

## Copper and base metals intersected in NSW Whatling Hill Project

### Highlights



- 14m of chalcopyrite-pyrite-quartz veins and stockworks intersected in diamond drill hole WHDD002 from 194m down the hole
- Sporadic veins of chalcopyrite, pyrite and locally molybdenite, sphalerite and, galena in WHDD001
- Alteration of epidote-chlorite and base metal mineralisation with pyrite, all consistent with intersecting the distal portions of a porphyry copper system
- Anomalous soil geochemistry and geophysical targets extend over a large 5km<sup>2</sup> area with recent drilling testing less than 5% of this area
- Assays and full analysis of the alteration and geology to follow in 4-5 weeks
- Age dating, geology, and alteration from limited surface exposure and now confirmed in drill core is similar to world-class porphyry copper-gold deposits in the province including Cadia-Ridgeway and Northparkes

### Emmerson Managing Director Mr Rob Bills commented:

*“First pass drilling at Whatling Hill has been successful in establishing the presence of porphyry copper style mineralisation – which is a fantastic result given the aim of this drilling was to gain an insight into the underlying geology in an area that is covered and has seen little previous exploration.*

*While the intersection of chalcopyrite-pyrite in quartz veins and stockworks from WHDD002 is obviously very encouraging, and the detailed geology is even more so with the intersection of multiple intrusions and intense alteration – mainly epidote and chlorite which signals that the drilling has yet to sample the core of the porphyry system.*

*Further analysis of the alteration and vein orientations, combined with the assay results and geology, will assist in providing vectors to the core of the mineralisation and determine the location of the next drilling campaign.”*

### **Whatling Hill (Figures 1 & 2)**

Approximately 1500m of Reverse Circulation and diamond drilling has been completed over the Whatling Hill project within Emmerson’s Fifield tenement. Assay results from these drill holes are expected to be returned in May and will be compiled with the geology and additional analysis from the trace element signature of the “green rock” alteration.

Drill hole WHDD002 tested the core of a geophysical Induced Polarisation (IP) anomaly coincident with elevated rock chip and soil anomalies (figure 3, refer to ASX Announcements dated 14 June 2018 and 8 August 2018). The hole intersected a chlorite altered monzonite cut by chalcopyrite-pyrite-quartz veins and stockwork breccia (figure 4).

Similarly, drill hole WHDD001, 200m to the north was also guided by IP geophysics and intersected chalcopyrite-pyrite-quartz veins, hydrothermal breccia and locally molybdenite, sphalerite, and galena. All pointing to lower temperature mineralisation on the periphery of a typical porphyry copper system. It may also indicate that the core of the mineralisation is further to the south, where we have over 3km<sup>2</sup> of elevated copper, gold and molybdenum geochemistry that remains untested.

The host to the mineralisation includes multiple intrusions and volcanic units associated with the Ordovician Raggatt Volcanics – a similar setting to other porphyry copper-gold deposits in the district.

As assay results from this program are awaited, activities in NSW will refocus toward the other NSW projects at Kadungle and Kiola. The next stage of exploration at these projects will include collecting additional geochemistry and geophysics, ahead of drilling in 2019.

### **For further information, please contact:**

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## **About Emmerson Resources, Tennant Creek and New South Wales**

Emmerson is fast tracking exploration across five exciting early-stage gold-copper projects in NSW, identified (with our strategic alliance partner Kenex Limited) from the application of 2D and 3D predictive targeting models – aimed at increasing the probability of discovery. (Kenex can earn up to 10% (to pre BFS) of any project generated providing certain success milestones are met).

The highly prospective Macquarie Arc in NSW hosts >80Mozs gold and >13Mt copper with these resources heavily weighted to areas of outcrop or limited cover. Emmerson's five exploration projects contain many attributes of the known deposits within the Macquarie Arc but remain underexplored due to historical impediments, including overlying cover (farmlands and younger rocks) and a lack of exploration. Kadungle is a JV with Aurelia Metals covering 43km<sup>2</sup> adjacent to Emmerson's Fifield project.

In addition, Emmerson has a commanding land holding position and is exploring the Tennant Creek Mineral Field (TCMF), one of Australia's highest-grade gold and copper fields producing over 5.5 Mozs of gold and 470,000 tonnes of copper from deposits including Warrego, White Devil, Orlando, Gecko, Chariot, and Golden Forty. These high-grade deposits are highly valuable exploration targets, and to date, discoveries include high-grade gold at Edna Beryl and Mauretania, plus copper-gold at Goanna and Monitor. These are the first discoveries in the TCMF for over two decades.

Emmerson recently announced the formation of a strategic alliance with Territory Resources to build a central mill in Tennant Creek to support the processing from Emmerson's small gold mines and other third-party feed. This alliance also extends to a \$5m earn-in by Territory Resources over Emmerson's southern tenements (where ERM is the Operator and Manager) plus a Mining Joint Venture over a portfolio of Emmerson's small mines that is on a 75/25 profit share basis, except for the Edna Beryl and Chariot mines which respectively have a 12% and 6% gold production royalty.

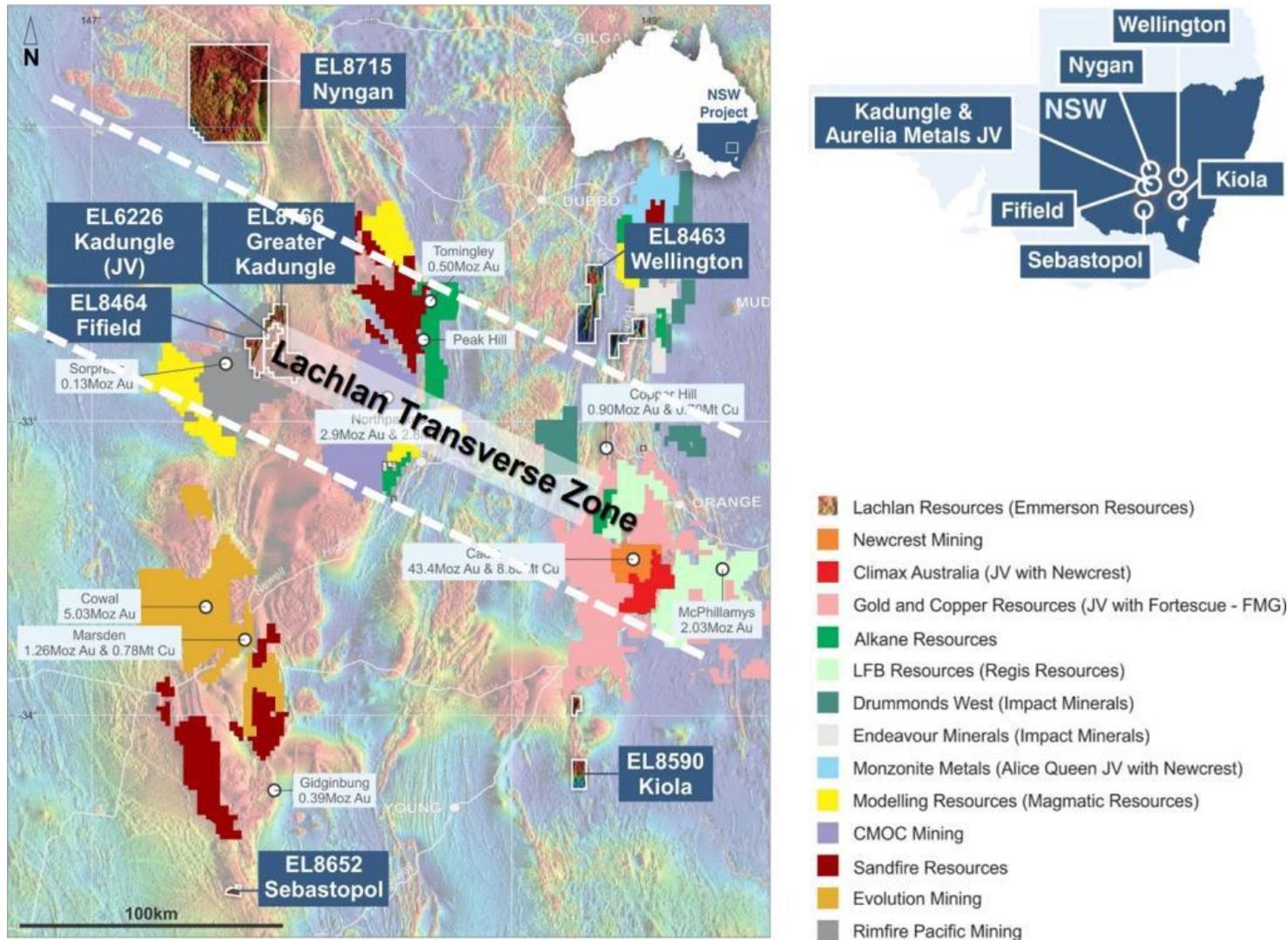
Emmerson is led by a board and management group of experienced Australian mining executives including former MIM and WMC mining executive Andrew McIlwain as non-executive chairman, and former senior BHP Billiton and WMC executive Rob Bills as Managing Director and CEO.

### **Regulatory Information**

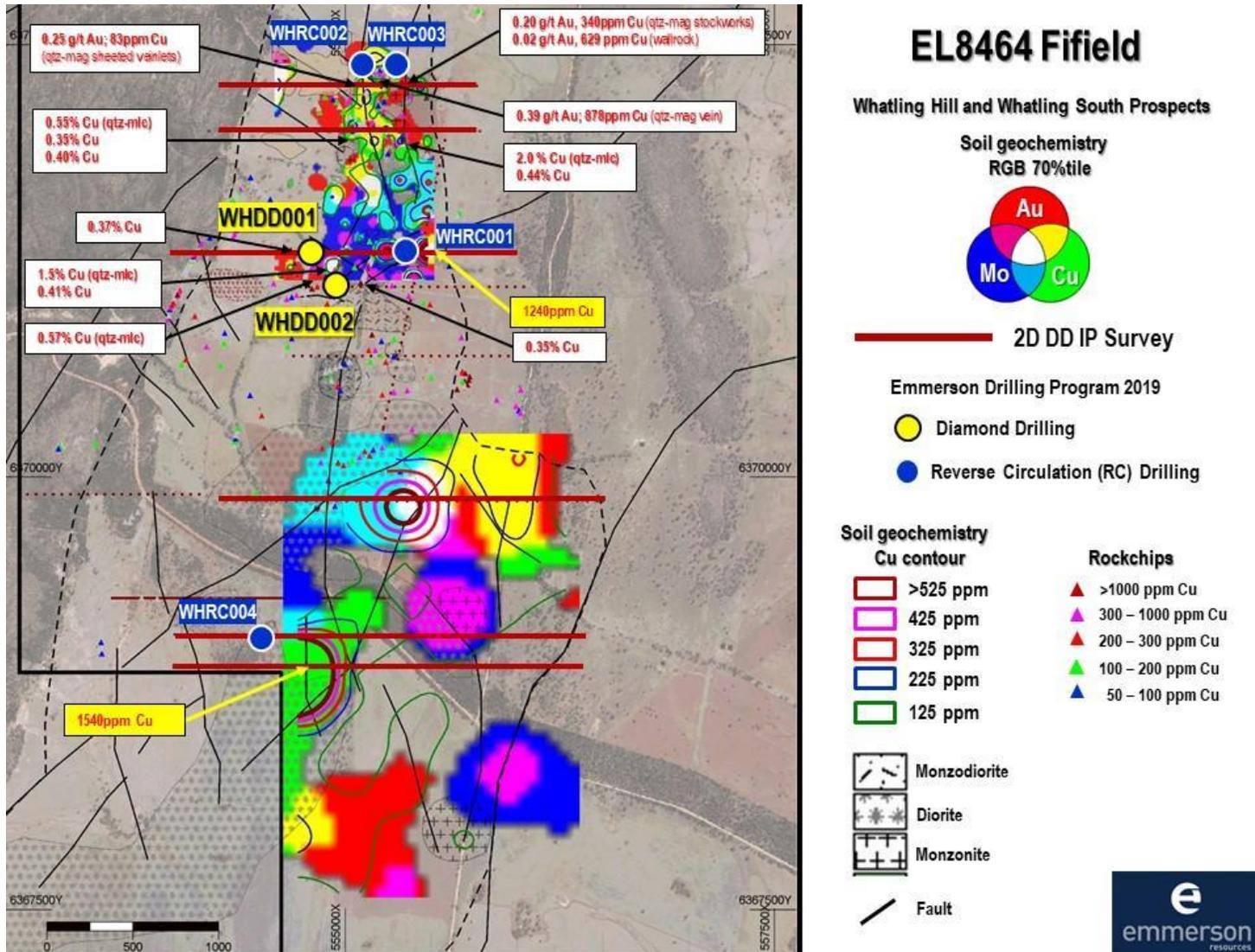
*The Company does not suggest that economic mineralisation is contained in the untested areas, the information contained relating to historical drilling records have been compiled, reviewed and verified as best as the Company was able. As outlined in this announcement the Company is planning further drilling programs to understand the geology, structure and potential of the untested areas. The Company cautions investors against using this announcement solely as a basis for investment decisions without regard for this disclaimer.*

### **Competency Statement**

*The information in this report which relates to NSW Projects Exploration Results is based on information compiled by Dr Ana Liza Cuison, MAIG, MSEG. Dr Cuison is a Member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the 2004 edition and the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Cuison is a full-time employee of the Company and consents to the inclusion in this report of the matters based on her information in the form and context in which it appears.*



**Figure 1.** Location of Emmerson’s NSW Projects (blue labels). The background is the regional magnetic image, with red indicating the various segments of the Macquarie Arc. Note the Fifield (EL8464) tenement contains the Whalting Hill project.



**Figure 2:** Location of Emmerson Drilling at Whatling Hill. Geochemical aircore results from the Whatling Hill Project within the larger Fifield tenement. Note the red lines mark the IP geophysical survey, the rockchip assays (red font) and peak assay results from the regolith (yellow call out boxes). The above exploration results were reported in ASX Announcements dated 8 August 2018 and 26 November 2018 and there is no new information or data that materially affects the information included in those previous announcements.

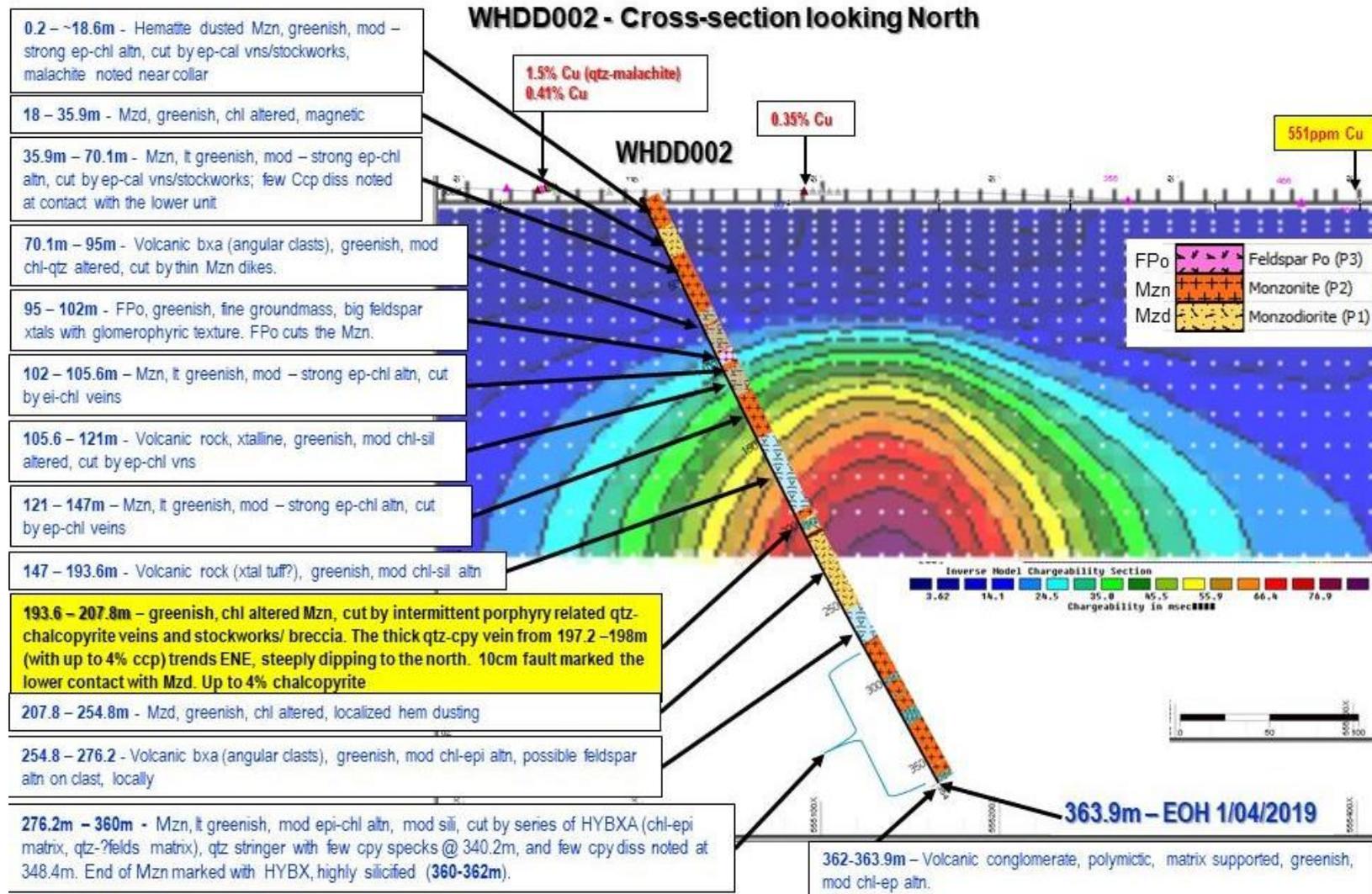


Figure 3: Cross section of the core of the IP chargeable zone (red contours) some 300m below the surface, and the visual drill results from diamond drill hole WHDD002

### Preliminary vein stages based on cross-cutting relationships

Late stage veins (overprinting Early stage veins, possibly associated with ?Devonian intrusions)



### Early stage veins (associated with mineralization)

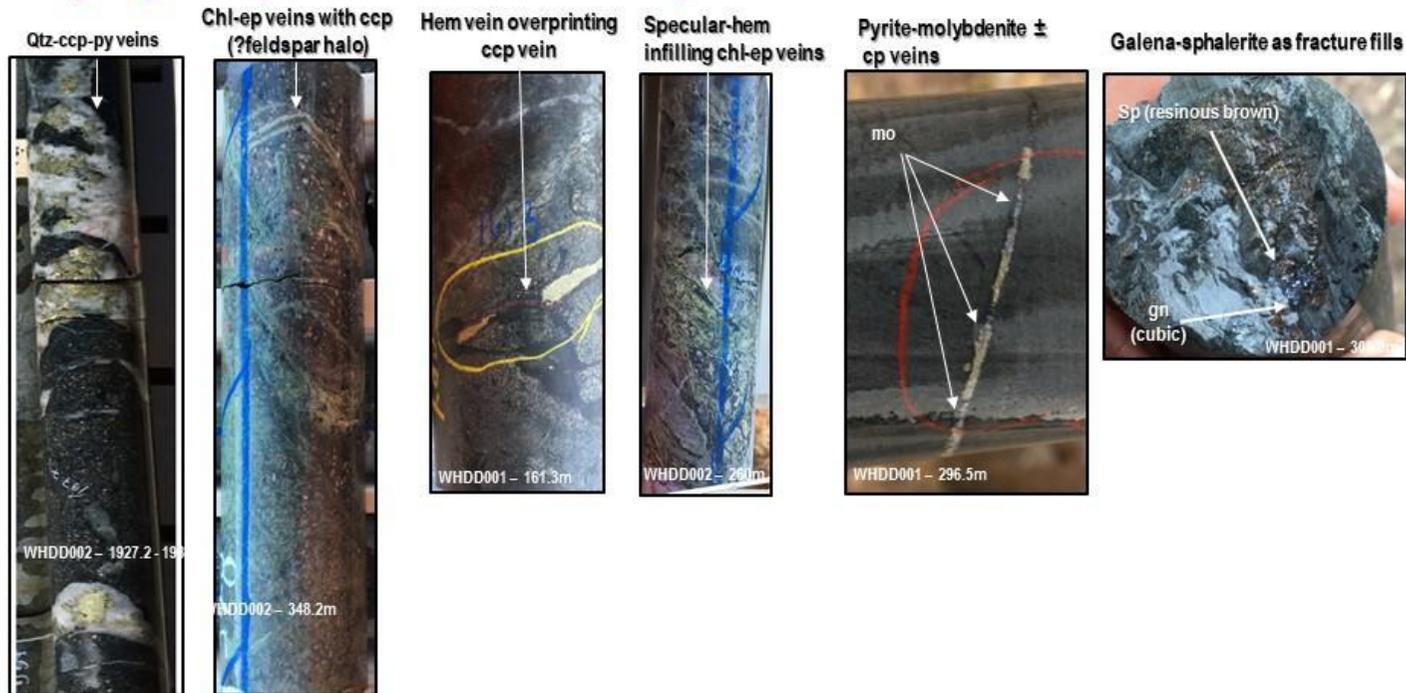


Figure 4: Preliminary geology and vein paragenesis from drill holes WHDD001 and WHDD002