

2017 Geophysical Survey Report

**Copperstone
Resources AB**

Synopsis

Copperstone Resources AB (publ) (“Copperstone” or “the Company”) has recently completed an extensive geophysical survey on the 100% owned porphyry copper exploration target project in Norrbotten County, northern Sweden. Fieldwork commenced on the 21st September 2017 and has included both a ground magnetic and a Natural-source Audio-frequency Magnetotellurics (NSAMT) survey. The objective of this integrated study was to utilise the two geophysical survey techniques to aid in the identification, mapping and interpretation of geology, alteration zonation vector patterns of the proposed porphyry copper model, and to provide targets locations for further core drilling.

From 3D modelling and interpretation of the geophysical data sets, as well as back-analysis of drill cores available at key positions within the property, the location of possible causative intrusive(s) and the surrounding halos of alteration or potential mineralisation have been proposed. A large NSAMT anomaly (zone of low apparent resistivity) coincident with a magnetic high was identified adjacent to a deeper magnetic feature. The resistive anomaly is interpreted to represent a steep zone of Advanced Argillic alteration, with a number of historic boreholes that penetrate this anomaly displaying extensive kaolinite clay development. To the west there is a deep magnetic body that is interpreted to be a possible blind causative intrusive, and this is mantled by a halo of intense phyllic alteration.

This outcome is supportive of the perceived genetic model on this property for location of a porphyry-style copper mineralisation system. Mineralisation envelopes are expected to straddle central causative intrusive / host rock boundaries as well as form widespread leakage veins beyond into the hydrothermally altered host rocks. Property-wide metal zonation patterns also support the hypothesis of a porphyry-style system being present with zinc-rich sulphide lode veins (Eva-style) located distal to more central chalcopyrite-bornite mineralisation.

Historical drill holes that have intercepted the NSAMT anomaly display well developed Advanced Argillic alteration, and are sporadically mineralised (pyrrhotite and chalcopyrite). This mineralisation style is interpreted to represent leakage from an underlying mineralised stock that has impinged on the margins of the zoned alteration that typifies porphyry systems. At Granliden Hill and Granliden South, veins with more well developed chalcopyrite, and subordinate bornite veining are considered to be more proximal to the main mineralisation centre.

In general, the application of combined geophysical surveys has enabled the alteration patterns as seen from a large drill dataset to be resolved into vectors that indicate the likely source of the system.

Exploration History Overview

This porphyry copper exploration project is located in Norrbotten County in northern Sweden and is located on a number of contiguous explorations permits (and a single exploitation concession) 100% owned by the Company. The project consists of three main contiguous exploration areas, namely Granliden Hill, Svartliden and Eva with approximately 33,900m (247 drill holes) of historic core drilling (1971-2007). From 2015-2016, the Company carried out 2,240m (13 drill holes) of shallow core drilling in order to evaluate shallow mineral resources within the larger historic dataset.

From 2013 to 2016 geological investigative work had suggested that there is potentially a large-scale hydrothermal alteration system present on this property, with related hydrothermal breccia bodies, leakage-style copper mineralisation and therefore a larger undiscovered mineralisation potential. Based on this hypothesis, detailed examination of drill cores at the Svartliden-Eva area was then carried out over a period of five weeks in late 2016 to further investigate this possibility, and to find vectors towards potential deeper seated mineralisation.

The findings of that study are documented in a report entitled “Exploration Potential of the Copperstone Svartliden Project” which was published by the Company on 24 January 2017. It was concluded from the study that *“Through generation of new structural geological data, the recognition of widespread phyllic alteration patterns, and the identification and mapping of inferred phreato-magmatic breccia bodies, the property has been identified as prospective for the presence of blind porphyry-style Cu-Au-Zn mineralisation. Based on this working exploration model it is proposed that this potential for deeper seated mineralisation is examined further through deep core drilling at key locations identified through this study.”*

Based on this conclusion a core drilling campaign (2,610.75m) was carried out from February 2017 to June 2017. The programme consisted of three deep drill holes, namely COS17353 (1,166.20m), COS17354 (572m) and COS17355 (872.55m). These three drill holes were orientated so as to intercept deeper-seated mineralisation that may underlie the Svartliden and Eva areas. The possibility of underlying mineralisation was based on the steeply dipping nature of sulphide veins, steep orientation of the hydrothermal breccia bodies, and presence of intense silica alteration.

The first drill hole was aimed northeast towards Svartliden, the second southwest under Eva, with the third hole drilled vertically between the two. All three drill holes intercepted Cu-Au-Zn mineralisation at depth thus supporting the potential existence of a large hydrothermal/Cu-Au-Zn porphyry-style system.

Assay results of the deep 2017 holes are reported in more detail in press releases on 14/06/2017 and 28/09/2017. Highlights are as follows:

- COS17353 intercepted sporadic low grade Cu mineralisation over a wide drilled length of 120m from 680-800m.
- COS17354 intercepted a Zn rich zone from 458-471m with assay values up to 5.5% Zn.
- COS17355 intercepted a zone of elevated Cu, Au and Zn from 495-516m with individual Cu assay results ranging from 1.97% Cu and Zn assay results up to 5.54% Zn.

Whilst the 2017 drilling campaign has provided further evidence for a large hydrothermal system somewhere on the property, porphyry copper mineralisation has not yet been discovered. Figure 1 below shows a basic summary of drill holes at the property.

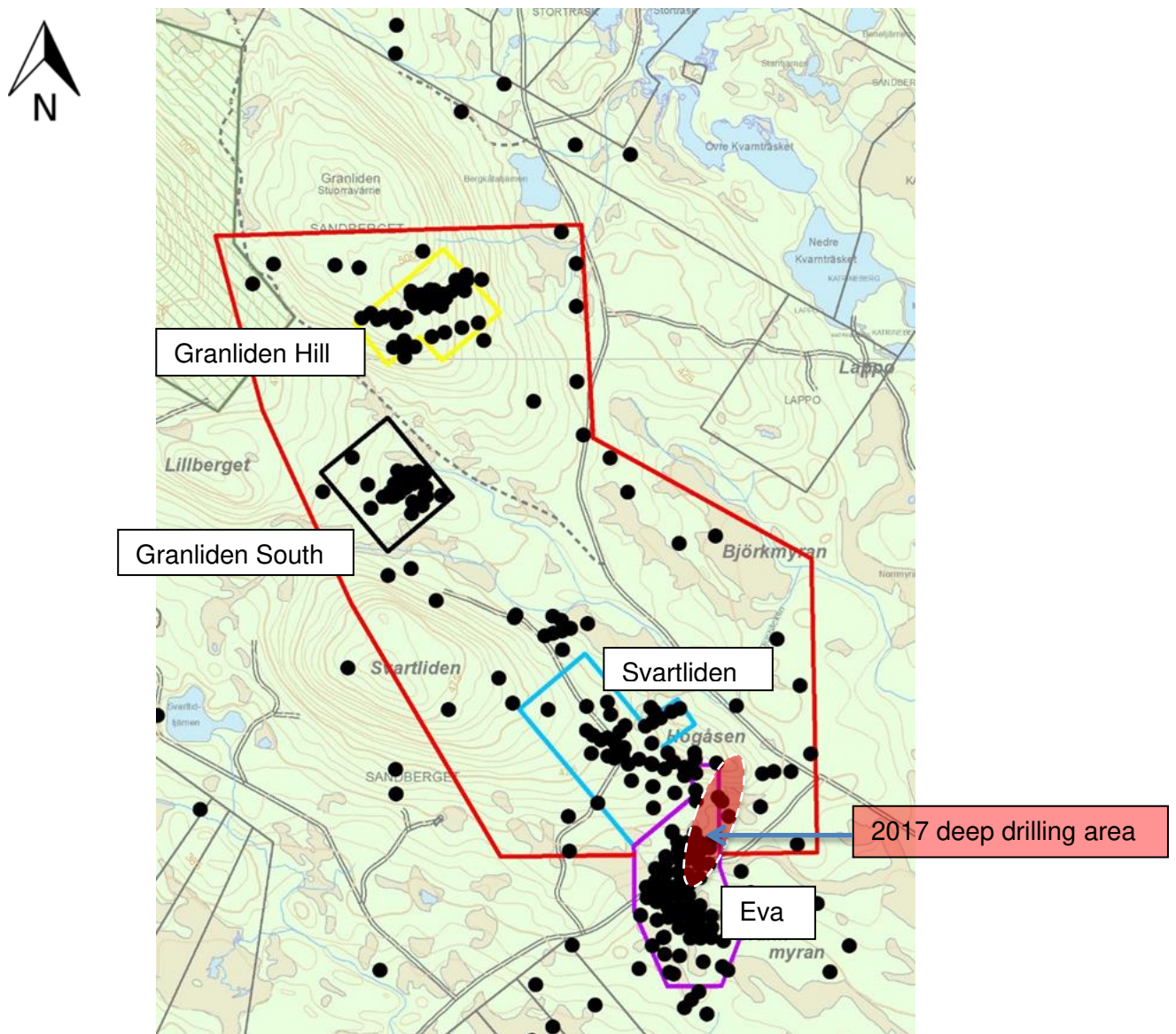


Figure 1: Exploration at Copperstone.

Porphyry Copper Systems

Porphyry copper systems are formed in specific plate tectonic environments where felsic to intermediate intrusive rocks are emplaced at shallow crustal levels and provide heat, metals and residual fluids to generate large complex hydrothermal systems. Such systems are known worldwide as the primary sources of copper mineralisation, and to a lesser extent gold and molybdenum mineralisation. Typically such large metal systems are centred on felsic (granite-like) stocks/dykes displaying a classic porphyritic crystal texture and mantled by predictable halos of metasomatic alteration of host rocks. In reality many systems have complex local geochemical and structural variations but typically display an inner potassic alteration zone (feldspar / biotite), enveloped by a mantle of phyllic alteration (quartz / sericite / pyrite) and then advanced argillic alteration (quartz / kaolinite). Beyond this inner system, propylitic (chlorite) alteration can be widespread for many kilometres. Economic deposits of copper (Au-Mo) mineralisation are almost always located within or close to the central potassic zone.

Causative felsic to intermediate intrusives can be primarily magnetic, and the hydrothermal fluids associated with the mineralisation system can also cause secondary magnetite to form. This means that ground magnetic surveys are very useful in providing targets for drill testing suspected blind porphyry-style systems. Magnetic survey results can potentially identify both the causative intrusives as well as the magnetic features of the mineralisation itself.

NSAMT is an electromagnetic survey technique that uses naturally-occurring ionospheric currents and lightning storms (i.e. passive energy sources) to measure the apparent resistivity of the earth down to depths of 500 meters or more. This enables mapping of geology below the surface and can identify areas of mineralisation and /or alteration which are characterised by having a higher conductivity than surrounding rocks.

This combination of techniques is therefore useful to identify both the magnetic and apparent resistivity characteristics of the geology. Both techniques provide different processes for detecting the presence of intrusive rocks, mineralisation and alteration. The position of the interpreted mineralisation or alteration relative to that of interpreted intrusives means targets can be ranked and understood within the context of a hydrothermal porphyry system.

In general the examination of the large drill data set at the Copperstone property suggests that there is an undiscovered porphyry-style mineralisation system present. Figure 2 below shows the generic alteration patterns that can be associated with porphyry copper mineralisation systems, and Figure 3 shows a typical convergent plate tectonic model where such systems are located on the planet, both in recent and more ancient tectonic zones.

Hydrothermal alteration zones

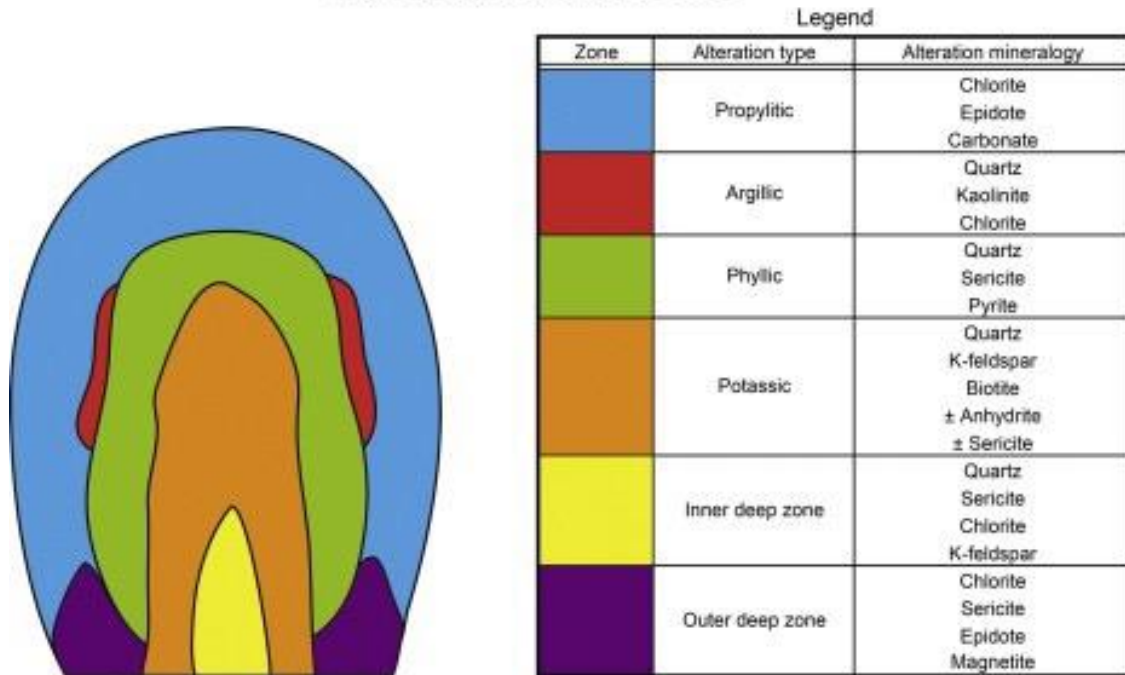


Figure 2: Classic alteration system developed around a generic porphyry copper model.

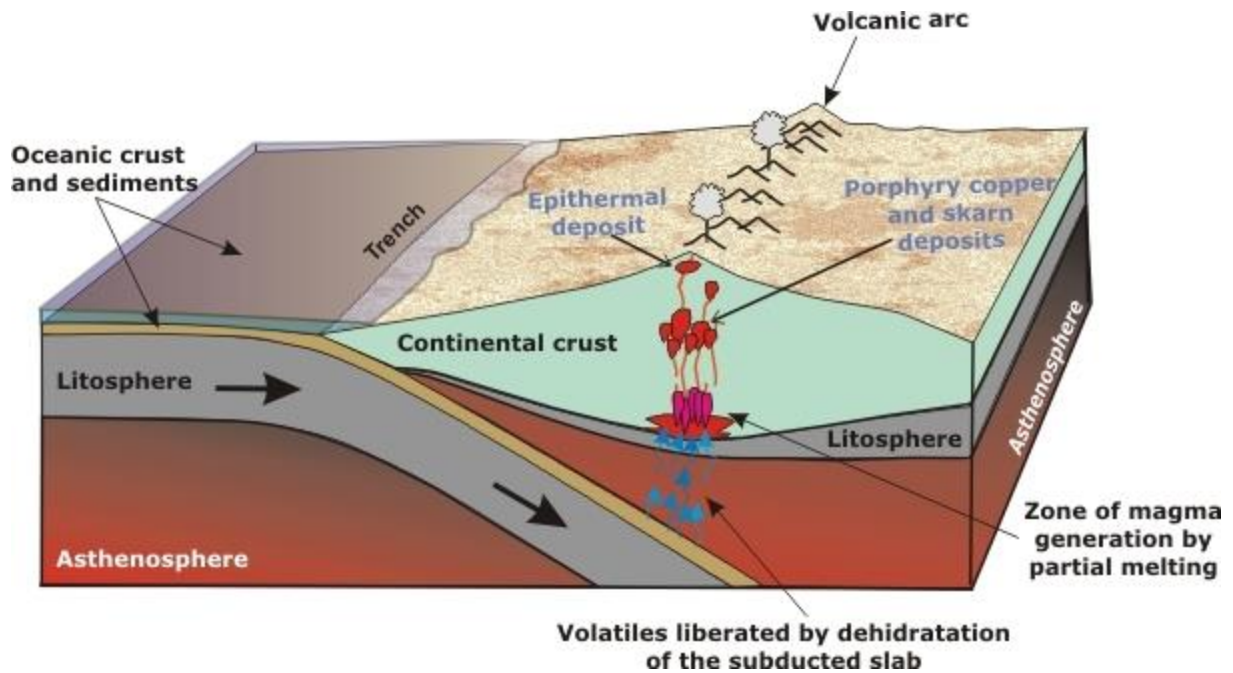


Figure 3: Typical plate tectonic model for setting of porphyry copper systems.

Property Geology

In order to interpret the results of the 2017 geophysical survey, it is important to firstly understand the bedrock geology of the property. In general the property is underlain by south-eastward dipping layered mafic volcanics and felsic pyroclastic units. The geological team at Copperstone has used the following informal nomenclature to describe these broad stratigraphic units.

The general stratigraphic column interpreted from logging of the drill cores indicated three main volcanogenic units as follows.

- *Granliden Hill Tuff unit* – an underlying sequence of subaerial pyroclastic beds, composed mainly of unwelded siliceous tuff, with associated secondary air-fall and flow units. Overall stratigraphy is inclined less than 30 degrees dip. Bed thickness can range typically from 5-30m. Classic features include pumice fragments, and numerous flow-deformed ash lapilli. Represents highly explosive wet eruptive history and distance to eruptive source is unknown.
- *Lappo Lava unit* – an overlying sequence of relatively un-deformed subaerial andesitic lava flows, often strongly amygdaloidal and containing subordinate partings of bedded siliciclastic sediments (arenite) derived from reworking of the lower felsic pyroclastic sequence. Generally conformable with Granliden Hill unit and interlayered at the general contact (co-genetic representing bimodal volcanism). This lava package may thin out down dip suggesting provenance to the NW and pinch out SE.
- *Eva unit* – to the south of the project area, there is a felsic pyroclastic unit that contains the Zn-Au rich pyrite lodes veins and is capped by a well-developed black shale-siltstone unit of lacustrine origins. Upwards this unit is covered by a thick felsic pyroclastic unit with obvious crystal tuffs.

The general volcanic stratigraphy of the property is also intruded by a number of mafic to intermediate dykes. It is suspected that there are also discreet diorite stocks (pre-mineral). At Svartliden there is also a large complex hydrothermal breccia (diatreme?) body that cross cuts the geology.

Interpretation of property structure from geophysics patterns and core orientation / optical televiewer (OPTV) data suggests a NE-SW structural fabric coeval with mineralisation. Structural style is brittle and probably polyphase. Grade of regional metamorphism is very low, and in general the geology appears quite intact, reasonably flat, and perhaps more youthful than the reported palaeo-Proterozoic age for this region.

Hydrothermal alteration and metasomatism is widespread and has resulted in the formation of a number of complex alteration rock types, from the yellow-tan coloured quartz-pyrite rich crackle breccia and related massive quartz-eyed rock (phyllic alteration), dark grey phreatomagmatic polymictic breccia, whitened argillically altered felsic tuff beds, to the extensive green propylitically altered lavas. In general alteration boundaries are diffuse and appear to cut across protoliths.

Geophysical Survey Results

General

In order to locate the central position of the postulated porphyry system ground magnetic and Natural-source Audio-frequency Magnetotellurics (NSAMT) geophysical surveys were conducted over the areas shown below in Figure 4. The area of the NSAMT survey was guided by magnetic anomalies which showed the Granliden Hill area to be most prospective.

Note that Sandberget 200 is known as Granliden South and Sandberget 300 is known as Granliden Hill.

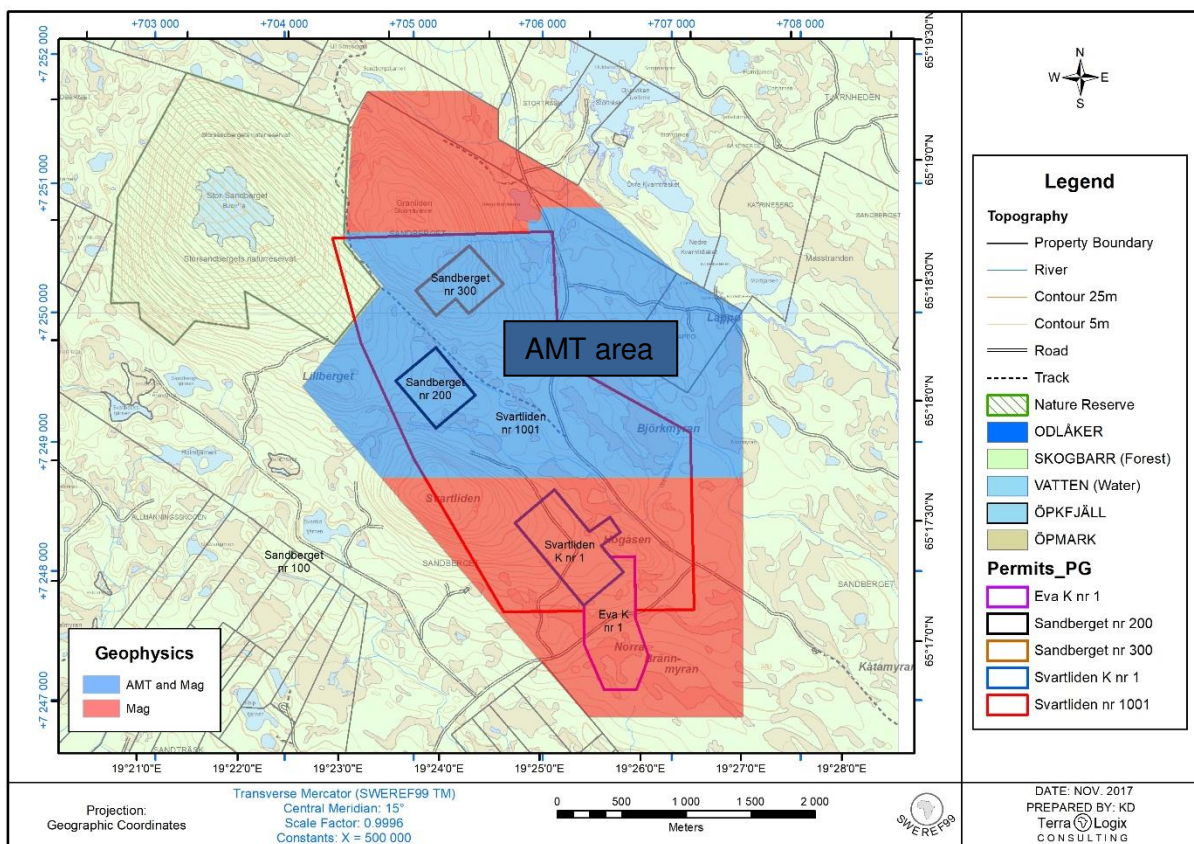


Figure 4: Area of ground magnetic survey shown in red and area of AMT / Mag survey shown in blue.

The ground magnetic survey was implemented by Geovista AB and the NSAMT survey by terratec Services GmbH & Co. KG. Quality control, data inversion and modelling were conducted by the independent geophysicists Neville Brown and Gavin Selfe. The NSAMT programme consisted of 589 readings taken on a 100m x 100m grid, covering approximately 2km north-south and 2.5-3.5km east west. Fieldwork was stopped in late October 2017 due to extreme weather conditions impacting negatively on the walk-about survey, and integrity of the survey equipment.

Ground Magnetic Survey Results

The following section highlights the main features identified by the ground magnetic survey (see Figure 5 below):

- Target A underlying Granliden Hill is thought to represent a possible magnetite-rich mineralisation centre within, or adjacent to a larger felsic / intermediate intrusive. This feature is blind and only occurs approximately 250-300m below surface, and has never been drill tested.
- To the east of Target A is a north-south trending magnetic high which coincides with a NSAMT anomaly (in the north) and is interpreted to represent an Advanced Argillic alteration zone. This magnetic zone is formed due to the presence of pyrrhotite.
- Svartliden and Eva to the south also both overlie smaller shallow magnetic anomalies modelled as intrusive / hydrothermal breccia complexes.

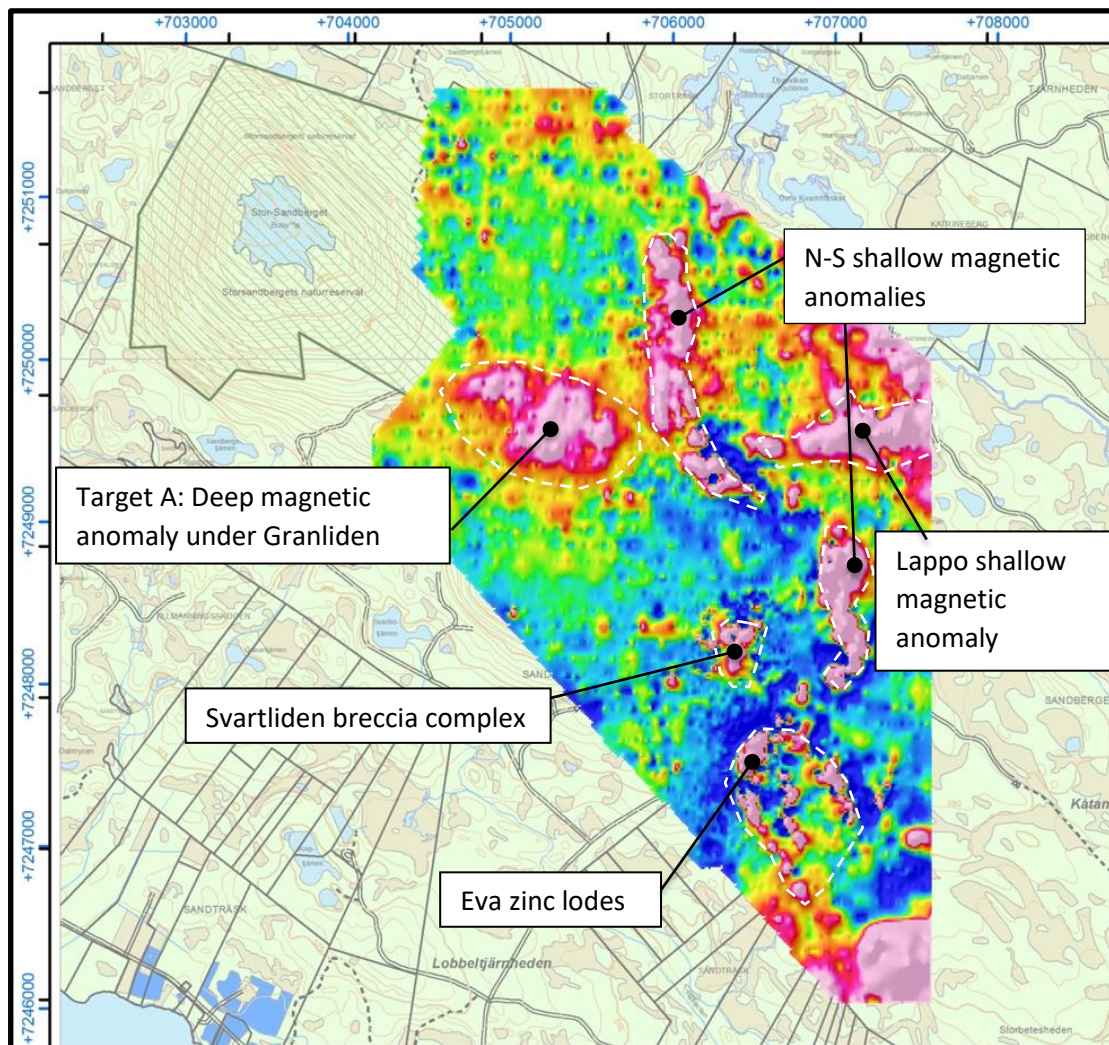


Figure 5: Map showing total magnetic field anomaly results.

The analytical signature (see Figure 6 below) of the N-S magnetic feature shows it to be semi-continuous but also broken up by a number of NE-SW faults. Target A is no longer visible in the image below as the analytical signal only measures near surface features.

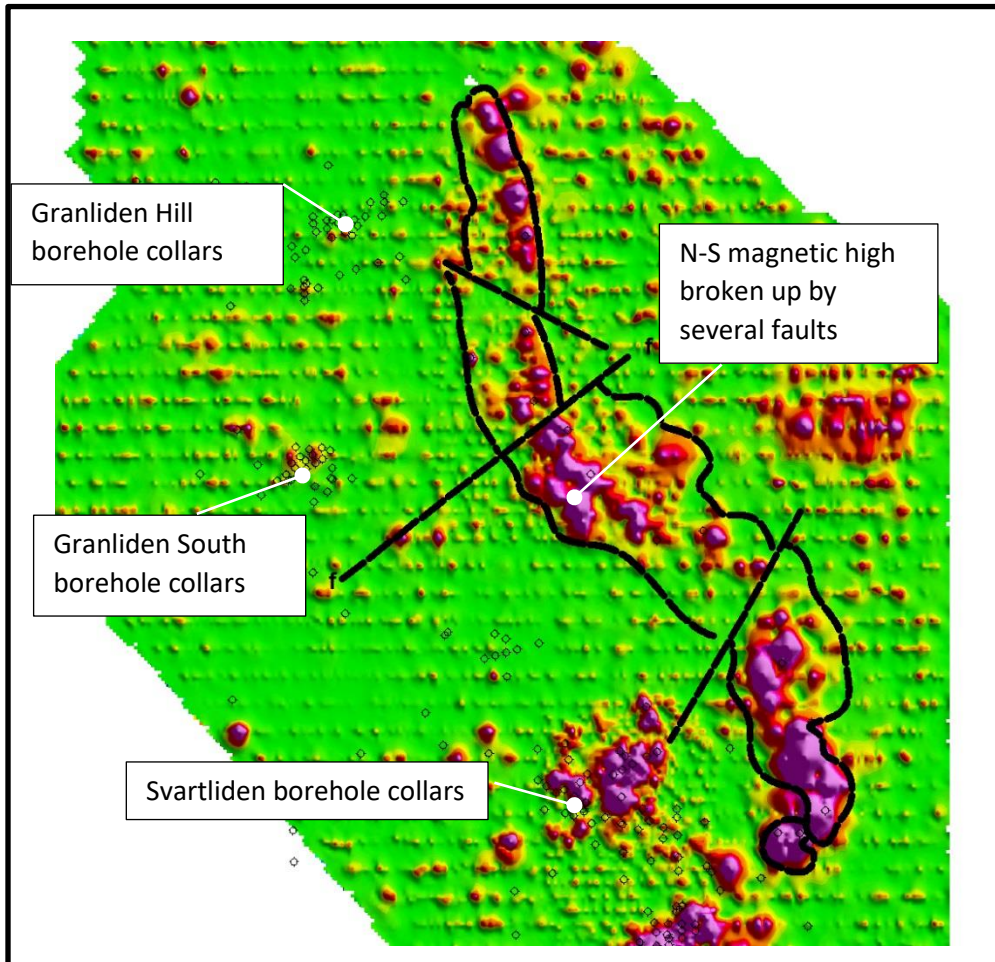


Figure 6: Analytical Signal showing the N-S magnetic feature in more detail.

NSAMT Survey Results

3D modelling of the NSAMT data has shown that Target A (shown in green in Figure 7 below) coincides with a larger resistive feature at depth. Both the magnetic and NSAMT anomalies are interpreted to represent an intrusive. This is depicted in a slightly different manner in Figure 8 which shows the intrusive body modelled from the NSAMT resistive feature (shown in green) superimposed on the intrusive feature modelled from the ground magnetic survey (shown in pink). It is noteworthy that there is a very close correlation in the outcome of the modelling of the two different geophysical properties.

The second feature identified from the NSAMT survey is a low resistivity anomaly interpreted to represent the Advanced Argillic alteration (AAA). This feature is shown below in Figure 7 (the yellow

feature) and also in Figure 8 as a red feature where it straddles the side of the interpreted intrusive (sees also NSAMT cross-sections shown in Figures 10 and 11 below).

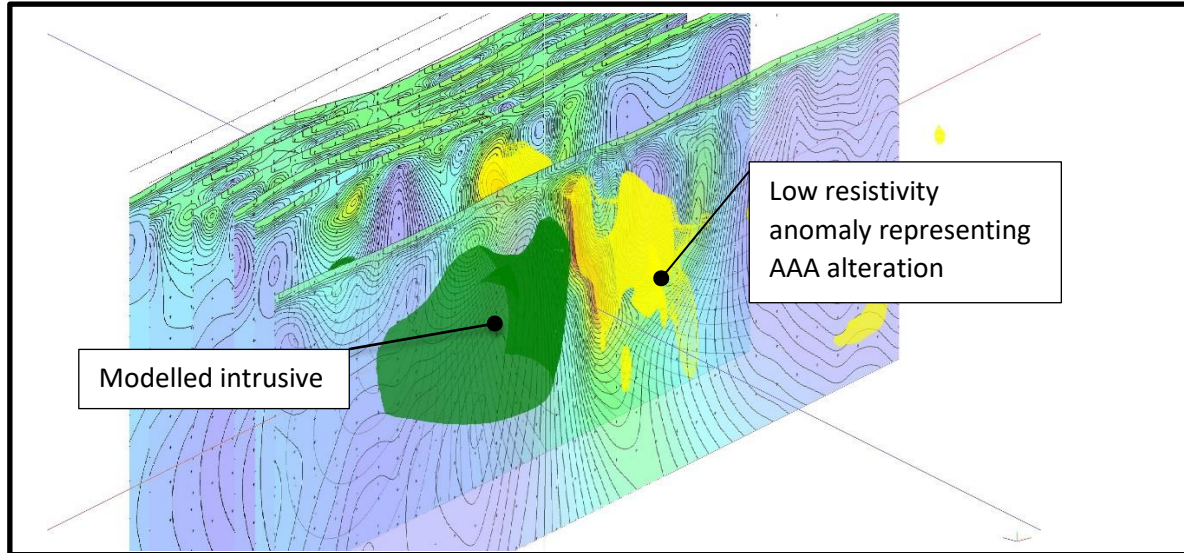


Figure 7: 3D image showing the NSAMT traverse lines superimposed with the modelled intrusion (in green) straddled by a conductive feature (in yellow) which is interpreted to represent Advanced Argillic alteration (AAA).

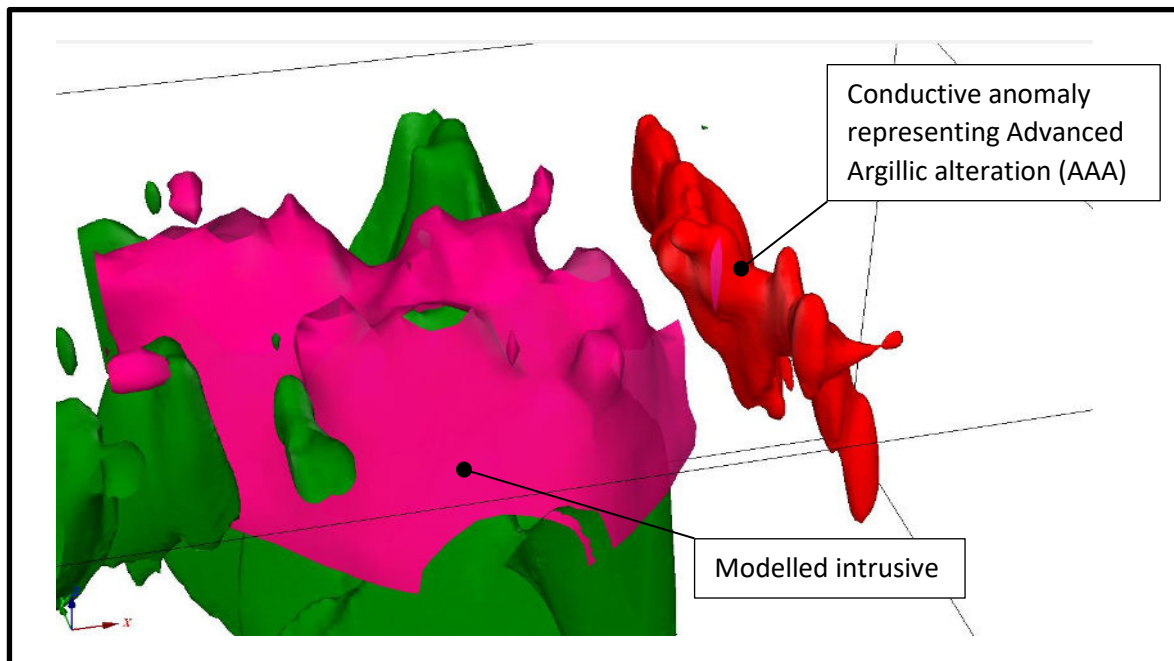


Figure 8: An interpreted intrusive feature modelled by NSAMT (in green) and by ground magnetics (in pink) is situated adjacent to the NSAMT AAA conductor (in red).

Interpretation of Geophysics Results

Key observations from the integrated geophysical surveys are as follows and shown on Figure 9 below:

- Where the NSAMT and the ground magnetic survey have both been carried out, magnetic and conductive anomalies are not necessarily coincident. The deep area Target A is magnetic but not strongly conductive.
- Where drill tested by historical drill holes, copper-gold mineralisation hosted with pyrrhotite sulphide (leakage veining) coincides mainly with shallow magnetic highs. This is considered to be distal mineralisation.
- Svartliden and Eva both coincide with smaller discontinuous shallow magnetic highs. Cause of magnetism is likely to be pyrrhotite at Svartliden and Eva.
- Granliden Hill chalcopyrite-bornite mineralisation coincides with a unique stronger but deeper magnetic high (Target A). This is considered to be proximal leakage mineralisation.
- The N-S magnetic high east of Granliden Hill does appear to correlate with extensive pyrrhotite where drilled at the interface of the propylitic-advanced argillic zones. This mineralisation is considered to be where sulphides have leaked out from the mineralised central stockwork into the surrounding altered host rocks.
- The shape and scale of the eastern NSAMT conductor, coincident with advanced argillic alteration is flanked to the east by propylitic alteration and to the west by phyllic alteration, providing a clear west vector towards the centre of the system.
- The large vertical extent of the NSAMT anomaly (AAA) implies that it straddles a vertical, steeply dipping intrusive buried at depth to the west.

The mineralisation in a number of historical drill holes (which partially penetrate the NSAMT N-S anomaly) is considered to represent the random ENE trending leakage of mineralised sulphides outward into the zone of advanced argillic alteration and is peripheral to the targeted mineralised stock. Both OPTV and core orientation studies carried out by the Company have previously identified that veins swarms trend roughly ENE-NE across the property, and thus represent a general structural grain developed during the emplacement of the system.

Assay results from individual drill holes that intercepted widespread copper mineralisation across various alterations zones are not representative of the general resource potential of the porphyry system. Further core drilling is still required to locate and evaluate the central system before any conclusions can be drawn. In more distal veins (pyrrhotite-host), chalcopyrite is spotty and very discontinuous even within vein.

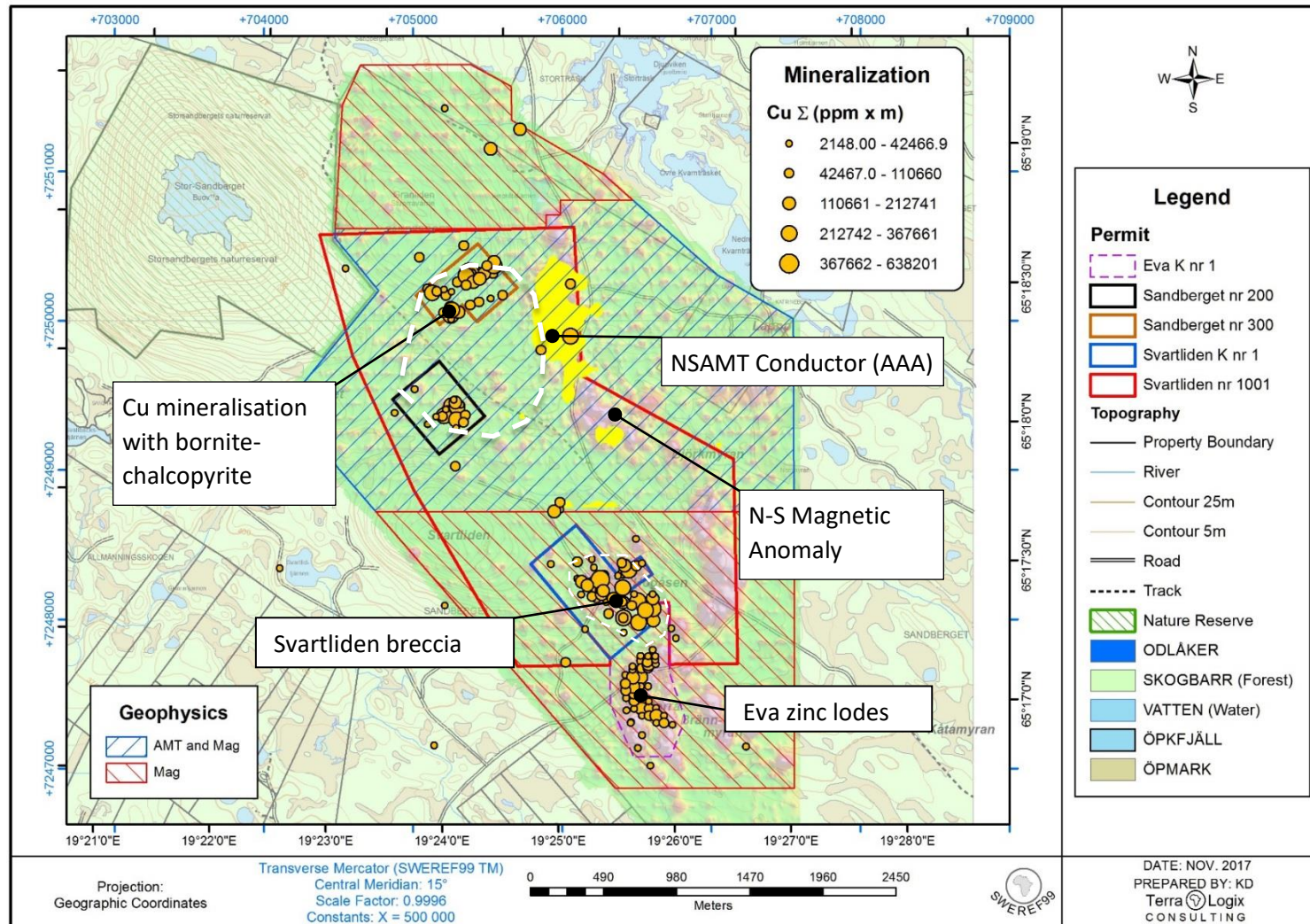


Figure 9: Plan view showing coincidence of the magnetic features with the NSAMT anomaly (in yellow).

NSAMT Cross-Section through COS06321 looking south

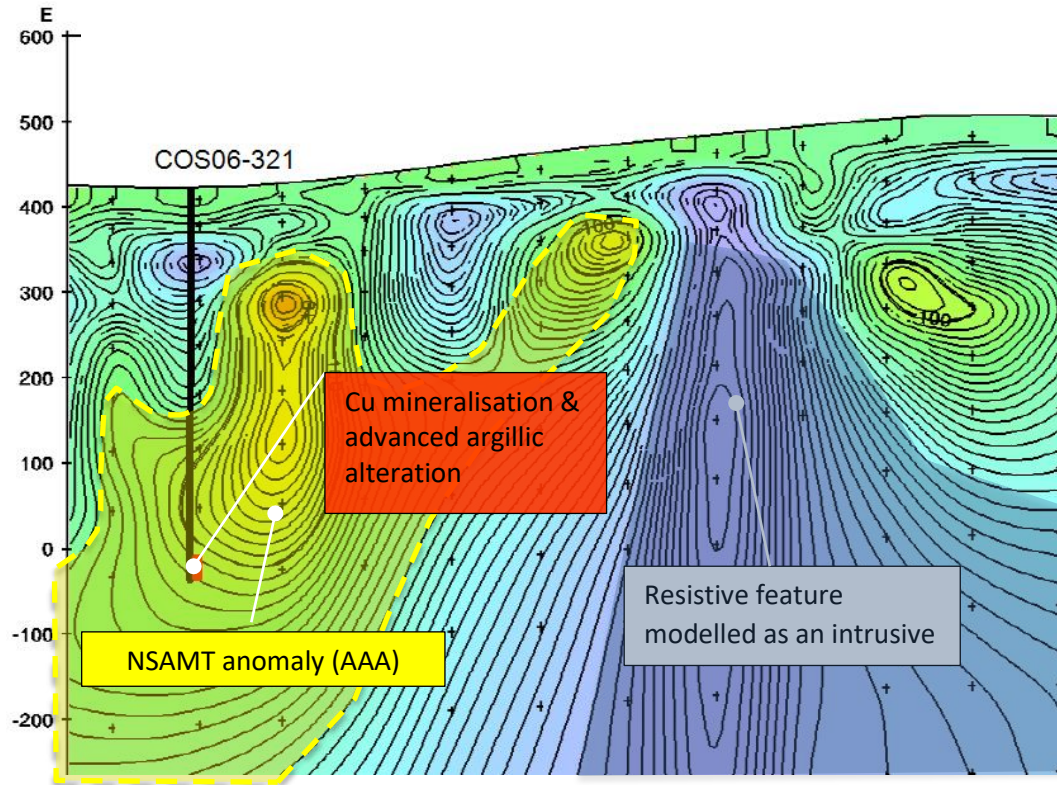


Figure 10: NSAMT cross-section through the anomaly where COS06321 intercepts it showing the correlation between the anomaly and the drilled mineralisation (shown in red).

NSAMT Cross-Section through COS06331 looking south

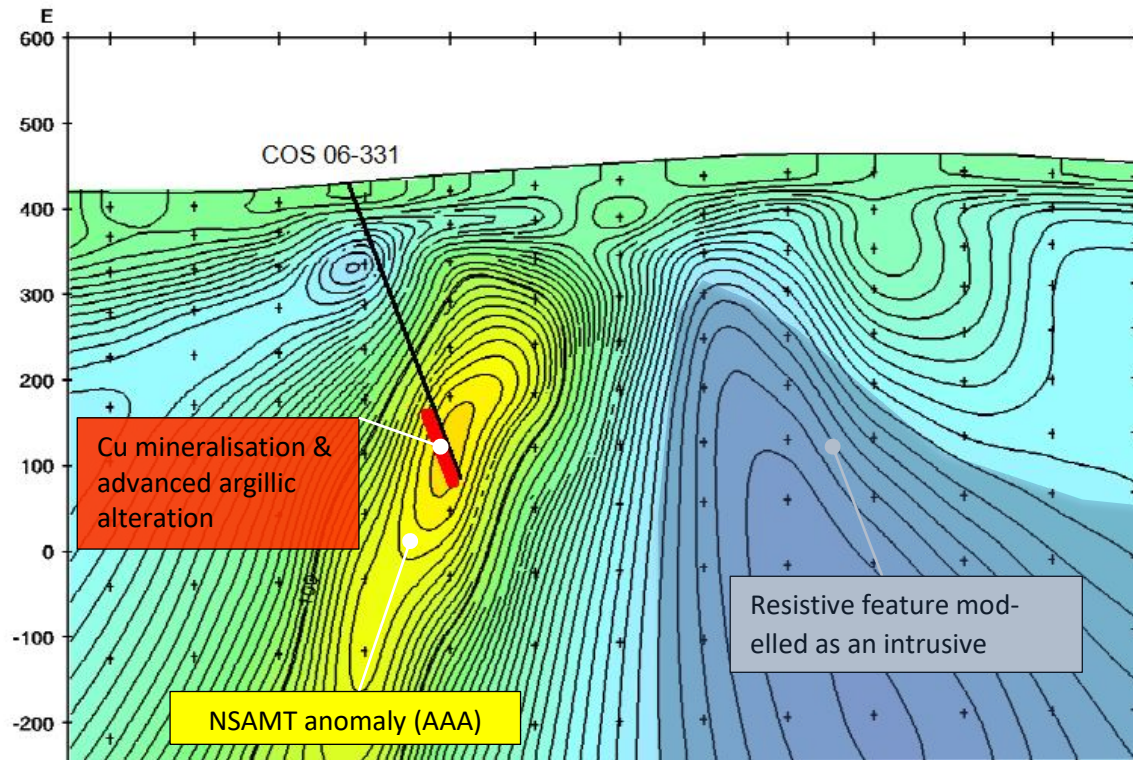


Figure 11: NSAMT cross-section through the anomaly where COS06331 intercepts it showing the correlation between the anomaly and the drilled mineralisation (shown in red). This intercept is strongly altered with pervasive white kaolinite clay (conductor).

An annotated version of this interpretation is shown on Figure 12 below. This plan shows the combined N-S magnetic-conductive body. This feature is interpreted to represent steeply dipping argillic alteration peripheral to buried intrusions lying to the west. The blue polygons are interpreted to be areas of potential buried intrusives (resistive features in Figures 10 and 11). The intrusions are all associated with copper and zinc mineralisation. The mineralised drill holes are thought to represent leakage points where sulphide veins have moved upwards and away towards to the palaeo-surface.

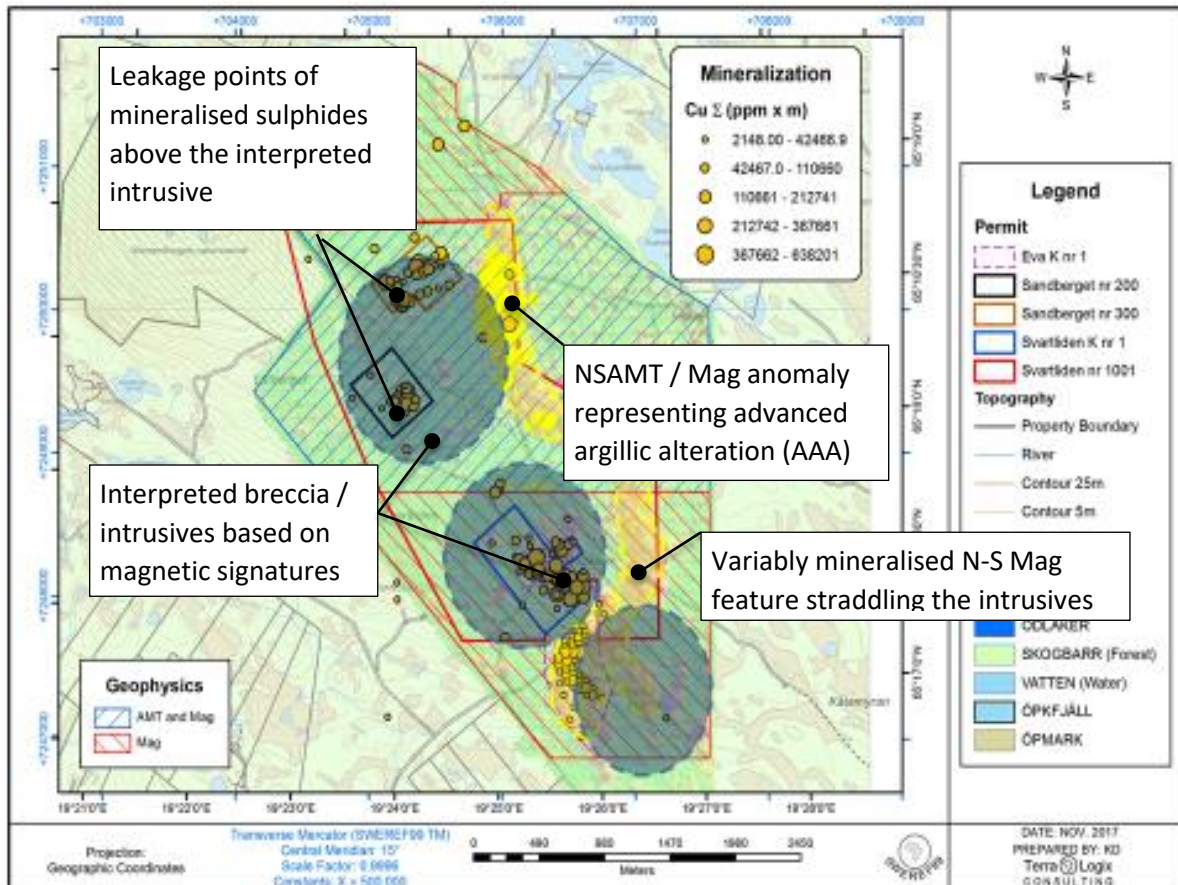


Figure 12: Interpretation of locality of intrusives and argillic alteration and together with circles showing the copper mineralisation as drilled in historic boreholes.

Metal zonation is a characteristic of porphyry copper systems, which will typically have a more copper-rich centre and zinc-silver-rich distal mineralisation (lode veins). Au is often formed in an outer epithermal environment on the periphery of the Zn system, as low and high sulphidation systems.

Such metal zonation patterns are evident on the scale of the property, with Eva in the south being the richest in Zn and Au and Granliden Hill in the north containing mostly Cu with very little Au or Zn, as seen in Figures 13, 14 and 15 below.

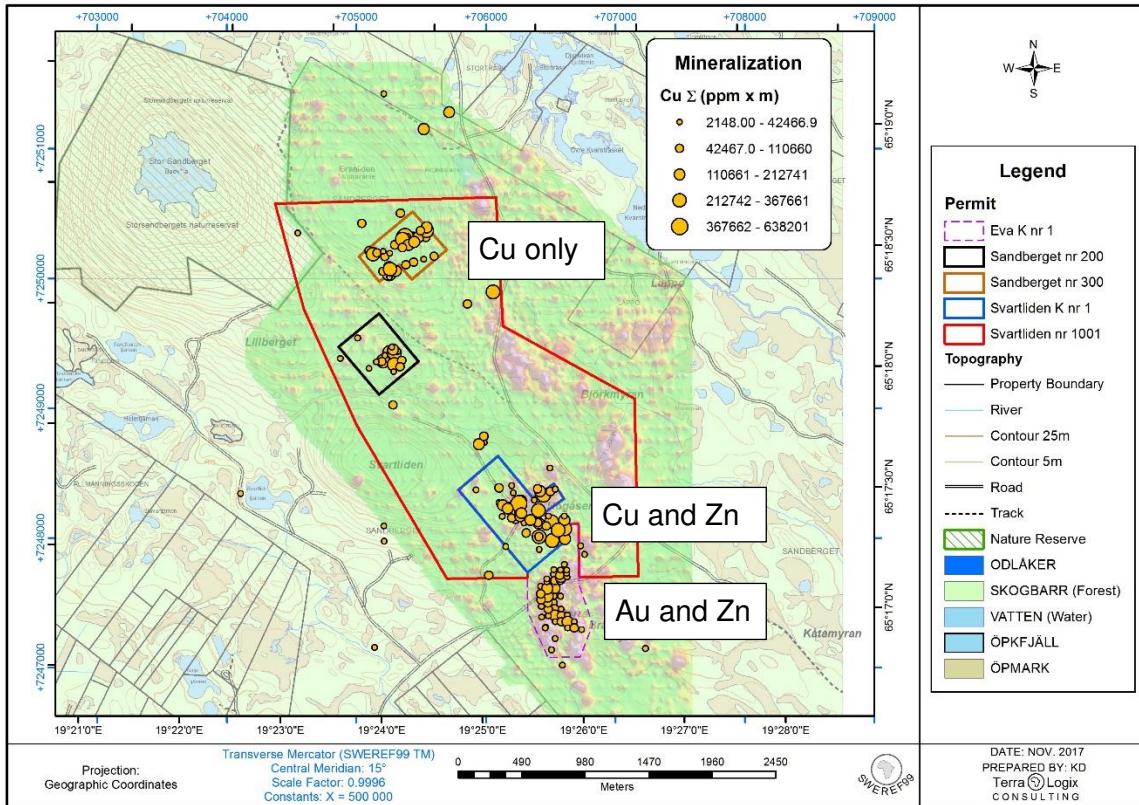


Figure 13: Cu overlying total magnetic field.

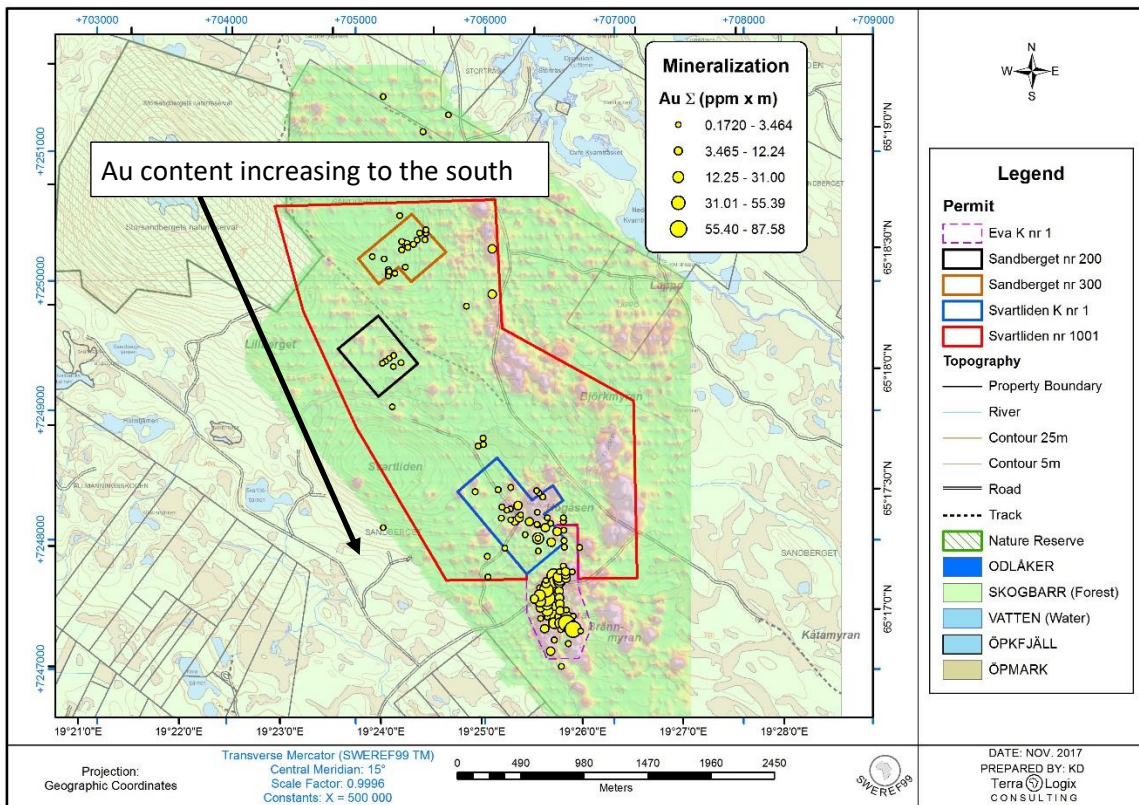


Fig 14: Au overlying total magnetic field showing an increase in content to the south.

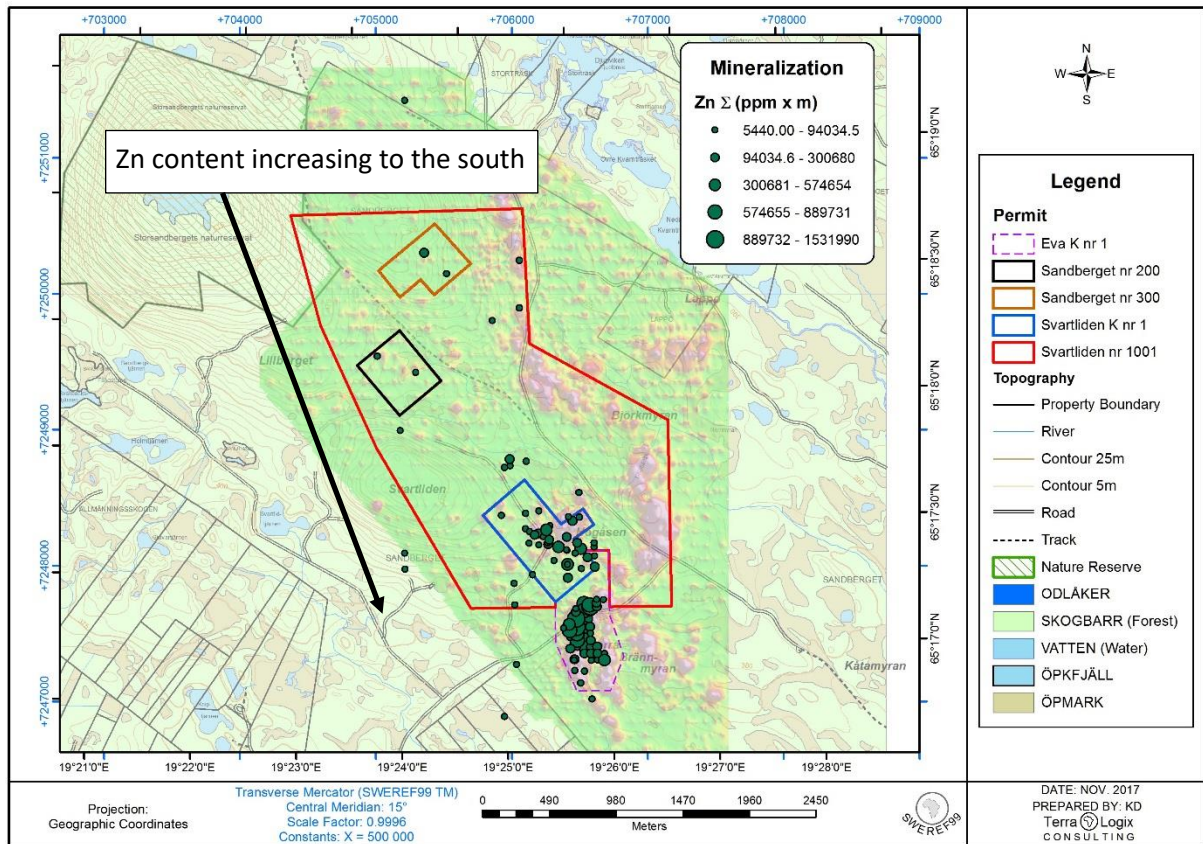


Fig 15: Zn overlying total magnetic field showing an increase in content to the south.

Genetic Model Summary

The 2017 geophysical programme was initiated to gain a greater understanding of the proposed porphyry copper genetic model at the property. The study has yielded significant results to aid the understanding of the underlying geology, metasomatic alteration patterns, and to identify areas of potential large scale copper mineralisation that might be expected with such systems. Modelling of the NSAMT and ground magnetic data at Target A shows a strong correlation between these two data sets and this feature is predicted to be the likely causative intrusion centre. Straddling this intrusive is a zone of conductivity that is interpreted to represent advanced argillic alteration that lies outside of the more resistive phyllic mantle. This pattern is supported by the fact that drill holes that intercept this anomaly display pervasive kaolinite alteration and are also sporadically mineralised illustrating that this is part of a larger alteration process.

In addition the drill holes collared east of the NSAMT/ Mag anomaly and drilled to the west (such as COS06331 and COS06321) display propylitic alteration at the top of the drill hole which progresses with depth into advanced argillic alteration (AAA). In a few holes there is also evidence of deeper progression into phyllic alteration. This pattern is repeated in a number of drill holes, with or without significant chalcopyrite-pyrrhotite veining. These are strong vectors that point to the west to

locate the inner part of the system. None of the drill holes around Target A have gone deep enough to enter into the inner potassic alteration zone.

The following image on Figure 16 below shows the current genetic model for the potential occurrence of a large scale porphyry-style copper mineralisation system to be present at the property. Although this is a simplification, the image represents a good summary of the various alteration styles identified to date, which are now significantly enhanced by the results of this geophysical survey campaign.

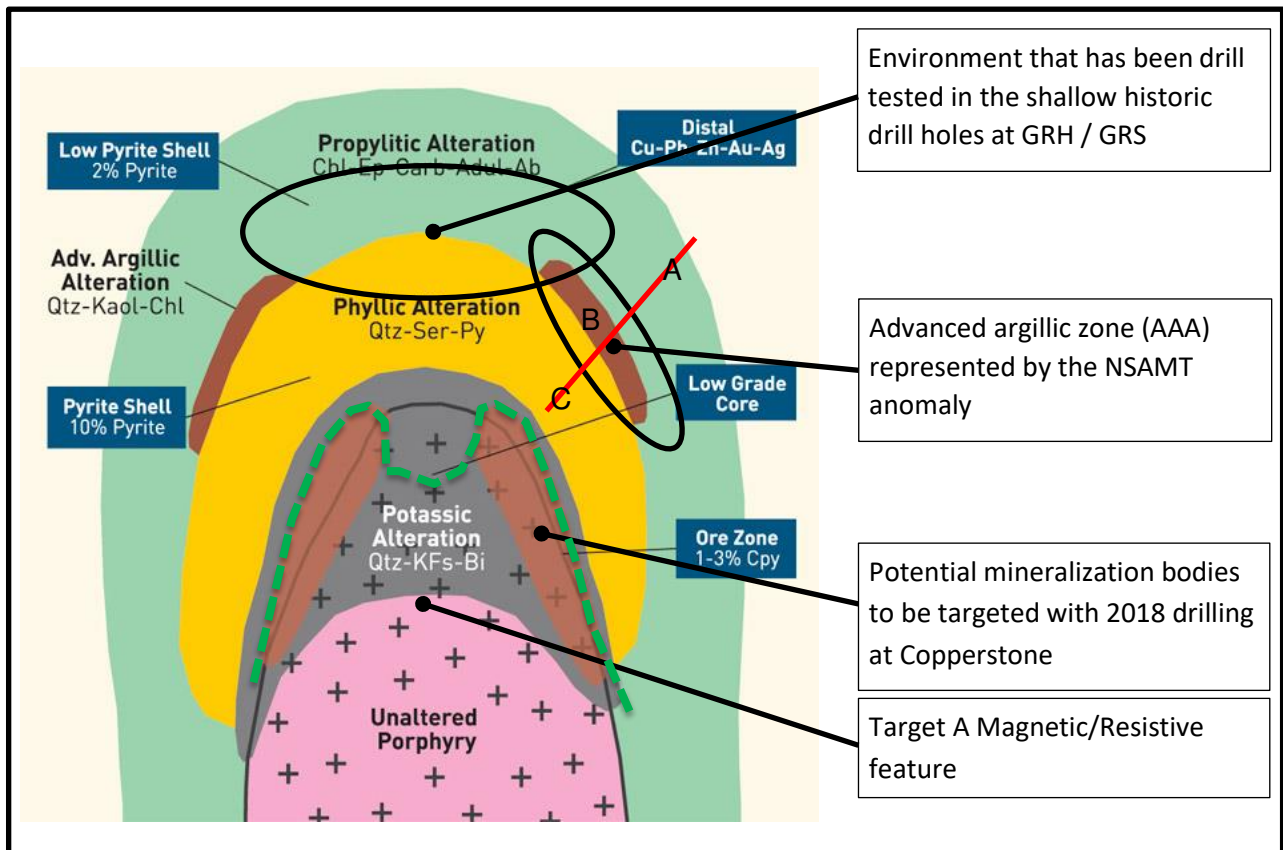


Figure 16: (After Earth Science Australia website) Cartoon illustrating the zonation in alteration styles and their locality relative to that of the ore zones in other deposits. The red line shows the part of the system that has been drill tested at Copperstone with historic shallow drill holes. The letters A, B and C correspond to the photos in Figure 17.

This image above does not show the potential hydrothermal breccia body at Svartliden, which are common features associated with porphyry intrusive centres. It is also possible that a smaller intrusion is also centred somewhere at depth under the Svartliden breccia.

Deep exploration drilling is still required to locate the potential ore zones as shown above on Figure 17. Grade and size of such bodies cannot be speculated on at this stage until they are located with a number of drill holes.

Figure 17 below shows a few photographs of the various alteration styles as intercepted in drillhole COS07334 collared east of the AAA zone and drilled westward. The letters A, B and C correspond to the same letters in Figure 16 above showing the styles of alteration that have been drill tested and how these correspond to the porphyry style genetic model.



Figure 17: Types of alteration drilled in COS07334.

Granliden Hill, Granliden South, Svartliden and Eva are all known to be mineralised from shallow historical drillholes but Copperstone is exploring for the greater mineral potential of a larger underlying porphyry copper system. The mineralisation that has been intercepted to date is considered to have resulted from leakage of fluids from underlying mineralised stockworks, and thus far, past exploration has neither identified nor drilled the potential heart of the system.

The leakage veins have been intercepted in the outer propylitic, advanced argillic and phyllic alteration halos. Zinc-gold mineralisation as found at Eva is interpreted to be distal and related to interaction with meteoric hydrothermal systems formed late stage by this system (see Figure 18 below).

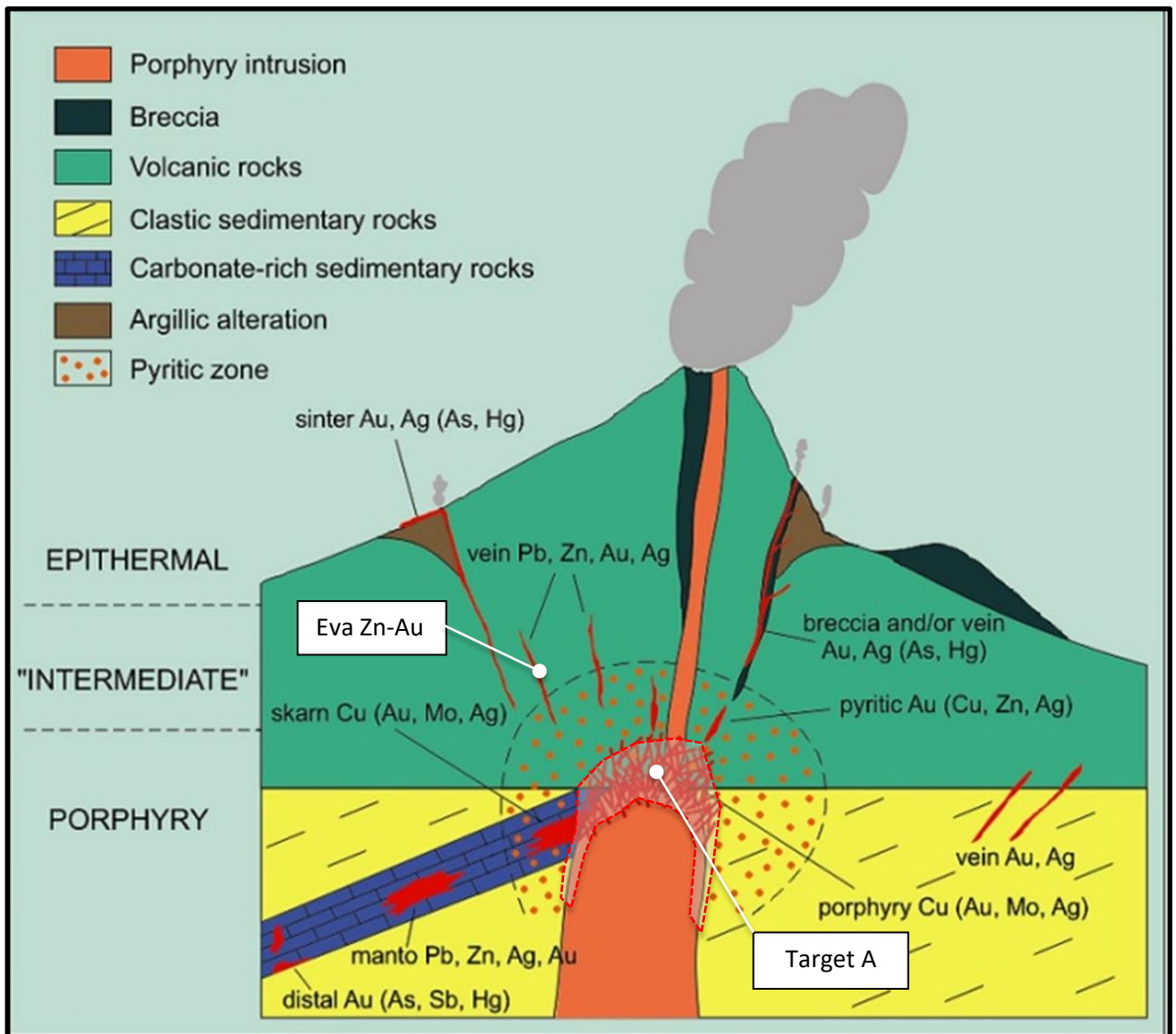


Figure 18: Distal Eva style veins genetically related to a larger scale porphyry copper system.

Granliden Hill and Granliden South shows evidence that the strong copper veining encountered by historic drill holes and by subsequent shallow drill holes by the Company in 2015 is located not far above the roof of the inner potassic system (leading evidence from phyllic alteration, metal zonation, presence of magnetite and bornite, very thin mineralised porphyry dykes, and lack of pyrrhotite). This area also coincides with the largest and deepest magnetic signature which is interpreted to be the intrusive that provided the heat source for the porphyry system to develop.

The intrusive modelled from this area is bound on its eastern side by a low resistivity NSAMT conductor which coincides with an outer zone of Advanced Argillic alteration. Drill holes such as COS07334 show that the advanced argillic alteration (AAA) is underlain by phyllic alteration. It is therefore logical that the inner porphyry style mineralised potassic alteration system, and a mineralised stockwork could lie at vertical depths of about 250-300m to the west of this area. The smaller magnetic anomalies to the south and beyond the current footprint of the AMT survey, underlying Svartliden and Eva, may also be associated with underlying porphyry style mineralisation and related hydrothermal breccia bodies.

However for now it appears that the Granliden area is the heart of the system based on metal zonation patterns, the size of the modelled intrusion and the metasomatic alteration patterns. The southern extent (towards Eva) and the northern extent north of Granliden Hill all appear to be part of the same broader mineralising system. Figure 19 below shows a 3D view of Target A with the trace of a proposed drill hole that could evaluate this feature.

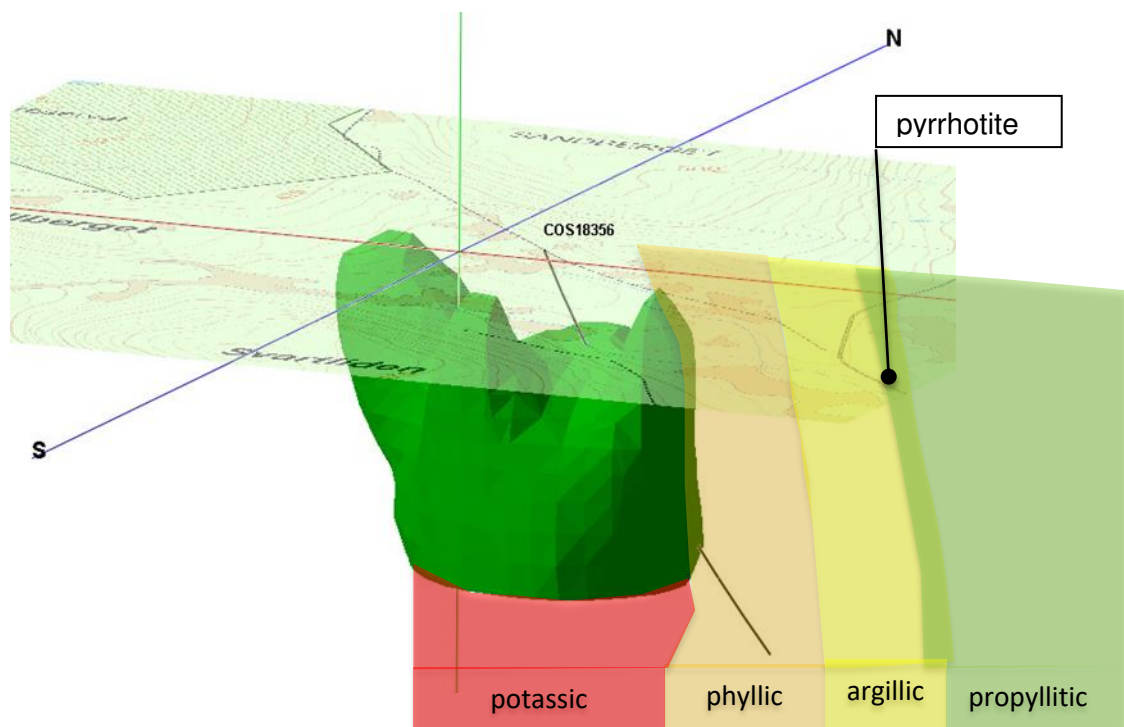


Figure 19: 3D image of Target A viewed oblique from southeast and showing proposed drillhole trace.

Conclusion and Recommendations

The ground magnetic and NSAMT geophysical surveys carried out since late September 2017 have led to a significant improvement in the interpretation of a large scale porphyry copper system present on this property. Integral features such as buried causative intrusive centres and advanced argillic alteration zones are now identified, and these compliment the metal zonation, geology and extensive alteration rock types already known

To date copper mineralisation intercepted in historic drill holes is considered to be peripheral to the main mineralised stockwork. There is strong potential that much larger volumes of mineralisation may well be present in the central untested blind part of the system.

Thus a deep core drilling campaign is highly recommended to drill test the primary Target A (between Granliden Hill and Granliden South) in order to explore for the potential mineralised stockwork at depth (see Figure 20 below).

It is also recommended that angled drill holes should be designed to penetrate the margins of the deep magnetic feature which is where copper mineralisation should be located in this model (brown ore zone in Figure 16).

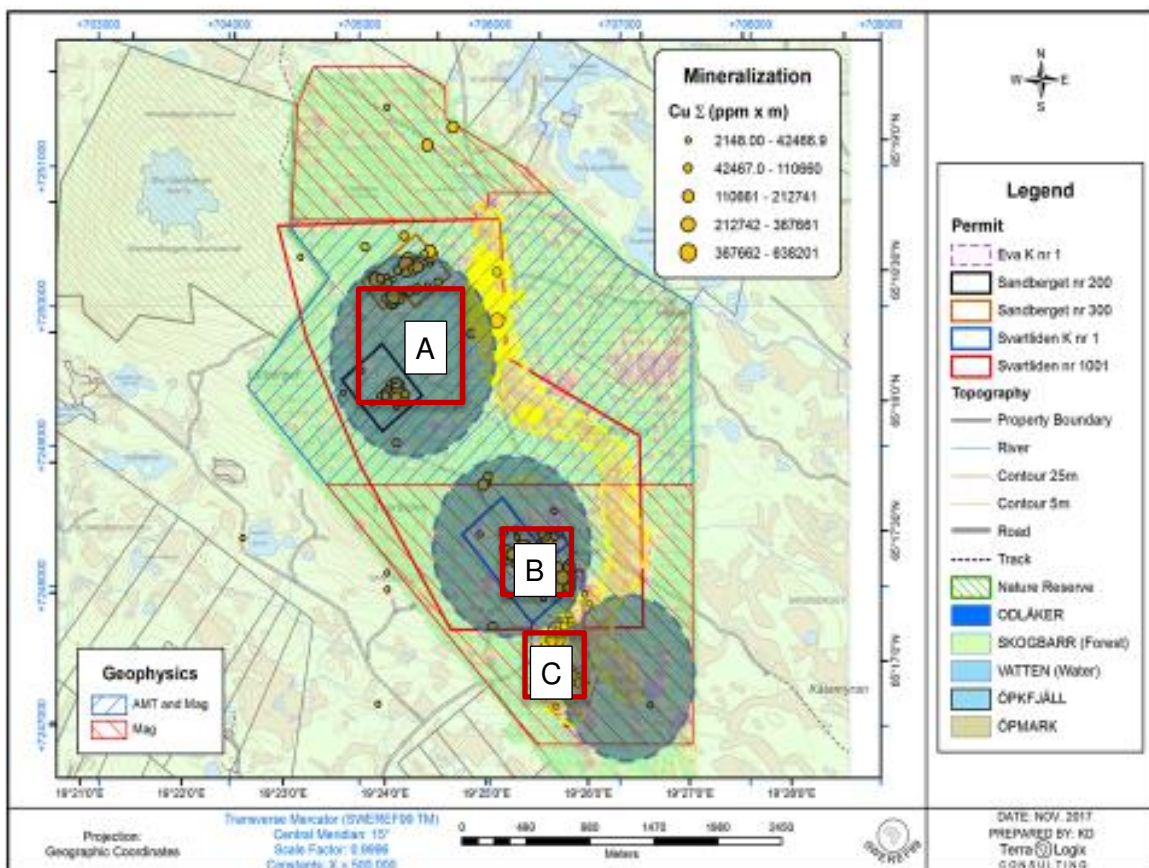


Figure 20: Recommended Drill targets

It is also recommended that the NSAMT survey be extended to the south to cover the Svartliden / Eva areas (areas B and C) in order to create exploration drill targets in those areas.

Further examination of all drill cores available on this property is also highly recommended and will no doubt help with further mapping of alterations zonation patterns, and identification of other intrusive / breccia centres such as at Svartliden and Eva.

The genetic model for a porphyry copper-gold-zinc mineralisation system present at the property has been significantly improved, and now deep core drilling is required to test out this model.

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