Executive Summary

Subsequent to the completion of logging and assay of drill core from the recent 2610m Svartliden-Eva deep drilling programme, technical work has since focused on creating a greater understanding of mineralisation intercept trends, an improved hydrothermal genesis model, identification of host rock geology and means of improved geophysical detection. Throughout the summer period, intensive work has included measurement and analysis of sulphide vein orientations, analysis of the geophysical signature coincident with mineralisation, and a study of host rock geochemistry and mineralogy. Comparisons have also been made to other ore bodies within the Skellefte-field region.

The results from all these lines of study have shown a strong consistency, highlighting the suitability for these techniques to become predictive tools for further exploration. Measurement of approximately 1800 sulphide-quartz veins derived from down-hole optical televiewer photography (OPTV) in the 2017 drill holes has further strengthened the dominant ENE-WSW trend and 80˚SSE dip patterns noted in similar studies from 2016 drillholes. The dip and strike of the mineralised veining system is extremely useful for design of future drillhole patterns, interpreting geophysical signatures, correlating grade in resource models, and building onto the working genetic mineralization model.

Downhole induced polarisation (IP) measurements have shown strong correlation between samples with elevated copper (and to a lesser extent gold and zinc) and elevated chargeability (measured with IP). The distinct high chargeability signature across mineralised zones with corresponding lower response across un-mineralised semi-massive pyrite-rich zones provides a confident means of identifying copper-gold mineralisation. This relationship will ensure that for future drilling campaigns all zones of mineralisation in core samples can be detected using downhole IP. This will give confidence that all drilled mineralized intercepts are found and assayed. Of potentially greater value is the possibility to identify areas of potential buried / blind mineralisation using deep 3-dimensional IP arrays. In conjunction with deep magneto-telluric studies (AMT), the 3D IP approach will enable better validation of conductive / chargeable targets, and allow better integration with the working genetic model being developed for this property. Such integrated geophysical studies are also now possible using the deep drillhole access points to build a comprehensive picture ahead of new drill campaigns.

Geochemistry results have confirmed that the host rock geology consists largely of silici-clastic sedimentary rock units intruded by a complex suite of silicic to intermediate subvolcanic bodies. Mineralogical studies have also confirmed extensive sericite, pyrite and silica alteration attributed to widespread hydrothermal systems that were active before and during mineralisation events.

The 2017 drill campaign has proved the existence of deep hydrothermal alteration patterns, the presence of high grade vein-style Cu-Zn-Au mineralization well below the historical drillhole dataset, and the persistence of structural controls. The best working model for understanding the genesis of mineralization styles on the property consists of early stage

(pre-mineral) emplacement of bulbous quartz porphyry stocks at high crustal levels intruded into mature fine-grained volcano-sedimentary units. Early stage pyrite-dominated Zn-Au mineralized sulphide bodies formed as thickened veins / lodes around the periphery of these bodies (Eva-style).

Later emplacements of more dioritic composition are spatially related to hydrothermal breccia and Cu-Au vein-style mineralization. These bodies range from zoned quartz to feldspar porphyritic textured rocks to more even grained varieties, and suggest a complex stock environment associated with mineralization.

The outcome of these value-add studies thought the summer of 2017 has created a platform for recommendation of future integrated exploration work programmes to progress the exploration potential of the property. Initial geophysical work will focus on both 3D IP around the deep drillholes and simultaneous with a broader magneto-telluric study. Analysis of these will generate drill targets within the context of the working genetic model. Core drilling of ranked targets will then follow.