adjacent to the genetically related intrusions.

Rocks of the Yukon Metamorphic Complex occur mainly as fragments in intrusion breccias in the northern and northeastern parts of the Casino deposit and locally as roof pendants in the Dawson Range Batholith in the same area. The most common rock type of this complex is mafic gneiss, dominated by plagioclase, biotite, and quartz. Less abundant types include metadiorite/amphibolite, quartz-rich and intermediate gneiss, and quartzite.

The Dawson Range Batholith is the main country rock hosting the deposit, and is dominantly granodiorite in composition. Quartz monzonite and diorite are less abundant. The two main phases of granodiorite are: a hornblende-bearing phase, mainly to the west, south, and east of the deposit, and a biotite-hornblende-bearing phase to the north. Early formed diorite is concentrated in the north and northeast, particularly east of Casino Fault. Some intrusions are foliated near their margins, particularly in the north and in the block east of the Casino Fault.

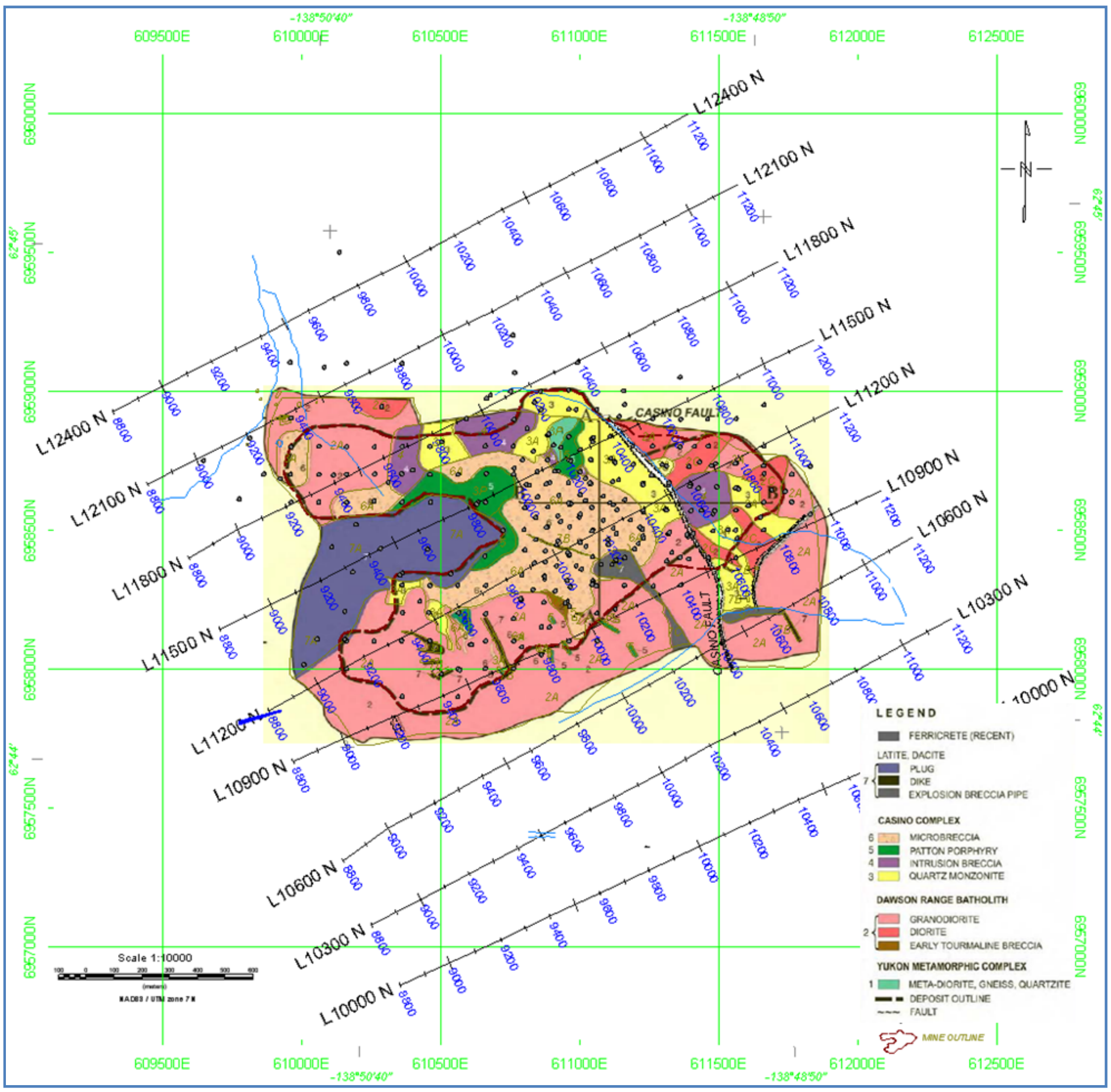

Figure 6: Casino Property Geology Map

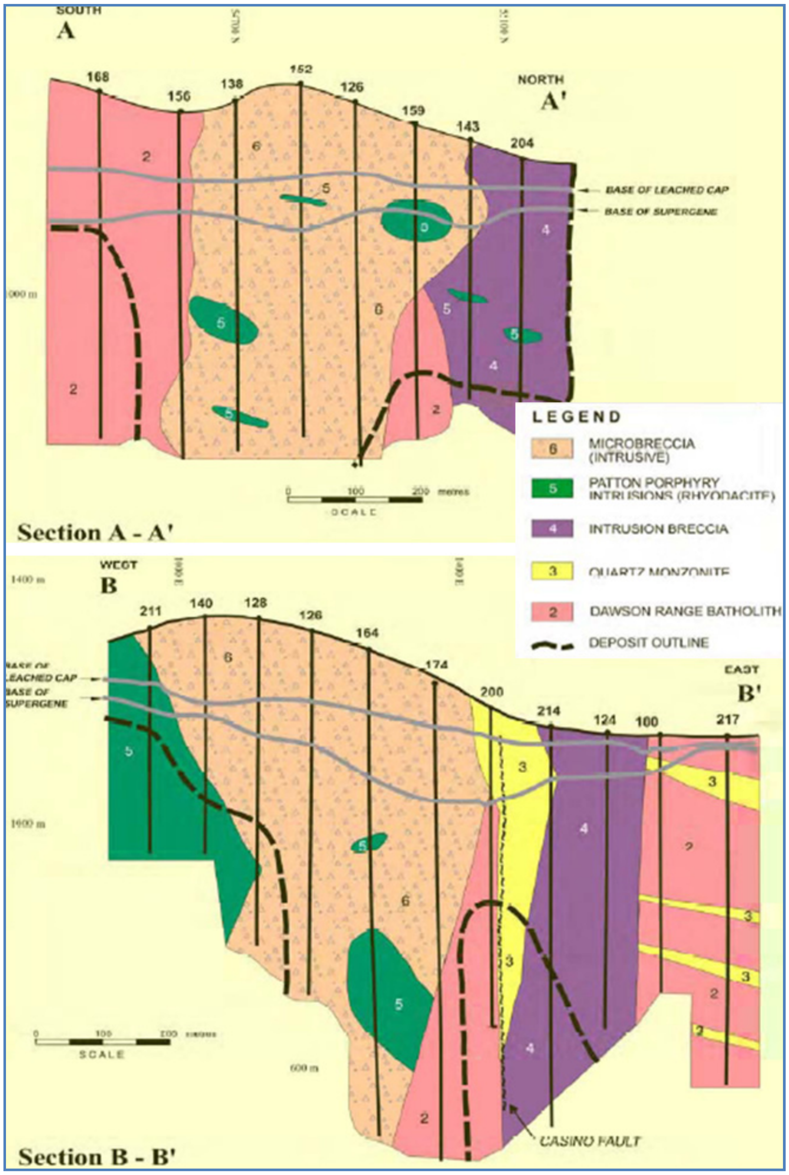

Figure 7: Geological Cross Sections (A-A' and B-B') over the Casino Deposit[5]

2.7 MINERALIZATION[6]

Leached Cap and Mineralization

The deposit is weathered to a depth of up to 300 m producing a well-defined Leached Cap. The Leached Cap averages approximately 70 m thick and is characterized by boxwork textures partly filled by earthy limonite, jarosite, goethite and hematite. This (leached) copper-oxide zone is closely related to present topography and is best developed on well drained slopes, where oxidation of earlier secondary copper sulphides occurs above the water table. Gold is enriched in the Leached Cap relative to the Supergene Sulphide and Hypogene zones, thus it is often referred to as the Oxide Gold zone.

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[5] *Geological Cross Sections captured from the Western Copper Corporation Web Site: http://www.westerncoppercorp.com/index.php/properties/casino/project_details/. Company Website accessed on August 2009.*

[6] *The information presented in this section was obtained from the Western Copper Corporation Web Site and from the "Technical Report on the "Casino Project Pre-Feasibility Study Yukon Territory, Canada (Volume I). Report prepared for Western Copper Corporation. M3 Engineering & Technology Corp. (M3-PN07078, 5 August 2008).*

Supergene Alteration and Mineralization

Supergene alteration at Casino consists of a poorly defined upper copper oxide zone that overlies a better-defined copper sulphide zone. The Supergene Sulphide zone averages 60 m in thickness and is characterized by a high pyrite content of the phyllic zone, which promotes leaching. Thus, secondary enrichment zones are thickest near the contact of the potassic and phyllic alteration zones. Copper-bearing minerals in the Supergene Oxide zone include chalcanthite, malachite and brochantite and minor azurite, tenorite, cuprite, and neotocite.

Hypogene Mineralization

The bulk of the sulphide mineralization occurs in and adjacent to the intrusion breccia and microbreccia. Molybdenite is concentrated moderately in the core of the deposit, and chalcopyrite is concentrated moderately towards the periphery, just inside the potassic / phyllic alteration contact.

Chalcopyrite occurs in veins, disseminations, and irregular patches. On the west side of the Casino Fault disseminated chalcopyrite is more abundant than chalcopyrite in veins and veinlets in microbreccia and granodiorite. On the east side of Casino Fault the distribution of chalcopyrite is more strongly controlled by brittle deformation. In this zone, the dominant style of mineralization consists of fracture controlled chalcopyrite, open space chalcopyrite fillings, and chalcopyrite with ankeritic carbonate and gypsum, as breccia matrix. Native gold occurs as free grains in quartz and inclusions in fractures in pyrite and chalcopyrite grains.

Within the Hypogene zone, polymetallic base-metal veins were introduced into parallel, steeply dipping fractures trending 150° to 170°. Many contain abundant sphalerite, galena, and calcite/ankerite, less abundant quartz, tetrahedrite, and chalcopyrite, and minor bismuth-bearing minerals. Some veins are dominated by chalcopyrite and/or pyrite.

2.8 Previous Exploration

The full extent of exploration at Casino Project is not known to the author at the time of writing this report. Historic work on the property included multi-element soil geochemistry, geological mapping, geophysical surveys, trenching and drilling.

The information and maps supplied by Western Copper Corporation (pers. Comm. August, 2009) indicates that the property has been extensively drilled in the central and western parts of the grid. Few drillholes are documented on the northern and southern parts of the survey grid. The Historic Casino Drillhole Location Plan Map is presented in Figure 8.

Digital copies of the maps and datasets from historic surveys were supplied by Western Copper Corporation and compiled in the digital archive for further references. The results from these surveys will be used for referencing and corroborating the targeting only. No interpretation or processing of the available data is included in this report.

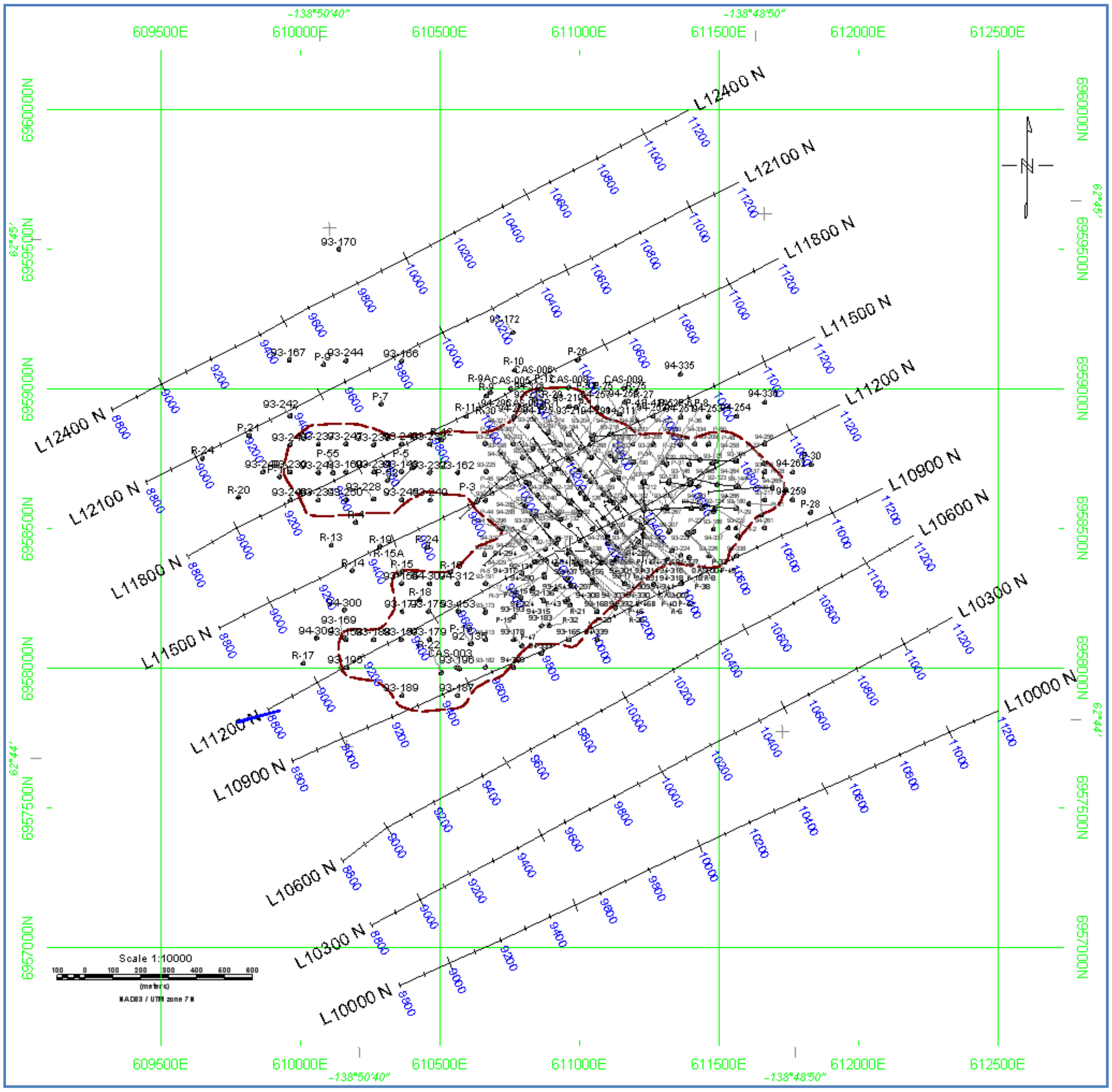

Figure 8: Historic Casino Drillhole Location Plan Map

Additional information from previous exploration on the Casino Project has been compiled in the Technical Report: "*Casino Project Pre-Feasibility Study Yukon Territory, Canada. (Volume I) Prepared for Western Copper Corporation. M3 Engineering & Technology Corp. (M3-PN07078, 5 August 2008)*".

The report is also available in the Western Copper Corporation Web site at: http://www.westerncoppercorp.com/content/pdfs/technical_reports/Aug508_Casino_PreFeasibility.pdf.

3. RESULTS

This section presents the results of the Titan-24 data inversions and interpretation in context with the known geology, survey objectives and significance to future exploration at Casino Project. Appendix E provides pseudo-section plots of the DC/IP and MT data used in the 2D inversions along with a more complete description of the data processing and inversion parameters.

In *Section 3.4* the 2D inversion models are presented graphically in Geosoft plot format along with an interpretation overlay and comments on the most significant results and recommended targets. Scaled maps and sections of the DC Resistivity, IP Chargeability and MT Resistivity models are also provided in Appendices F, G and H.

3.1 2D DC RESISTIVITY & INDUCED POLARIZATION INVERSIONS

In general, the quality of the DC/IP raw data is good. Pre-processing of the DC Resistivity & Induced Polarization (DC/IP) data involved adjustment of data errors and removal of poor quality data. For the DC/IP inversions, the UBC (DCInv2D™ and IPInv2D™) 2D platform was used (Oldenburg & Li, 1994).

Several 2D DC and 2D IP inversion models were calculated in order to produce a sound geological representation of the acquired data. Smooth inversion models "smDC and smIP" were produced for both, the DC resistivity and IP datasets. No sharp inversions were run for the DC and IP data.

The inversions were generally run with successive removal of poorly fitting data and error adjustment before arriving at the final 2D models. Some data acquired with large transmit-receiver separations were not of high quality and were removed prior to inversion.

In some instances, when using the DC inversion models as the reference for the chargeability calculations, the inversions produced models with abnormally large chargeability amplitudes and anomaly extents that are not consistent with the raw data.

In order to reduce the uncertainty of the models, additional IP inversions were derived by inverting the IP data assuming a constant resistivity distribution (half-space or homogeneous conductivity). These models are thought to have provided a relatively better image of the apparent chargeability distribution in the sections in the presence of conductive units contrasting with highly resistive rocks. The "smDC and smIP nullcon" inversion models were found to produce consistent results and were used for presenting the geophysical interpretation.

A more detailed discussion of the UBC technique, acquired DC/IP data and inversion results can be found in Appendix D.

3.2 3D DC RESISTIVITY & INDUCED POLARIZATION INVERSIONS

Three dimensional inversions were executed for both the 2D DC resistivity and IP chargeability data. The 3D DC and IP inversions were executed with the objective to minimize the effect of 3D structures and other 2D linear features that may affect the data and 2D inversions, and also to reduce the uncertainty on the interpretation of the 2D data.

The 3D DC and IP inversions were run using the UBC "DCIP3D" platform (Oldenburg & Li, 2000). A more detailed discussion of the UBC 3D Inversion technique is available at: http://www.eos.ubc.ca/ubcgif/.

Only one set of inversion models was produced for the DC data. Several models were produced for the IP data using different combination of the inversion parameters and starting conductivity models. Only the IP results using the null "chi" and the Titan conductivity as starting model will be presented in this report.

Details on the inversion parameters and alternate inversion models of the 3D inversions are available in Appendix D and in the digital archive supplied with this interpretation report.

3.3 Tensor Magnetotelluric Inversions

In general, the MT raw data quality is good. No significant sources of cultural or telluric noise have been documented in the vicinity of the survey area. The MT signal was relatively low for the dead band between 1 to 3 kHz. The low frequency data were generally good.

The unconstrained Tensor Magnetotelluric (2D MT) inversion models were calculated using the Geotools™ MT data processing and model-inversion platform. The initial data input into the Geotools database were line-station unrotated data, taken directly from the EDI archive[7].

One-dimensional (1D) inversion models for each mode[8] (XY and YX) of the unrotated data were generated at each site. The apparent resistivity and phase from the 1D model were interpolated to obtain twelve (12) frequency responses per decade. The resistivity and phase curves were auto-fitted to the data points. The TE mode was set to YX and interpolated. Stitched 1D TE & TM and the Determinant sections (det) were also created for interpretation purposes, data quality control, and to produce starting models for the PW inversions.

Alternative 2D smooth models were constructed using the RLM inversions (Rodi & Mackie, 2001). The inversion models were calculated using the interpolated resistivity and phase curves in the 10 KHz to 0.01Hz bandwidth, assuming a 5% error for the resistivity and 3 degrees error for the phase, at 4 to 6 equi-spaced frequencies per decade.

One RLM “mus_hrp” inversion model was derived from inverting the unrotated data using a half space resistivity (homogeneous resistivity model) of ~2512 Ohm-meters as starting model. The model uses the TM (phase and resistivity) and TE (phase and resistivity) data modes for the model calculation.

Similarly, four (4) sets of 2D PW MT Resistivity models were derived from inverting the Magnetotelluric data using different starting models and data modes.

The “pum_hrp” was derived from inverting the unrotated data using a half space resistivity (homogeneous resistivity model) of ~2512 Ohm-meters as starting model. The model uses the TM (phase and resistivity) and TE (phase and resistivity) data modes for the model calculation.

The “pum_drp” was derived from inverting the unrotated data using the Stitched 1D Determinant resistivity model (det) as starting model. The model uses the TM (phase and resistivity) and TE (phase and resistivity) data modes for the model calculation.

The “pum_h-p” was derived from inverting the unrotated data using a half space resistivity (homogeneous resistivity model) of ~2512 Ohm-meters as starting model. The model uses the TM (phase and resistivity) and TE (phase) data modes for the model calculation.

The “pum_htm” was derived from inverting the unrotated data using a half space resistivity (homogeneous resistivity model) of ~2512 Ohm-meters as starting model. The model uses the TM (phase and resistivity) data mode for the model calculation. These inversion models were found to produce consistent results when comparing with the DC Resistivity models, and were used for presenting the geophysical interpretation.

Details on the MT inversion parameters and alternate inversion models are also available in Appendix E and Appendix I.

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[7] *Electronic Data Interchange (EDI) data available in the digital archive submitted with the “Geophysical Survey Logistics Repo*

[8] *MT Modes include: Transverse Electric field (TE or XY) parallel to geology (strike direction) and Transverse Magnetic field (TM or YX) perpendicular to geological strike (dip direction).*

3.4 TITAN-24 MULTI-PARAMETER INTERPRETATION

This section[9] presents the results of the most significant geophysical anomalies and potential targets interpreted from the final DC/IP and MT and 3D DC/IP inversion models. A brief description of the results and targeting recommendations are also provided in this section. Only the "*smDC*", "*smIP nullcon*" and "*pum_htm*" models are used for presenting the interpretation results. Additional maps and sections are included in Appendix G and Appendix I.

The interpretation is presented graphically in figures containing 2D sections of the PW MT Resistivity, DC Resistivity and IP Nullcon Chargeability models with an overlay of the final target areas and anomaly trends. 3D models integrating all the available geophysical, geological and mineral information are also supplied.

The target zones enclosed by the polylines as drawn in the sections and plans represent the best possible line-to-line correlation of the DC, IP and MT anomalies derived from all the available inversion models. The interpretation was also based on the relative position and depth of the anomalies on the sections, plans and 3D geological space. The general geology and structural interpretation from historic surveys (Section 2.8) was also used for the interpretation.

For the DC and MT resistivity gridded data (sections and maps), cool colors (blue series) represent resistivity highs and warm colors (red series) resistivity lows. Alternatively for the IP, cool colors represent chargeability lows, and warm colors represent chargeability highs. Unless specified otherwise, all resistivity plots are in the 10-10000 Ohm-meters range and the chargeability plots in the 0-50 milliradians, Figure 9.

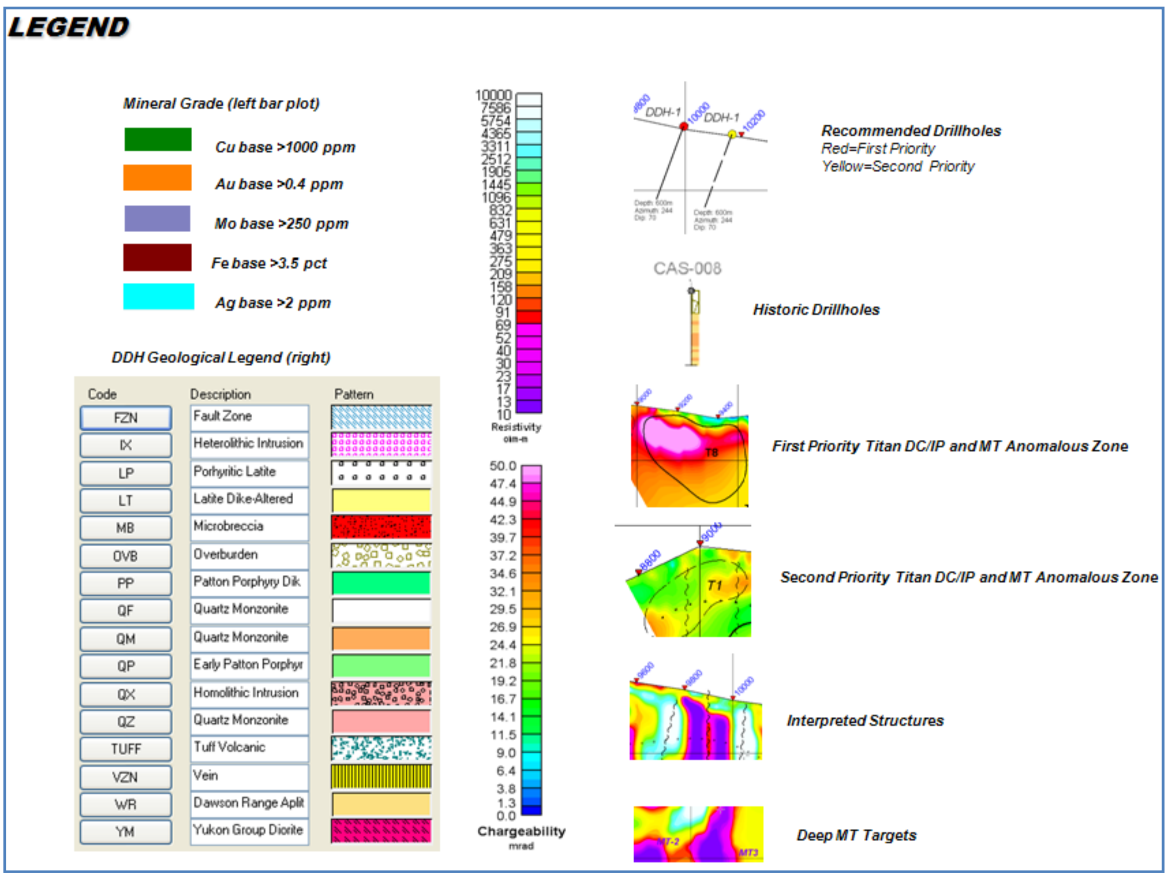


Figure 9: Legend for the Titan Multiparameter Interpretation

[9] *The final inversion models only are shown in this section. It is useful to review the actual raw data input into the 2D and 3D inversions (Appendix E), which is available in the Logistics Report previously submitted.*

3.4.1 Titan Target Classification

The Titan-24 anomalous zones were classified and assigned a target priority according to amplitude, size and multi-parameter IP, DC and MT Resistivity association as follow:

- *First priority targets:*
  - Large to moderate area (>300x300m) anomalies exhibiting strong IP response (>30 milliradians), DC and MT resistivity low association (rho <500 ohm-meters); interpreted to be consistent with massive to semi-massive porphyry copper/gold/molybdenum mineralization.
  - Large to moderate area (>300x300m) anomalies exhibiting strong to moderate IP response (>20 milliradians), located at the edges and/or over DC and MT resistivity moderate to high gradient zones (rho >1000 ohm-meters); interpreted to be consistent with semi-massive and/or disseminated porphyry copper/gold/molybdenum mineralization.
  - Large to moderate area (>300x300m) anomalies exhibiting DC and MT resistivity moderate to low responses (rho <1000 ohm-meters) with low to moderate chargeability responses (<20 milliradians); interpreted to be consistent with significant copper/gold/molybdenum mineralization and/or alteration zones.
- *Second priority targets:*
  - Moderate area (~300x300m) anomalies exhibiting moderate to weak IP response (5-20 milliradians), located either over DC and MT resistivity low or over gradient zones (rho <1000 ohm-meters); interpreted to be consistent with weak mineralization and/or alteration.
  - Deep MT resistivity lows and gradient zones (rho <1000 ohm-meters at >500 meters depth); consistent with deep mineralization, alteration, structures and/or feeder zones

3.5 DC/IP AND MT TARGETS FROM 0 TO 700 METERS DEPTH

The DC/IP and MT anomaly interpretation presented in this section is oriented to target copper/ molybdenum/silver sulphide and gold mineralization; however the interpretation results do not necessarily represent mineralization, mineral grade and or the full extent of the sources of the anomaly and are not intended for metal differentiation. Different geological, structural and mineral assemblages may produce similar anomalies in terms of response amplitude, shape, orientation and size.

The DC/IP and MT responses may be caused not only by gold and sulphide mineralization at depth. Iron sulphide, graphite, alteration zones and other geological structures (e.g. magnetic dykes, intrusive bodies, faults, etc) may also produce similar responses. A combination of the aforementioned factors is also possible and alternative source of the interpreted responses. The anomalous zones presented in this report have been outlined from each individual inversion model and grouped in zones according to the Titan Target Classification presented previously.

Based on the IP chargeability inversion models and the DC and MT resistivity association, a total of nine (9) anomalous zones have been identified for follow up at Casino Project from near surface to approximately 700 meters depth.

Of all the interpreted DC/IP and MT zones, four anomalies (T4, T5, T6 and T8) have been classified as high priority targets, and five zones (T1, T2, T3, T7 and T9) are classified as second priority targets.

The following figures present a summary of the interpreted zones and targets in plan views of the 2D DC, IP and MT Resistivity. The maps also include the recommended drillholes, geology, structures and mineralization in the property.

Three dimensional views 3D inversion results of the DC and IP data are also presented. Details on the properties and location of the interpreted anomalies are available in sections 3.5.1 and 0. Maps and sections are also available in Appendices E, G and H.

In general, the interpreted Titan DC/IP and MT anomalies correlate with the major mineral zones of the Casino deposit. Also a good resolution of the geological contacts, lineaments and structures was achieved in plan and at depth. The north-south trending fault systems (e.g. Casino fault) and geological contacts are well explained by the sub-vertical low resistivity features and gradient zones interpreted from the DC/IP and MT inversion models. This is well supported by the geological map, drillhole sections and 3D geological model supplied by Western Copper Corporation.

From the DC/IP and MT plans, at least three major structural zones can be differentiated at depth. These lineaments may be related to geological contacts, fault systems and/or intrusive bodies of different mineral composition such as dykes.

The first lineament or gradient zone is observed in the southern part of the property in between L10000N and L10300N. This signature strikes northeast and may be related to geological contacts and/or to a fault system. No significant Titan anomalies are observed to the south from this signature. The DC/IP and MT responses for anomalies T1 and T2 may be affected by this sub-parallel structure. The second zone strikes southeast from line L11200N at station 9000E to line L10000N at station 10800E. The north part of anomaly T4 and the south extent of anomaly T5 are limited by this signature. The third major structure is delineated on the eastern part of the survey grid. This zone strikes south east from L12400E at station 10100E to L11200N at station 11200E. Anomaly T6 on L11200N seem to be crosscut by this structure. From L11800N to L12400N, anomaly T5 is on the northern part of this gradient zone.

On the southwestern part of the grid and from near surface to approximately 300 meters depth, the moderate amplitude chargeability anomalies (T2 and T3) are basically associated with DC and MT resistivity high responses. These anomalies are sub-horizontal and limited at depth to about 300. They occupy large area in the sections, possibly related to the oxidation zone or Leached Cap.

In the central part of the survey area, the most intense chargeability anomalies associated with moderate to low DC and MT resistivity responses correlate with the main copper/gold/molybdenum sulphide and gold mineralization and alteration zones over the Casino deposit (e.g. anomaly T5). The variations on the amplitude of the chargeability and resistivity responses within the interpreted zones suggest mineral and/or geological differentiation over the deposit and unexplored areas. Significant mineralization may be also encountered at depth from 300 to ~700 meters nearby and below the Casino deposit (e.g. anomaly T4 and T8).

The moderate to weak chargeability response (T1) in the southwest part of the survey area is associated with DC and MT resistivity moderate to low responses, possibly indicating weak copper-gold-molybdenum mineralization and/or alteration.

Anomaly T7 is located on the northwest part of the grid. The IP response is strong to moderate with DC and MT resistivity low to moderate, suggesting significant sulphide mineralization. A second priority was assigned to this response due to survey coverage limitation at the end of the lines.

On the northeast, the strong chargeability anomalies (T9 and T6) with resistivity low may be related to significant copper/gold/molybdenum mineralization, but also with iron rich and/or magnetic formations. (e.g. anomaly T6).

The most significant anomalous zones on the Casino grid are anomalies T4, T5, T6 and T8. These anomalous zones are first priority targets for follow up. Anomaly T5 has been extensively explored, although potential for high grade mineralization exists to the south and north of the Casino deposit at depth >500 meters. Three anomalies (T1, T2 and T3) are second priority targets for follow-up from near surface to approximately 300 meters depth.

The interpreted deep MT resistivity low anomalies (MT-1, MT-2, MT-3 and MT-4) below and in the vicinity of the shallower Titan anomalous zones suggests the presence of significant sulphide mineralization and/or alteration zones within feeder channels at depths from 500 to >1200 meters. These deep MT responses are expected to be geologically and structurally controlled.

A total of thirteen (13) drillholes have been recommended to test the first and second priority targets interpreted in the property. The parameters, extent, geological and mineral association and suggestions for drill targeting these anomalies are supplied in the following sections. Additional information and tables of the interpreted anomalies and targets are also available in Appendix H.

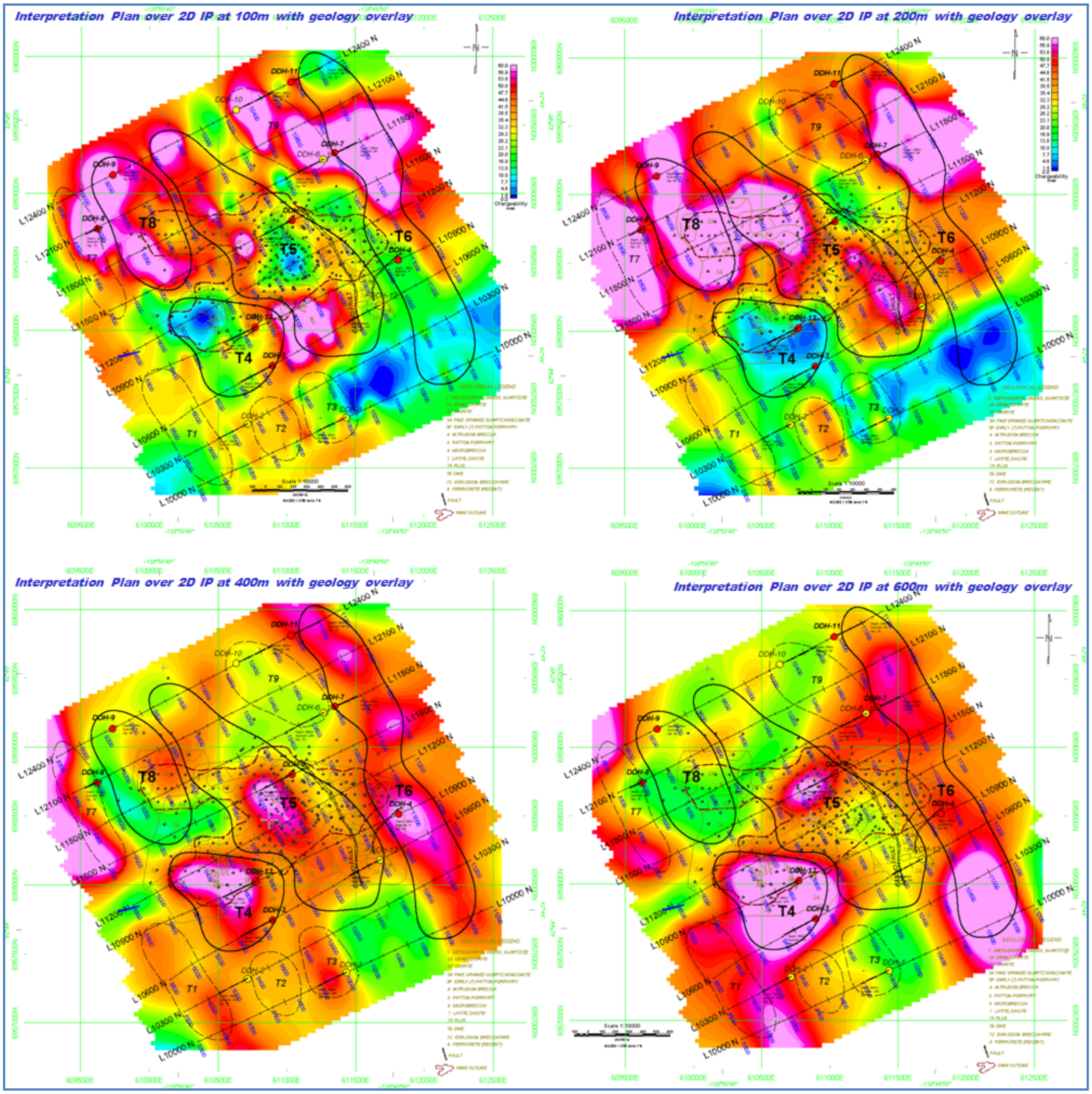


Figure 10: Interpretation Plans over 2D IP (nullcon) at 100, 200, 400 and 600 meters depth

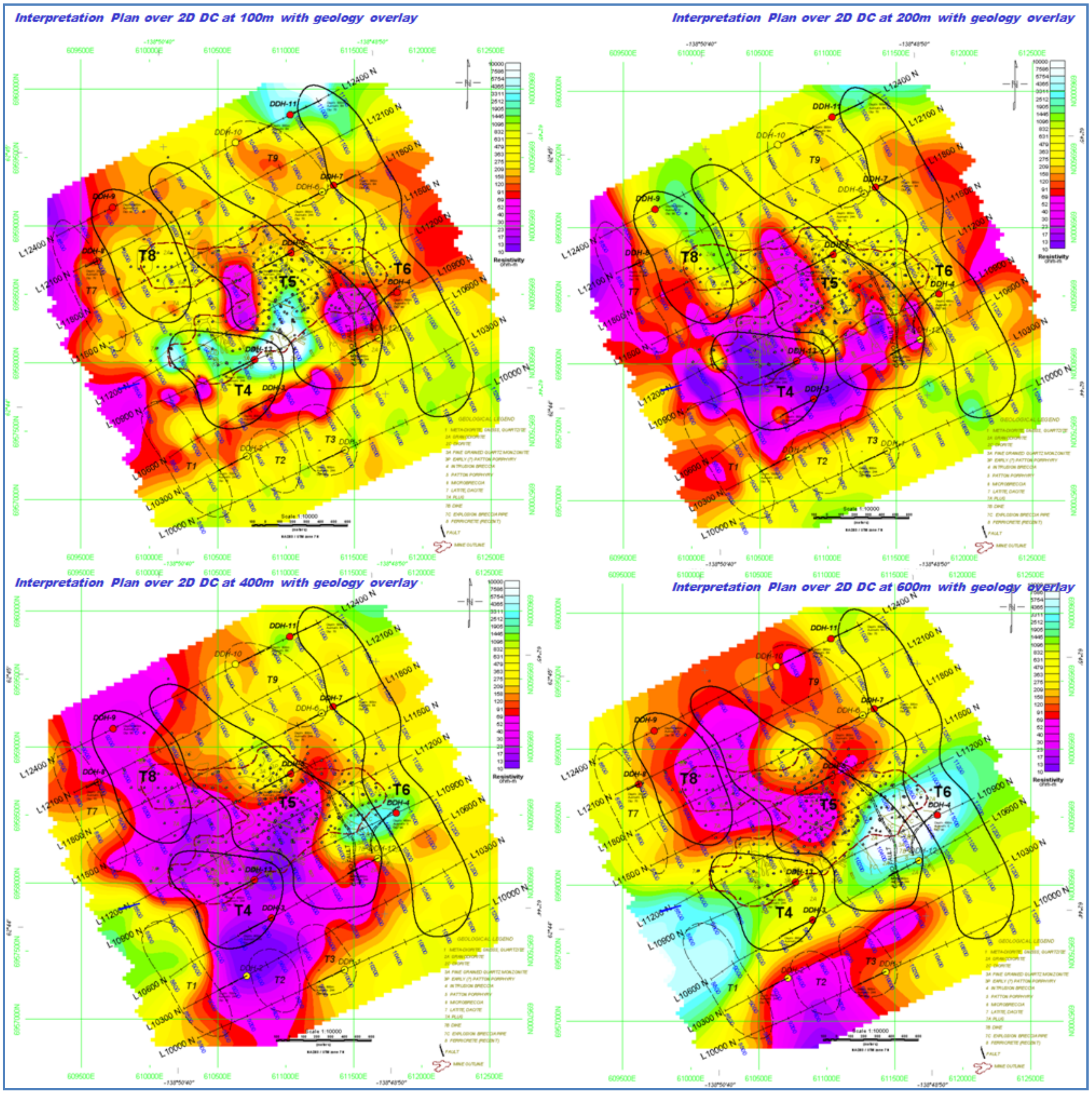


Figure 11: Interpretation Plans over 2D DC Resistivity at 100, 200, 400 and 600 meters depth

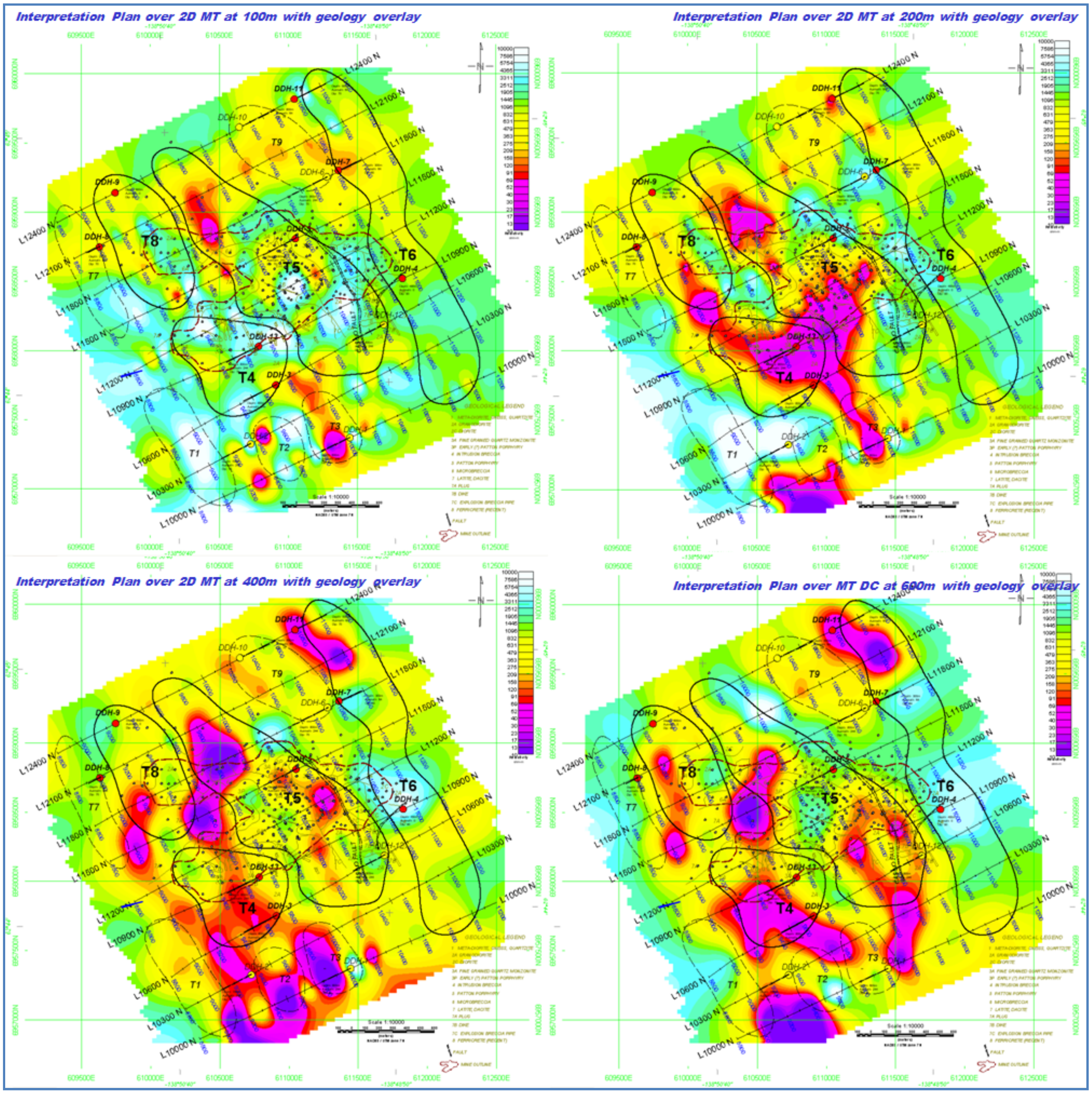


Figure 12: Interpretation Plans over 2D MT Resistivity at 100, 200, 400 and 600 meters depth

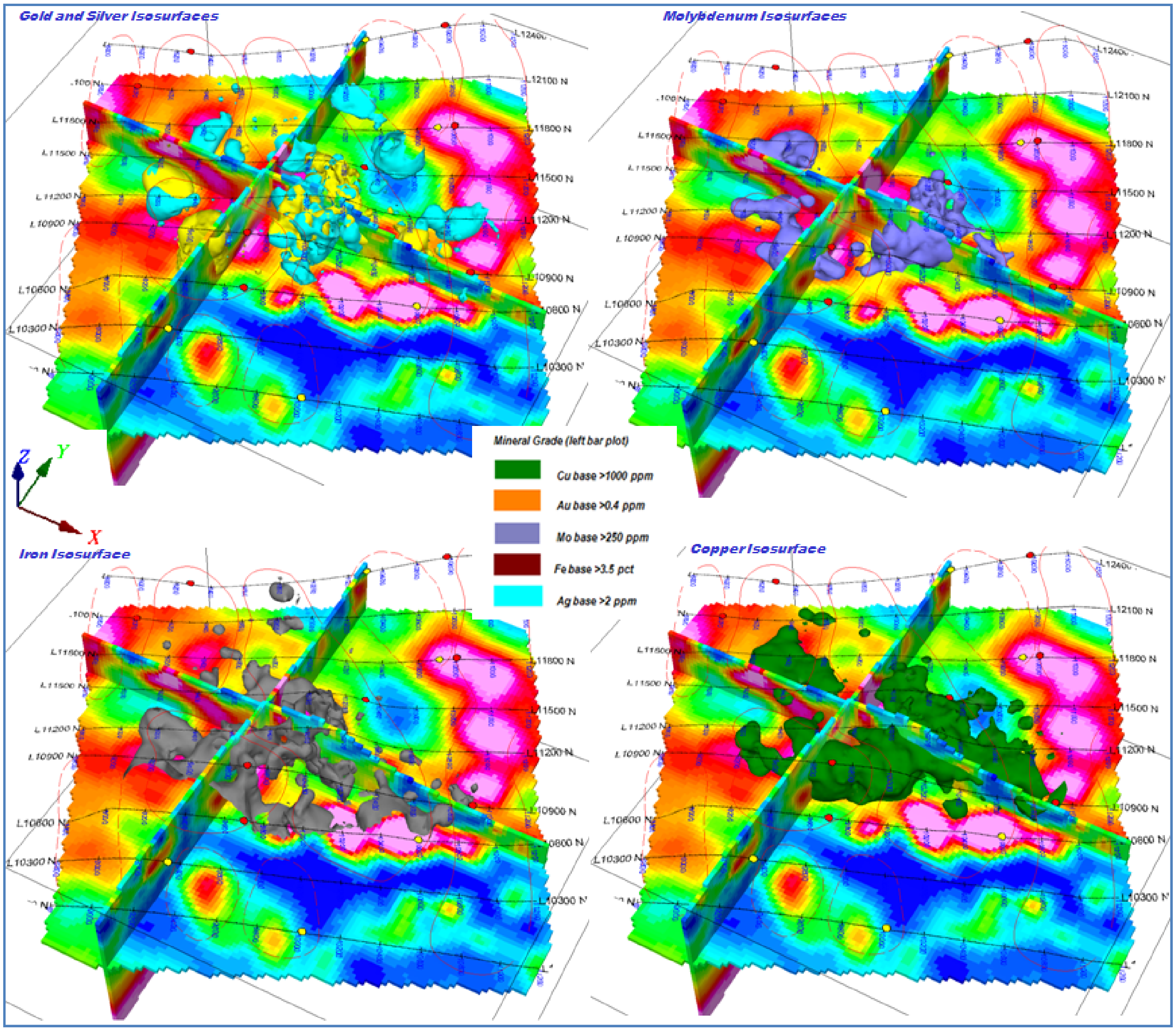


Figure 13: 3D IP Inversion Results with Titan Targets and mineral zones overlay

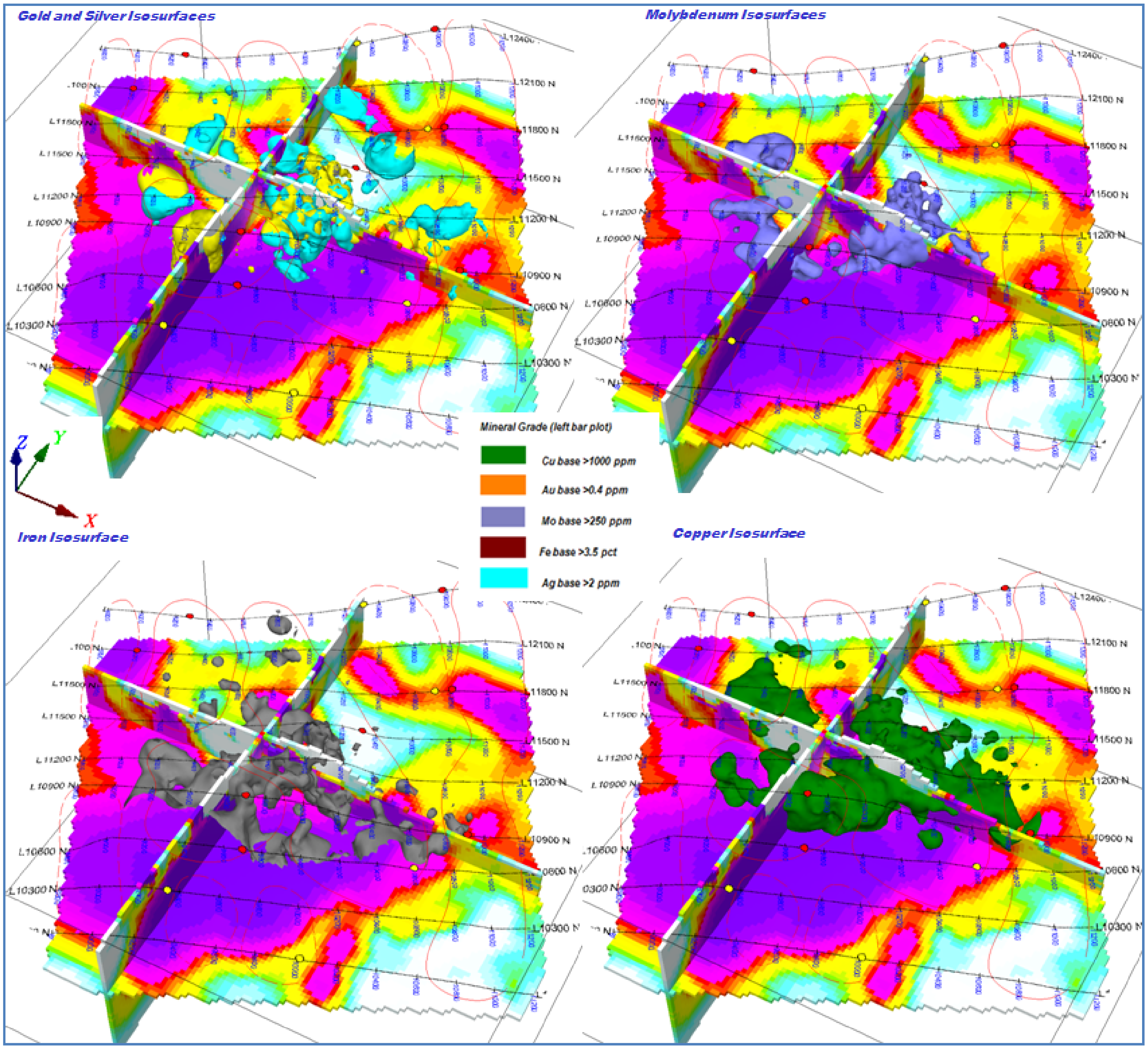


Figure 14: 3D DC Inversion Results with Titan Targets and mineral zones overlay

3.5.1 Second Priority Anomalous Zone T1

Anomaly T1 is a moderate size DC/IP and MT response located in the south-eastern part of the survey grid. This zone strikes northwest from line L10000N (station 8900E to 9150E) to line L10600N station 8800E to 9150E), Figure 15.

From line L10000N to L10300N the IP response is moderate to weak (<50 milliradians) and extends at depth from near surface to approximately 400 meters. The DC and MT resistivity is moderate (>500 Ohm-meters) suggesting disseminated to stringer sulphide mineralization. On L10600N the IP response is weak (<30 milliradians) and the depth is limited to about 200 meters.

The MT resistivity models indicate that the anomaly is hosted by more resistive rocks (1000 Ohm-meters). Disseminated to weak sulphide mineralization and/or alteration are the possible sources of the response. Iron rich and magnetic minerals may also be contributing to this response.

Below and east of T1, there is a significant increase of the chargeability with strong resistivity low suggesting potential for deep exploration. This zone may be an extension of anomaly T4. The MT resistivity low anomaly MT-1 supports the depth extent of the shallow multiparameter anomaly T1.

This zone is possibly located within the leach cap/oxidation zone and may also be related to sub-vertical contact zones and/or fault systems crosscutting the center of the anomaly from near surface to depth greater than 700 meters. No geological information is available from the drillhole data to define the host rocks.

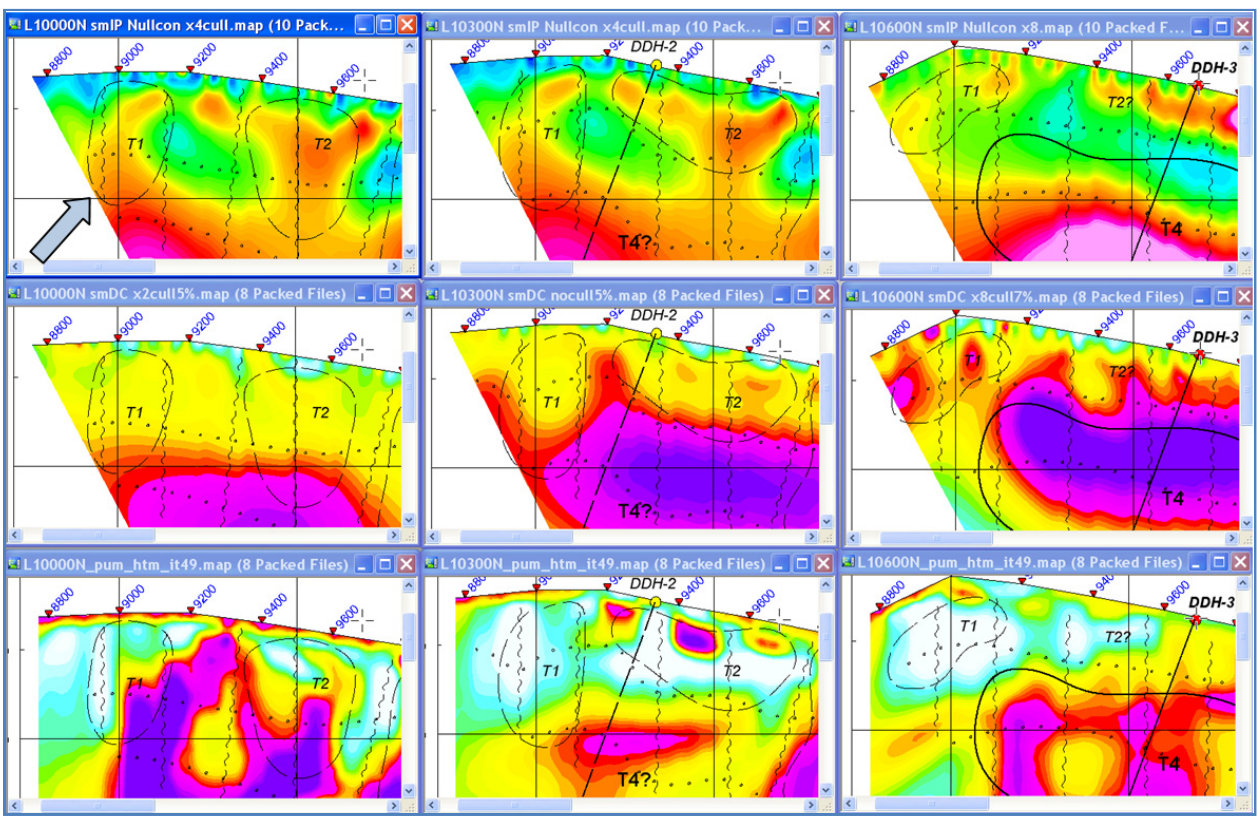


Figure 15: DC/IP and MT Sectional Views of Zone T1 from L10000N to L10600N

The limited area of this zone, along with the moderate to weak amplitude of the IP response and the moderate to high MT resistivity association make this zone a second priority target for further exploration. No drillholes are proposed to test this zone.

3.5.2 Second Priority Anomalous Zone T2

The anomalous zone T2 is a moderate to weak IP response (<50 milliradians) interpreted on the western part of the survey grid. The center of the anomaly is located from line L10000N (station 9400E to 9700E) to beyond line L10300N (station 9200E to 9700E). The IP response occupies a large area (>300x300m) and extent at depth from about 30 meters to more than 350 meters on L10000N. To the north (L10300N) the anomaly is sub-horizontal and considerably limited at depth to approximately 200 meters (Figure 16).

Similar to anomaly T1, the IP chargeability response for T2 is stronger for the southern part of the grid (<40 milliradians) and it is associated with DC and MT moderate to high resistivity responses (>500 ohm-meters). The deep portion of the response, particularly to the west, is possibly an extension of anomaly T4 and the resistivity low anomaly MT-2. The MT inversion models particularly on L10300N suggest strong structural control. No geological information is available from vertical sections to define the host rocks in this area.

Weak to disseminated mineralization is the potential source for this IP response, particularly to the north. To the south, the moderate to low resistivity association suggests semi-massive to stringer mineralization and/or alteration. The most intense portions of the IP response related to more conductive zones suggest more massive mineralization and/or high copper/iron content.

At depths greater than 500 meters, the anomaly T2 and the MT resistivity low anomaly MT-2 below and to the east may have the same deep structural control. Significant sulphide mineralization and alteration zones within feeder channels at depths from 500 to >1000 meters are also expected to be encountered.

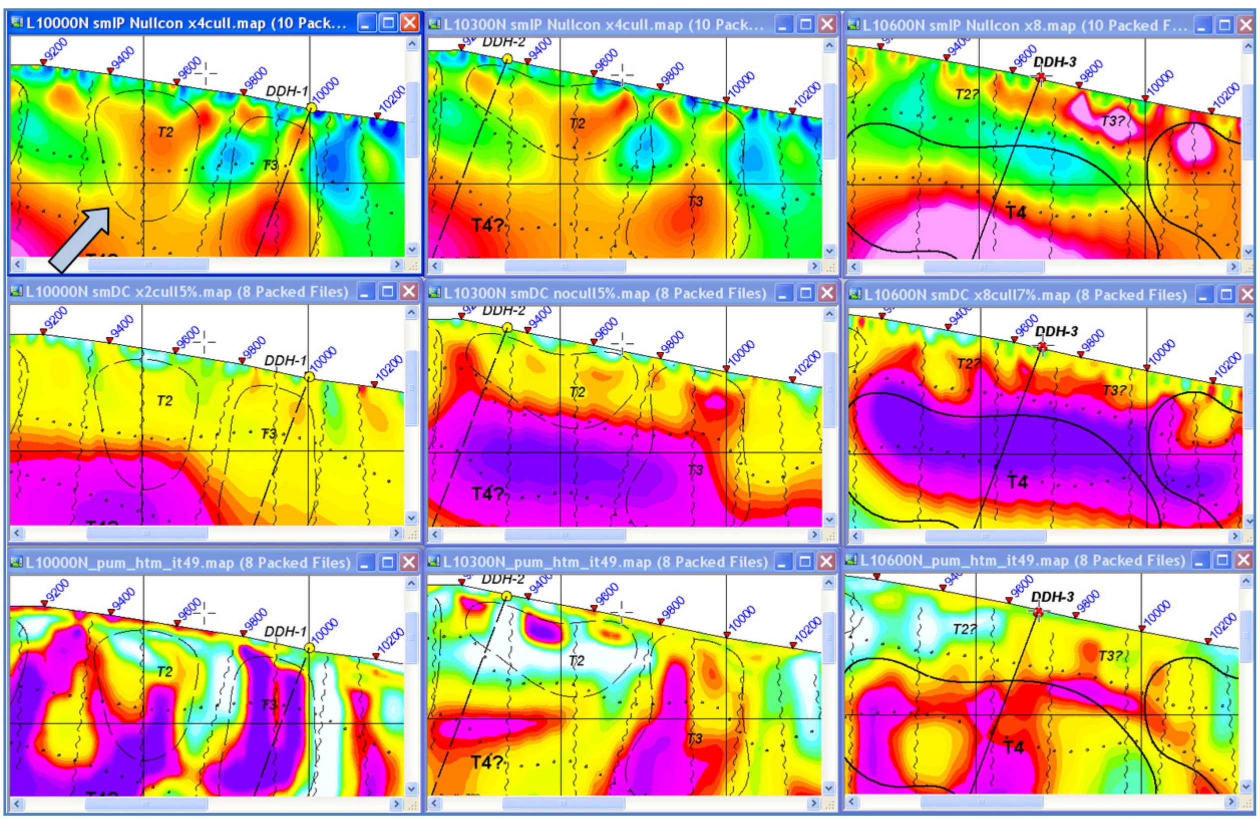


Figure 16: DC/IP and MT Sectional Views of Zone T2 from L10000N to L10600N

Zone T2 is interpreted as a second priority target for further exploration. One deep drillhole (DDH-2 located on line L10300N at 9330E) is proposed to test the west part of the DC/IP and MT multiparameter anomaly T2 and the deep MT resistivity low anomaly MT-2 and T4.

3.5.3 Second Priority Anomalous Zone T3

Anomaly T3 is a moderate size (~300x300m) chargeability response located from L10000N (station 9800E to 1000E) to L10300N (station 9800E to 1000E). The DC and MT resistivity responses are moderate to low with values <300 Ohm-meters (Figure 17).

The most significant portion of the IP response (30-50 milliradians) extend at depth from about 200 meters to more than 500 meters, possibly to the supergene zone. This anomaly is sub-vertical and possibly related to various sub-vertical structures, faults and alteration.

For the top part of the anomaly, the presence of small size IP responses with low DC and MT resistivity suggest discrete mineral intervals within the oxidation zone or leached cap. The central and lower part of the anomaly is a large area strong IP response with DC and MT resistivity low responses indicating more massive mineralization and or structures.

On L10300N, the MT resistivity is moderate to low (<300 Ohm-meters) suggesting disseminated mineralization. Particularly for line L10000N, the DC resistivity does not resolve the full extent of the anomaly due to presence of a very conductive anomaly T4 and MT-2 to the north and west respectively..

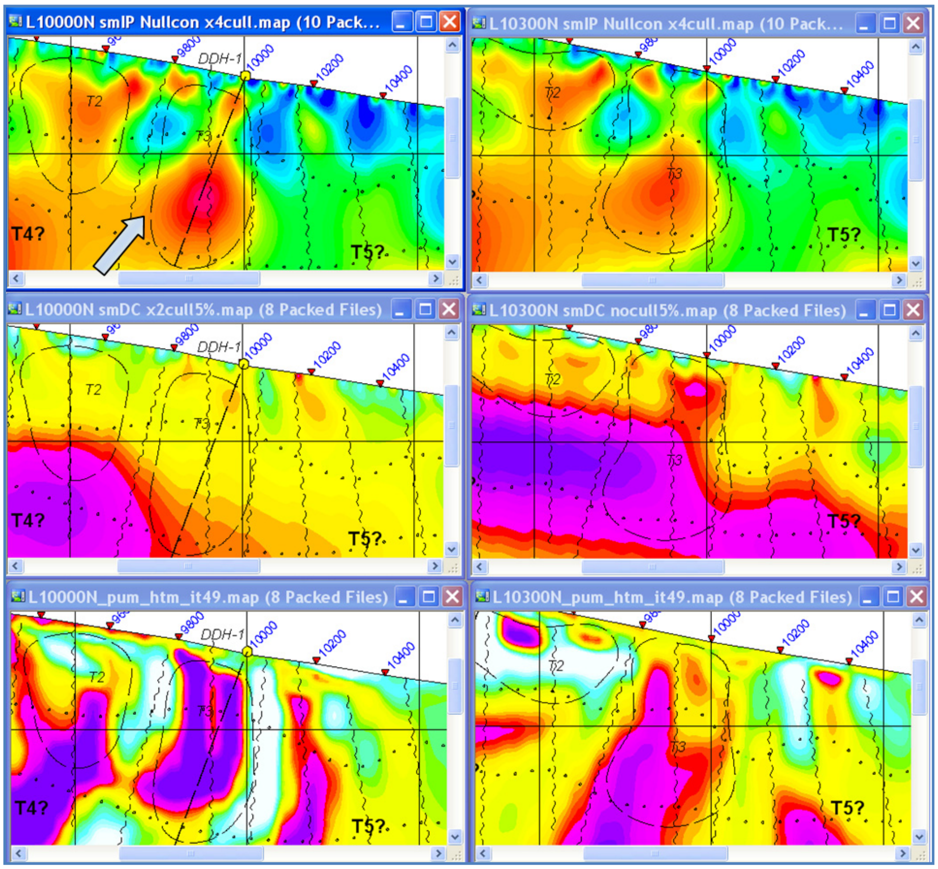


Figure 17: DC/IP and MT Sectional Views of Zone T3 from L10000N to L10300N

Significant sulphide mineralization may be the source of anomaly T3, although a second priority was assigned to this anomalous zone due to the limited area and depth extent of the IP response. One deep drillhole (DDH-1 located on line L10000N at 1000E) is proposed to test the DC/IP and MT multiparameter anomaly T3 and the top part of the deep MT resistivity low anomaly MT-2.

3.5.4 First Priority Anomalous Zone T4

Zone T4 is one of the most significant target interpreted at Casino. This is a sub-horizontal large area (>300x300m) strong IP response (>60 milliradians) located in the central/central-western part of the survey grid, extending from line L10600N (station 9100E to 1000E) to line L11200N (station 9100E to 9700E). This signature extends to depth from ~200 meters to >600 meters (Figure 18).

In general, the DC and MT resistivity inversion models delineate a strong resistivity low anomaly (<100 ohm-meters) associated to T4. The MT resistivity low and sub-vertical gradient zones associated to T4 and the resistivity low anomaly MT-2 below and west from T4 may indicate the presence of significant mineralization and/or alteration zones within feeder channels with potential for deep exploration.

The DC and IP inversions were unable to delineate the full extent of the response at >700 meters due to the depth limitations of the technique. The increasing chargeability at depth >500 meters could be an inversion artifact and therefore is questionable when comparing the results from other inversion models. Details on the inversion parameters and data input are available for review and further interpretation on Appendix E and G.

Several drillholes seem to have tested the northern and eastern shallow parts of this anomaly. On L10900N and on L11200N the top and central parts of the anomaly have been extensively tested. The drillhole logs indicate that the source of the anomaly is related to copper/molybdenum/iron mineralization. The host rocks over this area are mostly Latite-Dacite and narrow zones of Microbreccia. On L10600N indicating that the anomaly still remains open at depth for further exploration.

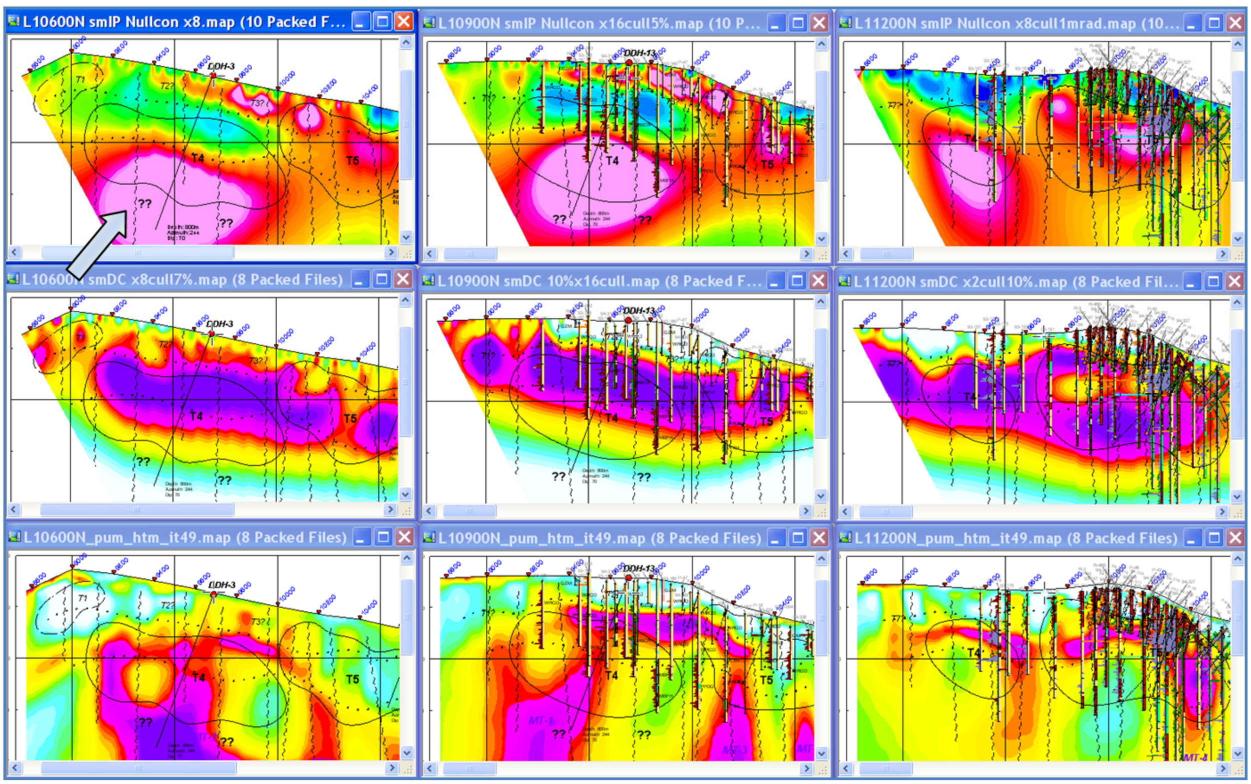


Figure 18: DC/IP and MT Sectional Views of Zone T4 from L10600N to L11200N

Based on the strong IP response and the DC and MT resistivity low association, a high priority for targeting sulphide mineralization was assigned to anomaly T4. Despite this anomaly being extensively explored to the north and east, potential for sulphide mineralization still exists over the unexplored areas and at depth. Two drillholes are recommended to test the anomalous zone T4. DDH-3 located on line L10600N at station 9680E and DDH-13 located on line L10900N at station 9700E. Another drillhole (DDH-2) located on L10300N at station 9334E may also test the deep and southern extent of T4.

3.5.5 First Priority Anomalous Zone T5

Anomaly T5 is one of the most significant responses located on the central part of the survey grid. This zone is a large size (>300x300m) sub-horizontal IP anomaly located from line L10600N (station 9900E to 10600E) to L12400N (at station 9600E to 9900E). The IP response extends to depth from near surface to about 500 meters (Figure 19 and Figure 20).

Similar to T4, the anomalous zone T5 is one the most representative targets over the main ore zone of interest at Casino. The chargeability response for T5 is strong (>50 milliradians) and the DC and MT resistivity varies significantly with location, with values from low (<100 Ohm-meters) to moderate (<500 Ohm-meters).

The most intense portion of the chargeability response is observed from line L10900N to L11500N and corresponds to the high grade gold and copper/molybdenum/silver/iron content. Over this area, the resistivity is moderate to low (<300 Ohm-meters) indicating massive mineralization. The moderate to high resistivity (>500 Ohm-meters) suggests semi-massive to disseminate mineralization.

On the southern and northern parts of the grid (from L12000N to L12400N and from L10900N to L10300N respectively), this IP signature may extend to the south to depth >500 meters, although the amplitude of the chargeability response is considerably low (<20 milliradians).

This anomaly has been extensively explored, however potential for sulphide mineralization still remains open at depths >500 meters below the Casino deposit and along strike to the south and north of the ore deposit. A high priority for targeting mineralization was assigned to anomaly T5 on line L11500N.

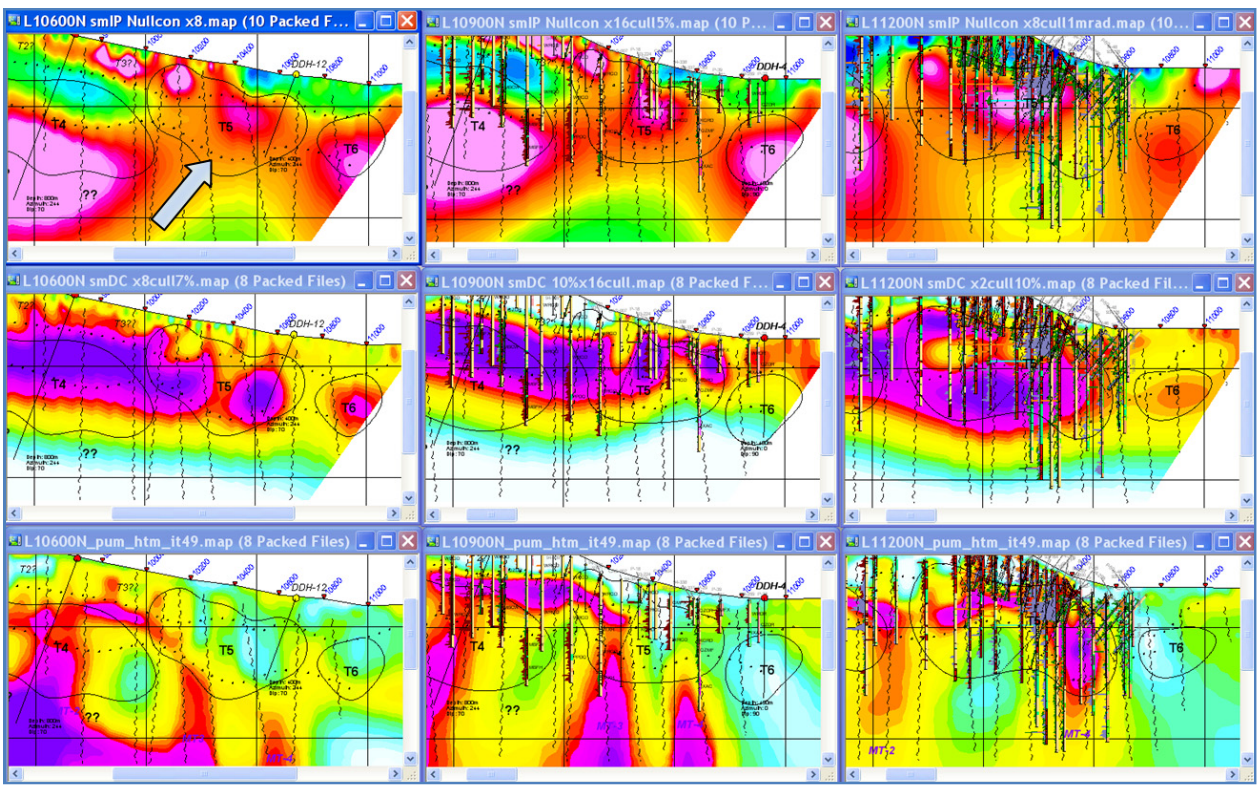


Figure 19: DC/IP and MT Sectional Views of Zone T5 from L10600N to L11200N

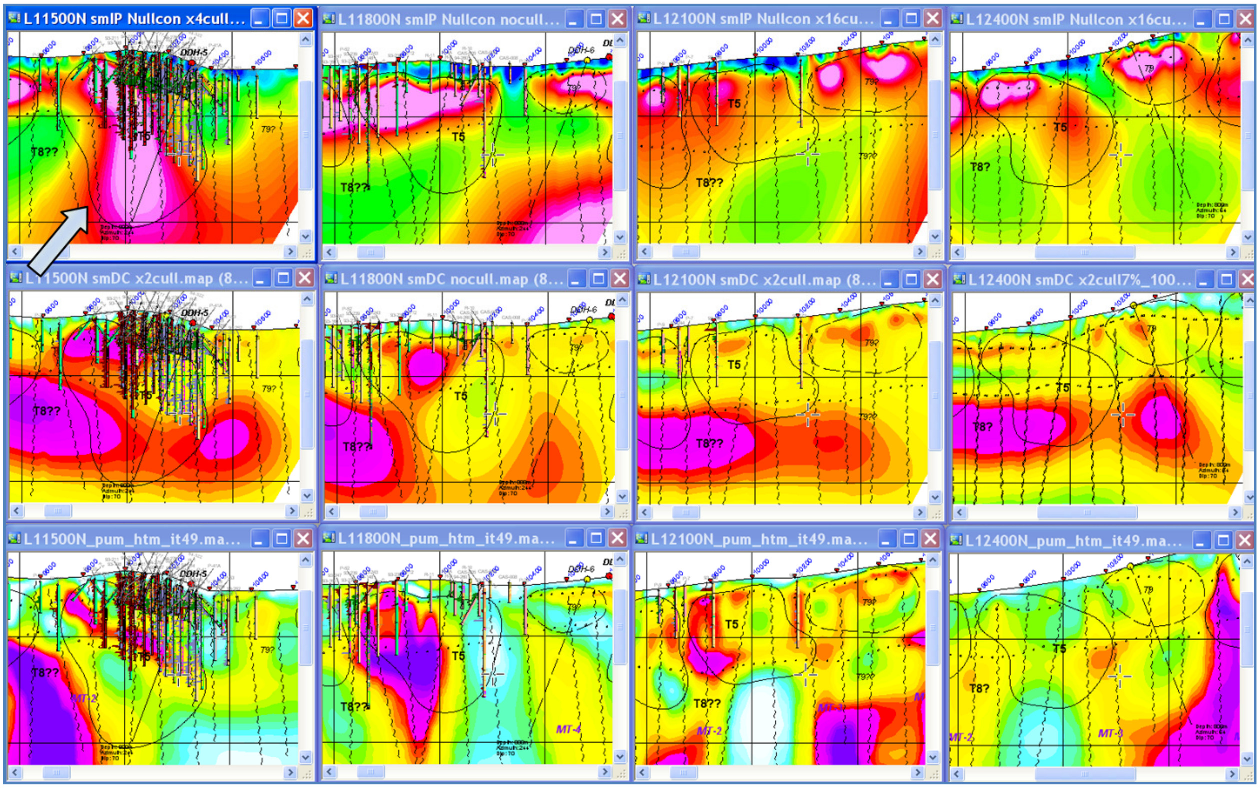


Figure 20: DC/IP and MT Sectional Views of Zone T5 from L11500N to L12400N

According to surface geology and the drillhole sections, the host rocks for T5 are microbreccia and quartz monzonite rocks. This anomaly may also be related to gold and significant sulphide mineralization located in major fracture/contact systems and alteration zones on the unexplored areas.

Two drillholes are recommended to test anomaly T5. Drillhole DDH-5 is located on line L11500N at station 10300E in order to test the deep portion of the IP response bellow the Casino ore. Drillhole DDH-13 is located on line L10600N at station 10670E, to test the south and east extent of the IP response.

3.5.6 First Priority Anomalous Zone T6

Zone T6 is located on the eastern part of the grid. The central axis of the anomaly strikes north from line L10000N at station 10800E to line L12400N at station 11000E. This target is a moderate size with a strong-to-moderate chargeability response (40-60 milliradians) observed from >30 to approximately 500 meters in depth (Figure 21).

South of L11200N the anomaly is moderate-to-weak (<40 milliradians) and limited to about 300 meters depth with a moderate-to-low resistivity association (<500 ohm-meters). This may indicate low sulphide content and/or weak mineralization in the southern part of the anomaly.

On the northern part of the grid, from L11200N to L12400N the IP response is a large size area and extends to depths >500 meters. Over this area, the chargeability is stronger when compared with the southern part (>50 milliradians) and the DC and MT resistivity is moderate-to-high (>300 Ohm-meters) suggesting disseminated sulphide mineralization. Iron rich sulphides may also be the potential source of the anomaly.

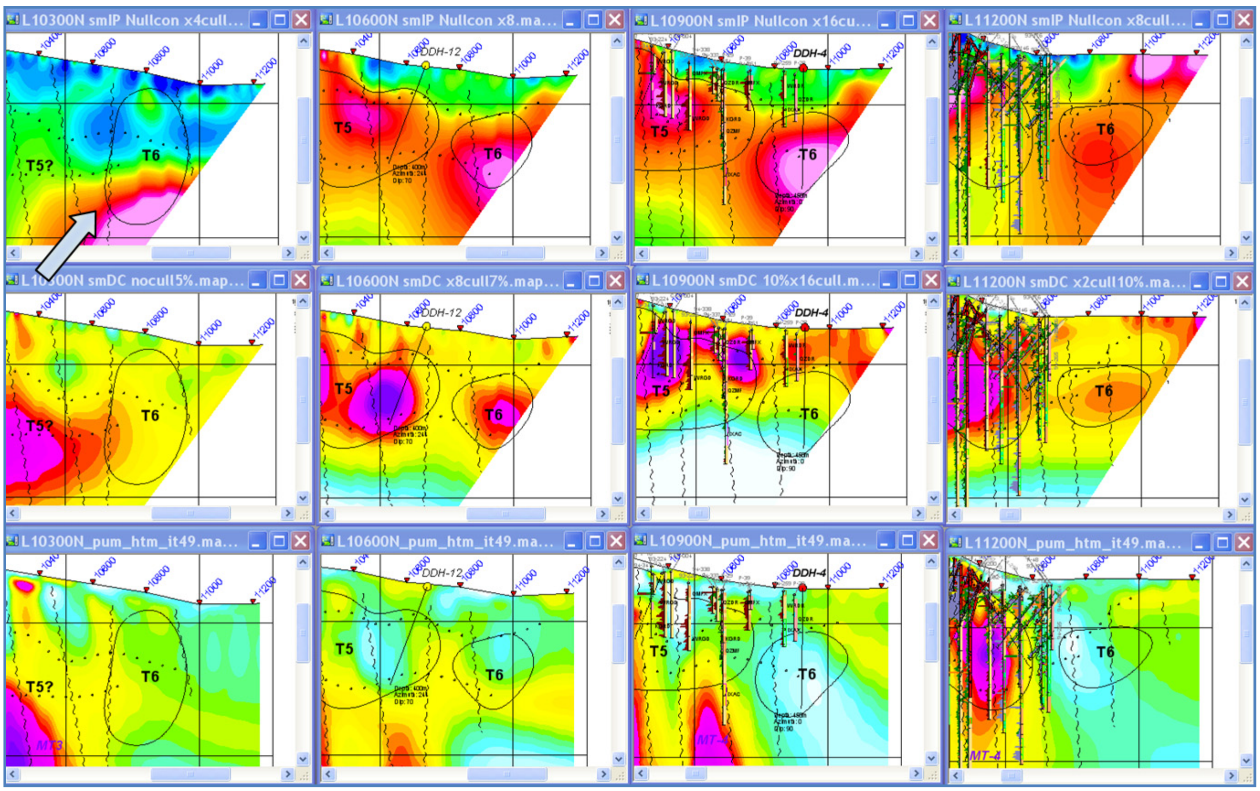


Figure 21: DC/IP and MT Sectional Views of Zone T6 from L10300N to L11200N

Contact zones and/or fault system that may extend to depths >500 meters are possibly related to the sources of this response.

Zone T6 is not interpreted to be high priority and/or representative of mineralization like other targets (e.g. T4 and T5) due to the moderate to high resistivity association and the limited depth extent.

This anomaly remains unexplored along strike and at depth. Three drillholes (DDH-4 on L10900N at station 10900E, DDH-7 on L11800N at station 10800E and DDH-11 on line L12400N at station 10750E) are recommended for testing the unexplored zones of anomaly T6.

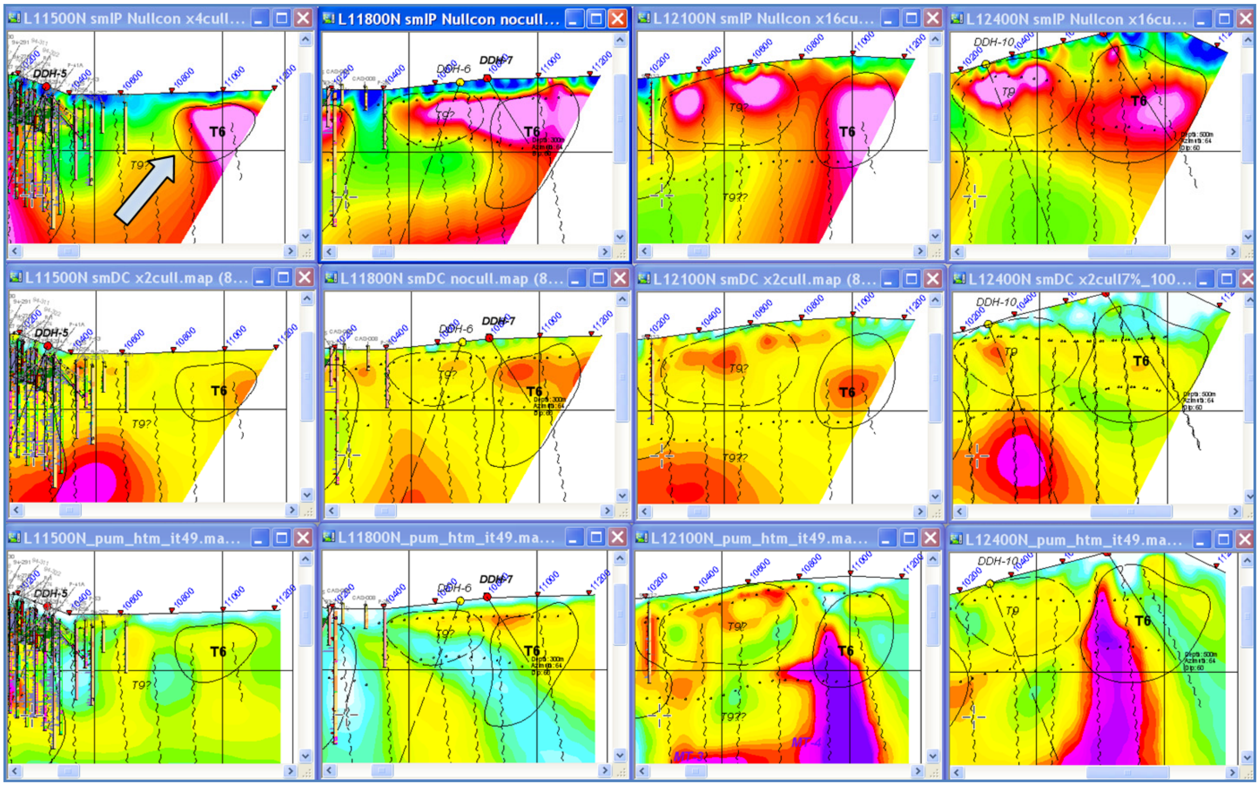


Figure 22: DC/IP and MT Sectional Views of Zone T6 from L11200N to L12400N

3.5.7 Second Priority Anomalous Zone T7

Zone T7 is interpreted as a low priority target for follow up on the eastern part of the survey grid. This anomaly is a limited area, moderate-to-strong chargeability response (>40 milliradians), associated with a DC and MT resistivity moderate-to-low response (<500 ohm-meters).

The center of the anomaly strikes northwest from L11500N (station ~8900E) to L12400N (station 9000E). According to the inversion models, the top part of the response is at approximately 50 meters and extends to approximately 200 meters in depth, although the full extent of the anomaly is not well resolved either at depth or to the east due to survey coverage limitations (Figure 23).

There is a significant increase in both the DC and MT conductivity below and to the east of T7 suggesting the presence of mineralization, structures and/or alteration at depth.

The limited depth extent and the shallow position of these IP responses in the section suggest that T7 could be related to mineralization within the oxidation zone or leach cap.

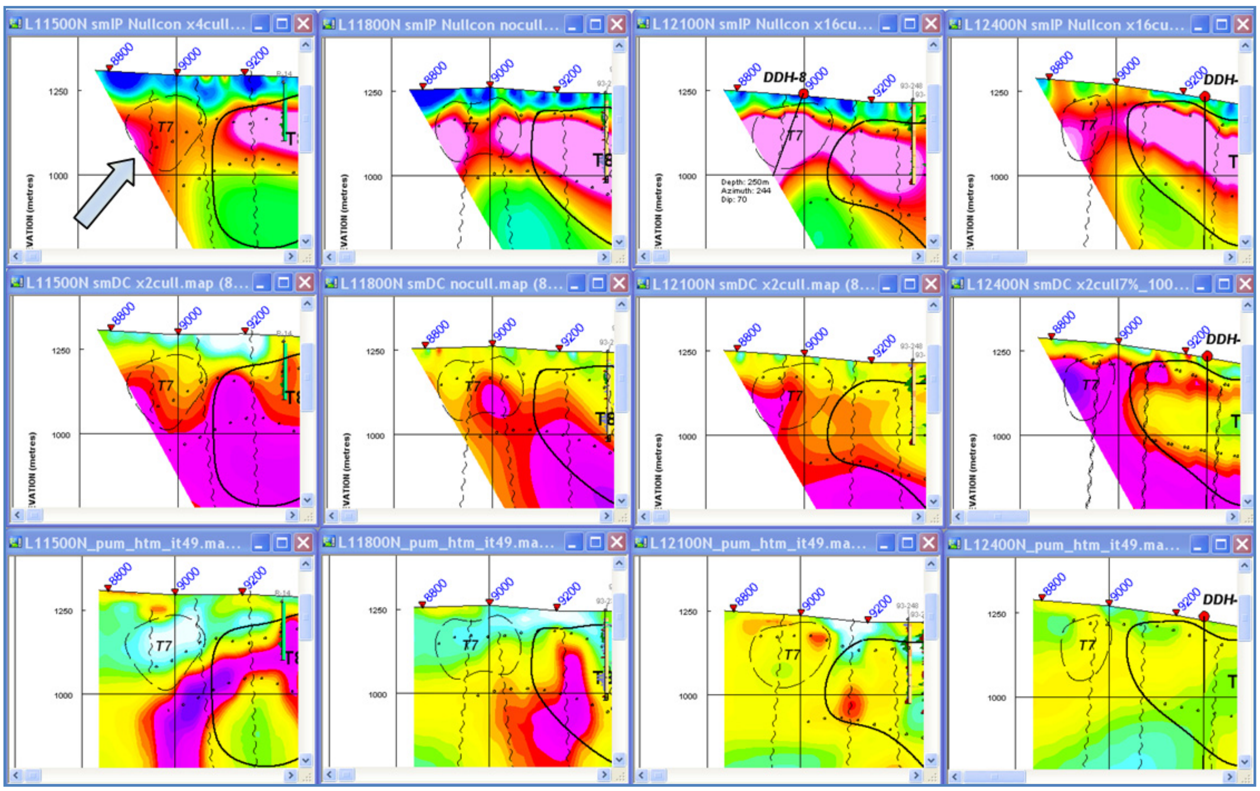


Figure 23: DC/IP and MT Sectional Views of Zone T7 from L11500N to L12400N

A second priority was assigned to T7. Limited potential for economic mineralization is expected for this anomaly, however, further geophysical coverage could change that view. One drillhole (DDH-10) is proposed to test the most intense part of the anomaly T7 on L12100N at station 9000E.

3.5.8 Second Priority Anomalous Zone T8

This anomaly is a large size strong IP response (>60 milliradians) located in the northwest part of the grid. The center of the response has its axis striking near north from line L11500N (station 9300E) to L12400N (station 9300E). The anomaly is sub-horizontal and extends at depth from near surface to approximately 500 meters.

The south and west part of the response show lower resistivity values (<300 Ohm-meters) possibly indicating more massive mineralization. For the north and east part of the anomaly the resistivity is high to moderate (>500 ohm-meters) suggesting mineral dissemination. According to the structural interpretation derived from the resistivity sections, the most intense chargeability areas of T8 are located in the oxidized zone or leach cap.

For all the lines, the DC inversion models show a strong sub-horizontal resistivity low anomaly (<100 Ohm-meters) located at approximately 500 meters depth below and to the east with no significant chargeability response. The deep MT resistivity low anomaly MT-2 corroborates the DC resistivity results. Significant sulphide mineralization, structures and/or alteration at depths greater than 800 meters are the possible source for this feature. The presence of several sub-vertical lineaments in the vicinity of T8 suggests the existence of deep structures and/or feeder channels associated to this anomaly.

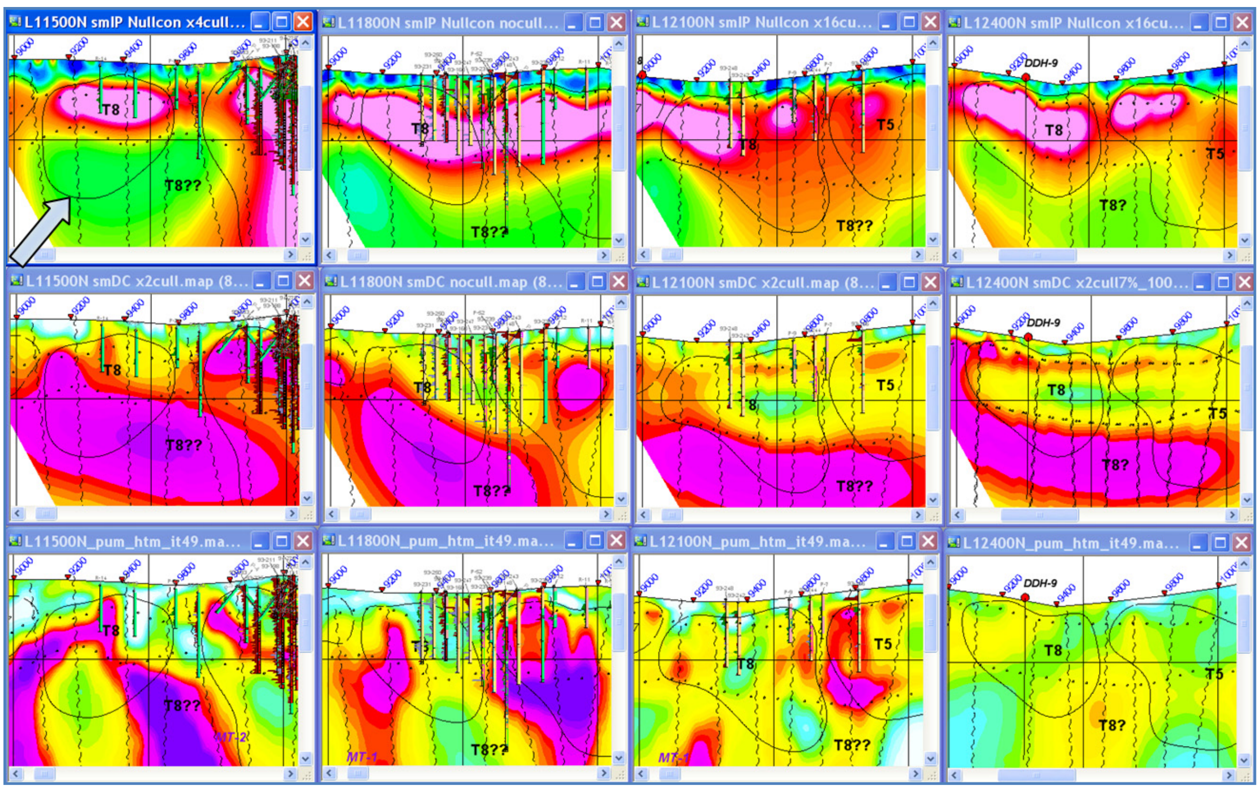


Figure 24: DC/IP and MT Sectional Views of Zone T8 from L11500N to L12400N

Few drillholes are documented over this area. The shallow and southern parts of the anomaly have been partially tested, although potential for sulphide mineralization still exist to the north and at depth >400 meters.

A first priority was assigned to T8 based on the high amplitude of the IP response and the limited exploration in this zone. One drillhole (DDH-9) is recommended for testing T8 on line L12400N near to station 9300E.

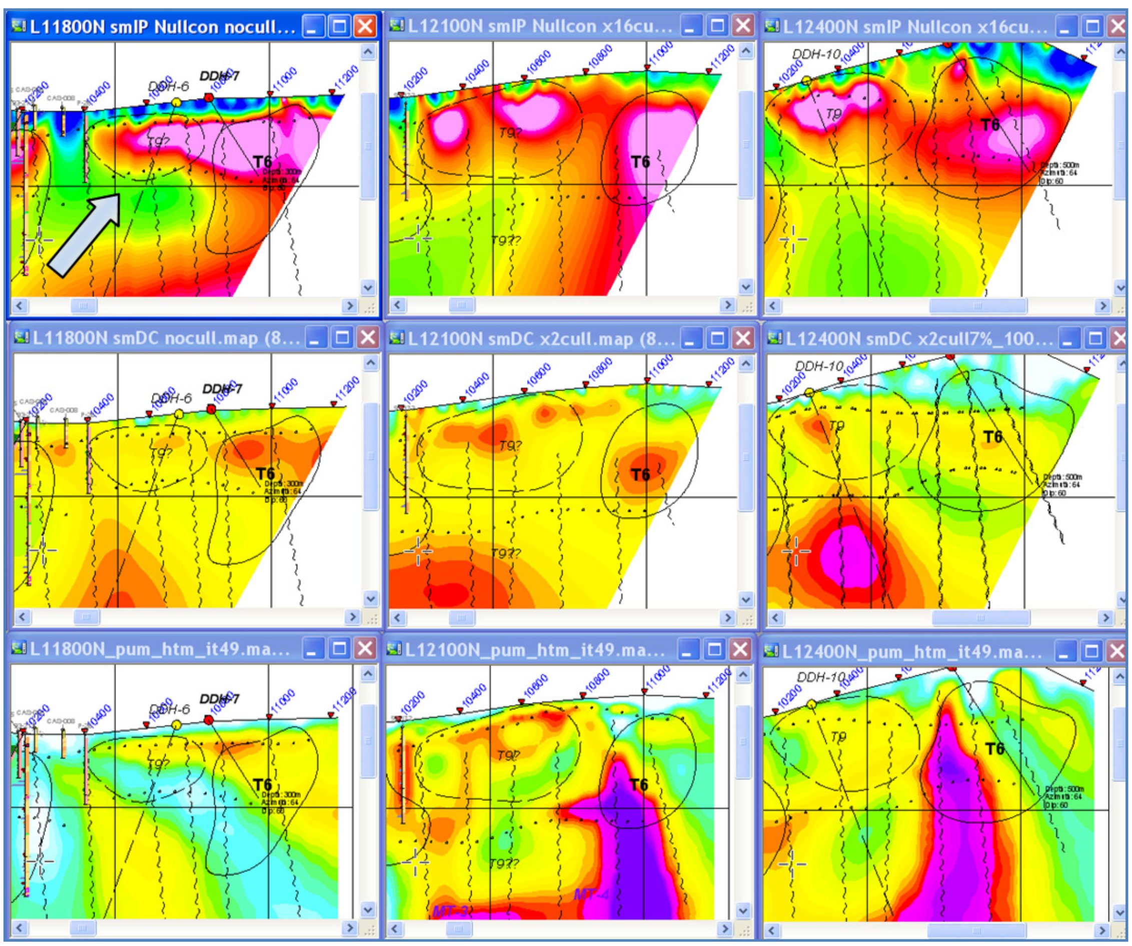
3.5.9 Second Priority Anomalous Zone T9

The Titan zone T9 is a low priority target for exploration on the property. This anomaly is a sub-horizontal strong-to-moderate chargeability response (>50 milliradians) associated with a DC and MT resistivity moderate-to-high responses (<1000 ohm-meters). The center of the anomaly is limited in area and located from L11800N (at station 10600E) to L12400N (at station 10400E). The top part of the response is near surface and extends at approximately 300 meters.

The proposed geological model suggests that T9 is located within the oxidized cap and the top part of the supergene zone. Disseminated mineralization is expected to be the main source contributing to this anomaly in the areas where the resistivity is high to moderate. Also, there is a significant increase of both the DC and MT conductivity in the areas where the chargeability show the highest amplitude of the response, suggesting the presence semi-massive mineralization.

According to the DC and MT structural interpretation, there are several sub-vertical structures that crosscut this Titan anomaly at approximately station 10400E and 10500E. On the southern part of the anomaly, the chargeability increases considerably at depth >500 meters. The DC and MT resistivity also manifest resistivity low responses which are related to this deep IP response. The MT resistivity low anomaly MT-3 indicates that T9 has potential for deep exploration to >800 meters in depth. The full extent of the IP and DC resistivity response is not well resolved at depth due to the depth limitations of the technique.

Two drillholes are proposed to test anomaly T9 and the deep DC and MT resistivity low responses below T9. DDH-6 is located on line L11800N at station 10700E, and drillhole DDH-10 is located on line L12400E at station 10300E.



<u>Figure 25: DC/IP and MT Sectional Views of Zone T9 from L11500N to L12400N</u>

3.6 DEEP MT TARGETS FROM 500 TO 2000 METERS DEPTH

Four deep MT resistivity anomalies (MT-1 to MT-4) have been identified as significant targets for exploration within the depth range from 500 to 2000 meters. The interpreted MT targets represent resistivity low anomalies (<100 ohm-meters) that may be associated with sub-vertical and structurally controlled mineralization and/or alteration (Figure 26 and Figure 27).

A second priority was assigned to the deep MT anomalies due to the large depth of the targets and the inexistence of DC/IP coverage, drillhole and conventional geophysical data to corroborate the interpretation.

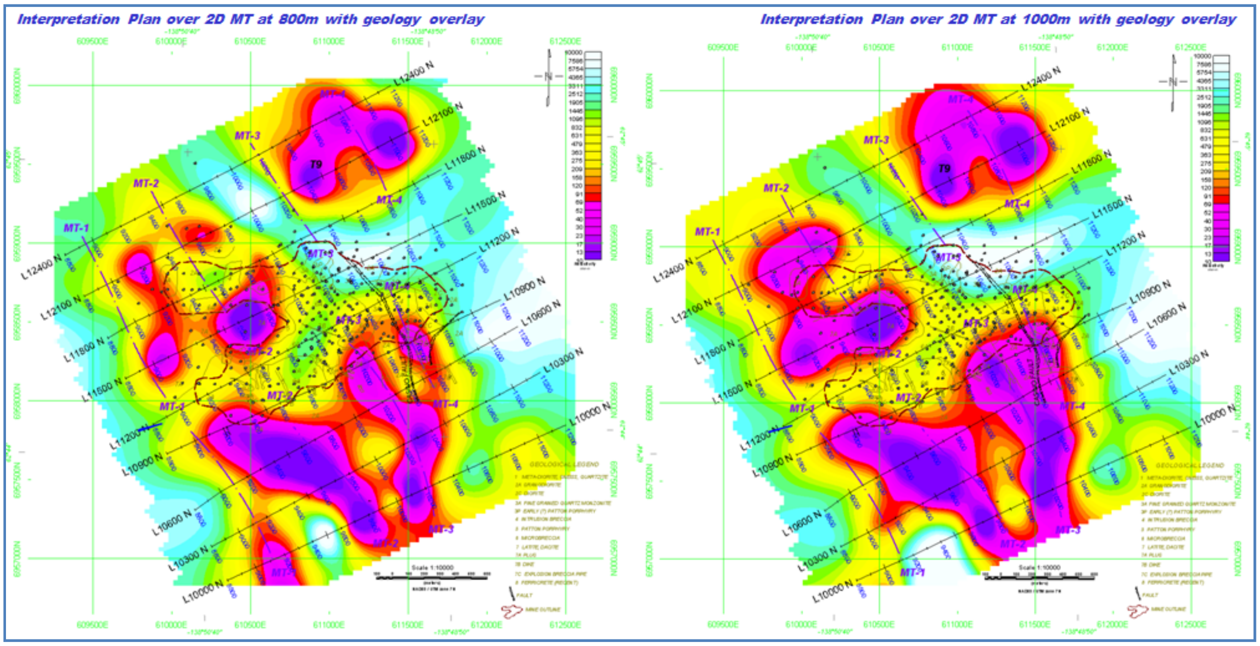


Figure 26: Interpretation Plans over 2D MT Resistivity at 800 and 1000 meters depth

The deep MT resistivity low zone MT-1 is situated on the western part of the survey grid. The central axis of the anomaly is located from L10000N at station 9100E to line L12400N at station ~8900E. The most significant portion of this MT response (<300 Ohm-meters) is situated at >700 meters depth from L11500N to L12100N. For the rest of the lines this response is not well resolved by the inversions (Figure 27).

Zone MT-2 is situated on the central-western part of the survey grid from L10000N at station 9800E to line L12400N at station 9500E. This is a large area resistivity low (<100 Ohm-meters) response located at depth from 500 meters to a maximum of 1000 meters.

Zone MT-3 is on the central part of the grid from L10000N at station 10200E to line L10900N at station 9500E, and from L11800N at station 10300E to line L12400N at station 10200E. This signature seems to be broken and displaced on the central part of the grid by a secondary north-east structure or fault system. This MT anomaly is a large area resistivity low (<100 Ohm-meters) response located at depth from 500 meters to >1200 meters. The Casino fault could be related to this deep MT response.

Zone MT-4 is located on the western part of the grid from L10600N at station 10500E to line L10900N at station 10600E, and from L11800N to line L12400N at station 10800E. Similar to MT-3, this MT response is possibly displaced to the north-east by a secondary north-east structure crosscutting the anomaly at 10700E on L11500N.

The MT resistivity responses MT-2 and MT-3 represent the most significant MT targets for deep exploration on the property. The anomalies MT-1 and MT-4 are lower priority targets for deep exploration at Casino.

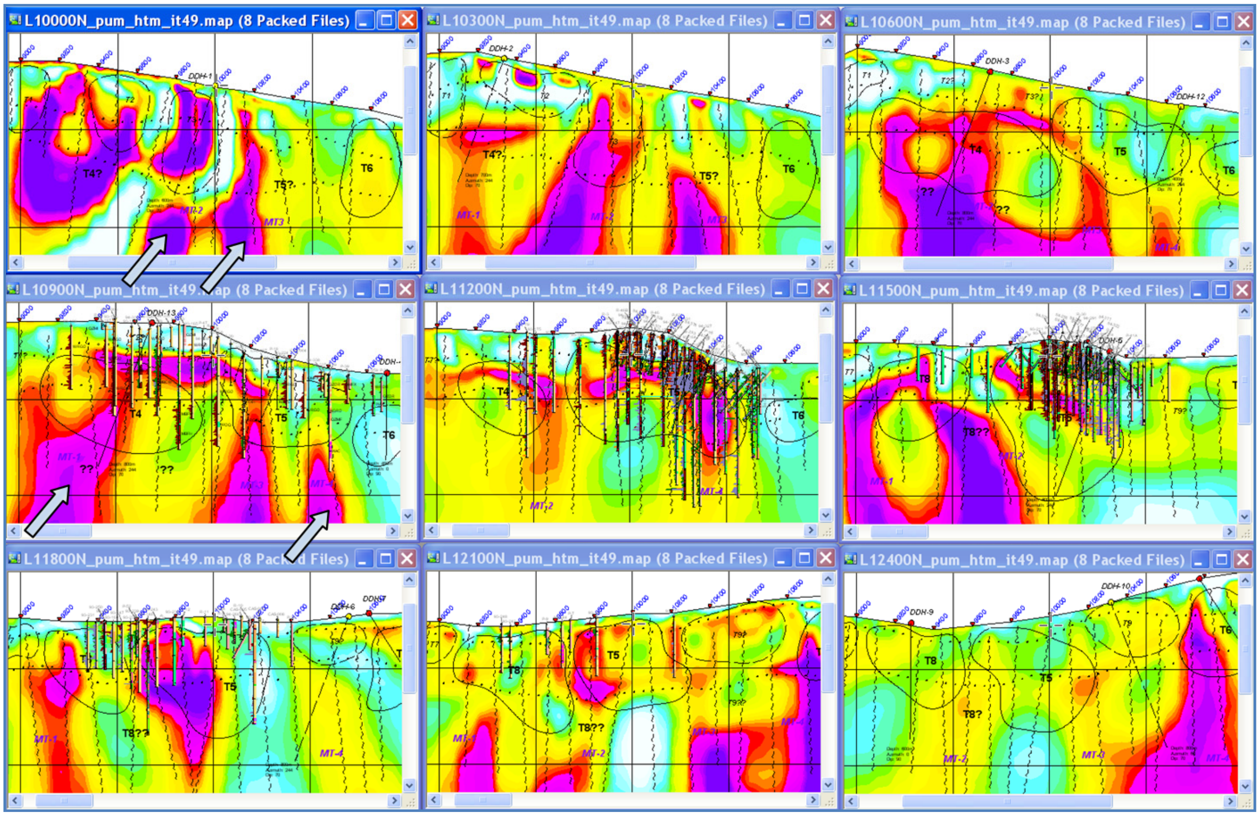


Figure 27: Deep MT Anomalous Zones MT-1 to MT-4 from L10000N to L12400N

In addition to the deep MT target interpretation (MT-1 to MT-4), the inversion models also resolve several sub-vertical lineaments and gradient zones crosscutting the interpreted near surface target zones. These interpreted structures basically have north and northeast azimuth, and may be possibly associated to deep feeder channels geological contacts and/or faults systems. Mineralization, alteration zones and other geological structures (e.g. mafic and magnetic dykes) may be the sources for the MT anomalies as well.

In cases where the deep MT anomalies (either conductive or resistive gradient zones) are an extension of the shallower DC/IP chargeability and MT anomalies, a higher priority may be assigned to these responses if significant results are encountered when targeting the shallower anomalies. If mineralization is encountered when drilling the anomalies above the deep MT targets, extending the drilling should be considered as a higher priority.

The unrotated PW TM inversion models preferentially accentuated the geological signatures and potential mineralization along the geological dip direction. A good resolution of the geological contacts was also achieved by the unrotated PW TMTE from a half space and PW TMTE from the stitched 1D determinant inversion. For details on other MT inversion models and interpretation refer to previous sections and Appendix H. Additional information on the interpretation, inversion parameters and models (plan maps and sections) is also available in the digital archive and Appendices G and I.

4. CONCLUSION AND RECOMMENDATIONS

4.1 CONCLUSION

At Casino Project, the Titan-24 survey has successfully identified at least nine geophysical anomalies (T1 to T9) in the DC/IP and MT raw data and inversion models with potential for copper/ molybdenum/silver sulphide and gold mineralization from near surface to approximately 700 meters depth. Of all the interpreted DC/IP and MT zones, four anomalies (T4, T5, T6 and T8) have been classified as high priority targets, and five zones (T1, T2, T3, T7 and T9) are classified as second priority targets.

The MT inversion models show good resolution of the anomalies to about 2000 meters depth. Four MT resistivity low anomalies (MT-1 to MT-4) have been delineated as significant targets for deep exploration in the property.

The interpreted deep MT resistivity low anomalies bellow and in the vicinity of the shallower Titan anomalous zones suggest the presence of significant sulphide mineralization and/or alteration zones within feeder channels at depths from 500 to >1200 meters. These deep MT responses are expected to be geologically and structurally controlled.

A second priority was assigned to the deep MT anomalies due to the depth of the targets, the limited coverage of the DC resistivity and IP chargeability at depth and the inexistence of drillhole and/or geophysical data to corroborate the interpretation. In cases where the low MT resistivity responses are an extension of the shallower DC/IP chargeability, a higher priority may be assigned to these responses if significant results are intersected by the recommended drill holes.

The DC/IP & MT interpretation could possibly be affected by 3D and other linear structures (faults, veins, dykes, etc), which may run parallel and/or sub-parallel to the survey lines. The DC/IP and MT model interpretation and target prioritization was mainly based on the anomaly amplitude, extent and multi-parameter association.

The interpreted anomalies, particularly to the west and east from the Casino ore deposit may not necessarily be directly related to gold and copper/molybdenum/silver sulphide mineralization. Other sources, such as iron-rich formations, graphite and clay fault systems could produce similar DC/IP and MT responses.

The 3D inversions of the 2D DC and IP data was useful for supporting the interpretation based on the 2D inversion results and also for compensating for the effect of 3D and 2D structures sub-parallel to the survey lines.

A total of thirteen (13) drillholes have been recommended to test the first and second priority targets interpreted in the property. The following table (Table 1) and figure (Figure 28) summarize the location and parameters of the proposed drillholes for testing the interpreted anomalous zones.

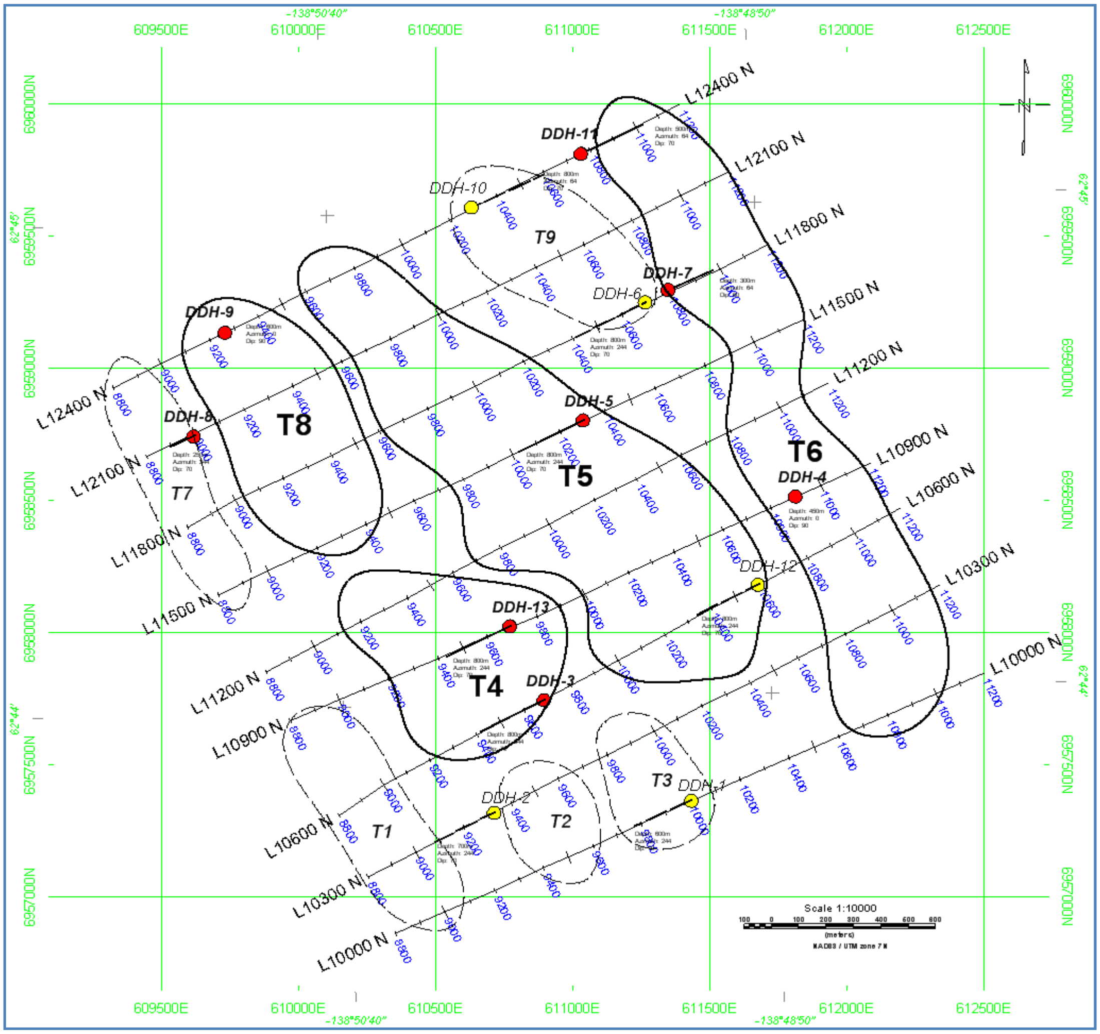


Figure 28: Interpretation Plan with Recommended Drillhole Targets at Casino Project

Hole_ID	Priority	UTME	UTMN	Elev_m	Depth_m	Azimuth	Dip	Target Zone	Line	Station
DDH-1	**2st**	611440.61	6957377.72	1220.2	600.00	244	-70	T4, T5	L10000N	1000E
DDH-2	**2st**	610724.79	6957328.91	1374.3	700.00	244	-70	T2, T4?	L10300N	9334E
DDH-3	**1st**	610903.74	6957755.15	1322.1	800.00	244	-70	T4	L10600N	9680E
DDH-4	**1st**	611821.3	6958529.54	1134.3	450.00	0	-90	T8	L10900N	10910E
DDH-5	**1st**	611046.91	6958815.87	1249.7	800.00	244	-70	T5	L11500N	10314E
DDH-6	**2st**	611274.67	6959258.38	1275.2	800.00	244	-70	T7, T8	L11800N	10700E
DDH-7	**1st**	611356.01	6959307.19	1285.5	300.00	64	-60	T9	L11800N	10800E
DDH-8	**1st**	609625.02	6958760.56	1237.9	250.00	244	-70	T1	L12100N	9000E
DDH-9	**1st**	609742.16	6959151.01	1227.9	600.00	0	-90	T2, T3	L12400N	9264E
DDH-10	**2st**	610640.19	6959619.55	1346.5	800.00	64	-70	T7, T8	L12400N	10300E
DDH-11	**1st**	611037.15	6959824.53	1468.9	500.00	64	-70	T9	L12400N	10760E
DDH-12	**2st**	611674.4	6958186	1149.81	800	244	-70	T5	L10600N	10650E
DDH-13	**1st**	610768.7	6958029	1387.37	800	244	-70	T2, T4	L10900N	9700E

Table 1: Recommended Drillhole Targets at Casino Project

4.2 RECOMMENDATIONS

The following recommendations are derived from the interpretation of the DC/IP and MT survey at Casino Project:

6. Drill-test the top and center portions of the interpreted high priority anomalies, and if favorable drill results are obtained, then drill test the deep portion and unexplored areas in the vicinity of the chargeability anomalies where significant DC and MT resistivity responses are observed.
7. Review and evaluate all the available geophysical, geological and geochemical data in the vicinity of the priority target areas prior to drilling and commencing further exploration of these zones.
8. If mineralization is encountered during drilling the anomalies above the deep MT targets, consider extending the holes to test these responses.
9. When the deep targets are drilled, follow up with downhole BHTEM and consider physical property logging on all the targets in order to delineate the extent of the source and/or identify secondary sources of the anomalies.
10. Evaluate and re-interpret the existing conventional surface and borehole geophysical data to further enhance the interpretation and drill targeting.

RESPECTFULLY SUBMITTED BY QUANTEC GEOSCIENCE LTD.

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Toronto, Ontario
September, 2009

5. GLOSARY OF ACRONYMS AND ABBREVIATIONS

- Titan-24 (or Titan): Quantec Geoscience proprietary Distributed Acquisition System.
- DAS: Distributed Acquisition System.
- DC/IP: Galvanic Direct Current Resistivity/Induced Polarization.
- MT: Tensor Magnetotelluric Resistivity.
- P-DP: DC/IP pole-dipole acquisition configuration.
- Tx/Rx: DC/IP current injection/ receiver electrode.
- Ex/ Ey: MT in-line/cross-line station or electrode.
- Hx/Hy: MT inline/cross-line magnetometer.
- 1D: One dimensional inversion models.
- 2D: Two dimensional inversion models.
- DCInv2D™/IPInv2D™: UBC DC/IP inversion codes.
- UBC: University of British Columbia, Canada.
- RLM: Rodi, W., and Mackie MT Inversion Code.
- PW: Phil Wannamaker MT Inversion Code.
- Phs: MT Phase.
- Rho: MT Resistivity.
- TE (XY): Transverse Electric field (parallel to geology or strike direction).
- TM (YX): Transverse Magnetic field (perpendicular to geological strike or dip direction).
- Geotools™: MT data processing and model-inversion platform.
- EDI: Electronic Data Interchange data.
- T# (e.g. T1): Interpreted DC/IP and MT Titan anomalous zone.
- MT- # (e.g. MT-1): Interpreted deep MT conductive zone.
- L#N (e.g. L1N): Titan survey line.
- DD- # (e.g. DDH-1): Recommended drillhole.
- Hz: Hertz.
- smDC: Smooth Direct Current Resistivity Sections.
- smIP: Smooth Induced Polarization Chargeability Sections.
- nullcon: UBC Inversion Models Using the Half Space Conductivity as Starting Reference Model.
- P.Geo.: Practicing Professional Geoscientist registered in a Canadian Association.
- QGL: Quantec Geoscience Limited.

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