



## **COPPERSTONE RESOURCES AB INTERCEPTS ZONE OF CHALCOPYRITE-ARSENOPYRITE-BORNITE MINERALIZATION AT SVARTLIDEN IN FIRST DEEP DRILLHOLE FROM 720m-810m**

In mid-January 2017 Copperstone Resource published a geological report on the exploration potential for blind copper-gold mineralization under the Svartliden property in northern Sweden. Highlights of this study were also presented at the Future Mine and Mineral Conference held in Stockholm in late January 2017. On 1st February 2017, deep core drilling work commenced at Svartliden to test out this hypothesis.

A potential for Cu-Au porphyry-style mineralization was identified on the contiguous exploration licences 100% owned by the Company in Northern Sweden. This hypothesis at Svartliden was based on the identification of various hydrothermal alteration styles, the occurrence of hydrothermal breccia and the extensive footprint of dispersed Cu-Au-Zn bearing sulphide veins. Given the regional geological setting within the largely under-explored Arvidsjaur tectonic terrain, it is believed that such intrusion-related hydrothermal systems remain hidden within this region.

In 2016, the Company also generated the first structural datasets for the property using both core orientation and optical televiewer systems from four holes drilled at Svartliden. Additional optical televiewer results from historic drill holes further confirmed that mineralized sulphide veins have a pervasive east-northeast strike and steep dip to the south-southeast, with some degree of variation. Vein systems appear to be broad and illuminate pre-existing brittle structure patterns. It has been postulated that at depth there is potential for larger masses of copper-gold mineralization that would form a series of columns peripheral to a central late stage felsic stock. Review of historic geophysical datasets showed that Svartliden is indeed underlain by a central strong magnetic anomaly and ringed by a broad conductive halo. These patterns are complimentary to the envisaged blind porphyry style system.

Detailed 3D modelling and vector analysis of these data sets combined to form a basis for design of a deep core drill programme to test this hypothesis. The programme includes three steeply dipping boreholes each to a minimum of 800 m length at Svartliden. Drilling of the first borehole (COS17353) commenced on 03rd February 2017 and is being drilled by Styrod Drilling AB. The chosen collar lies south of Svartliden (see plan view on Figure 1 below) and was aimed northwards (on azimuth 020) and drilled at an angle of -70 degrees from horizontal. Downhole giro survey on the 14<sup>th</sup> March 2017 when the drillhole length was approximately 700m showed a very slight deflection to the east and reduction in dip angle to approximately -62 degrees (see basic section on Figure 2 below).



Figure 1:  
Location and  
trace of  
COS17353

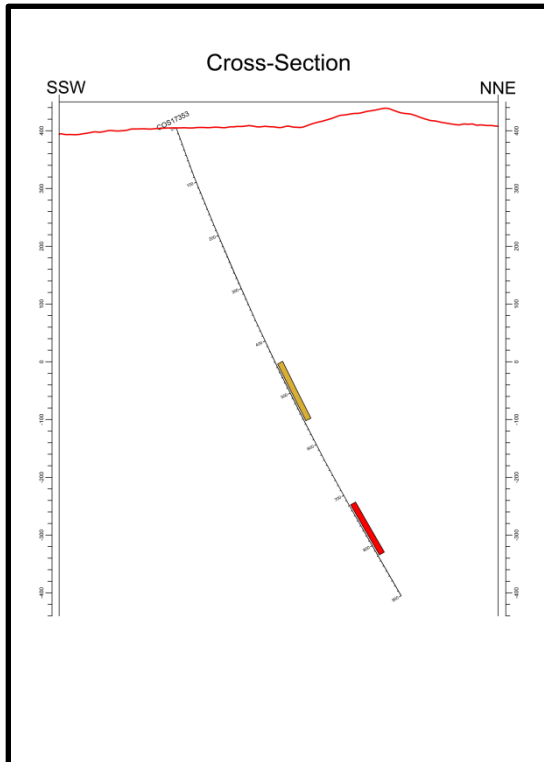


Figure 2: Section along COS17353.

Brown zone is SMP1 and red zone is MMZ (see text below).

As at 6pm Monday 20<sup>th</sup> March 2017, this first deep drill hole is at approximately 887m depth. Core drilling advance utilizes a wireline NQ2 system (76mm diameter drillhole) with recovery of a 52mm diameter drill core. Core barrel length is 3m. All cores are placed in wooden boxes and transported to Malå for logging and sampling.

COS17353 has encountered the following broad geological-alteration zones to date:

- **Phyllic 1:** Phyllic alteration overprinting a sequence of tuffaceous rocks, and younger mafic-intermediate dykes to a depth of 445m.
- **SMP1:** Wide zones of more intense semi-massive pyrite alteration overprinting tuff bedrock intercepted to approximately 545m and interlayered with more bleached and silicified rock.
- **Phyllic 2:** Interlayered zones of silicification and phyllic-chloritic alteration, weakly and locally developed chalcopyrite-arsenopyrite, and younger dykes to approximately 720m depth. Bedrock is tuff, but noticeably pyrite content is reduced with depth.

- **MMZ:** A very competent, silicified rock zone consisting of extensive quartz veinlet stockworks, containing well developed chalcopyrite, arsenopyrite and bornite with lesser sphalerite and pyrrhotite. This sulphide mineralization was intercepted sporadically over an interval of approximately 90m between 720m and 810m, including thin post mineralization dykes. The MMZ zone commences approximately 650m vertical depth below surface and nearly 500m below any historic drillhole data. Pyrite is largely absent in this zone of potential Cu-Au mineralization, and some veins are pegmatitic (with white feldspar).
- **POR:** Sulphide mineralization (chalcopyrite, pyrite and bornite veinlets and spots with quartz) is still present at the current depth of the drill hole (887m). This unit is an altered porphyritic intrusion, becoming more felsic with depth and less chloritized. This may be the causative stock margin.

At this stage it is planned to drill this first deep hole to at least 950m before moving to the second drill position. It is necessary to build a clearer picture of the stock and the relationship to contained and surrounding mineralization. Below 950m it is necessary to telescope the hole to a smaller drill diameter to be able to reach deeper mineralization. All indications are that the main column of mineralization may lie to the west of this drill hole trace.

In general terms, the entire drill hole has encountered tuffaceous host rocks with varying degrees of hydrothermal alteration. Indications are that the drillhole passed through outer pyritic alterations typical for porphyry style systems, and encountered the edge of a mineralization column (bornite-chalcopyrite bearing). Higher level vein systems encountered by historic drill holes appear to have invaded older structural patterns and dispersed accordingly. Beyond the MMZ, obvious quartz-feldspar porphyry has been found, and this may be the causative stock.

Sampling will start this week, and begin from approximately 690-840m throughout the MMZ zone, with first results available roughly within a month (depending on laboratory turnaround time). Favourable results are also expected based on the abundance of Cu-bearing sulphides

in the MMZ. Laboratory testing will also be carried out over the SMP zone, which remains prospective for elevated Au-Ag.

The Company is excited to have drilled predicted sulphide mineralization / porphyry stock at depth below the Svartliden property at the first attempt. This discovery continues to support and validate the proposed model for a deep seated Cu-Au hydrothermal mineralizing system and supports the hypothesis of Cu-Au porphyry underlying the property. Drilling will continue to the depth capability of the rig and will be followed by another two holes to further evaluate lateral and vertical extent of this system, and lay a foundation for detailed evaluation.

The following photographs highlight some of the main features found to date.

Photos of COS17353



Plate 1: Example of Phyllic 1



Plate 2: Example of SMP 1



Plate 3: Example of MMZ showing intergrown bornite and chalcopyrite within highly altered core



Plate 4: Example of MMZ showing intergrown bornite and chalcopyrite within highly altered core



Plate 5: Example of MMZ showing veins of chalcopyrite pyrite and fine bornite



Plate 6: Example of MMZ showing chalcopyrite, bornite and minor pyrite