

ASX ANNOUNCEMENT

4 May 2021

Porphyry Drilling Update Juruena Project, Brazil

Key Highlights

- Hole JUDD042, the first drillhole to test the porphyry copper gold potential at depth, has reached 841m downhole (2/05/2021).
- From 600m the hole has progressed through complex, classic porphyry geology including felsic to intermediate porphyry intrusives, dolerites and lamprophyres overprinted by intense phyllic alteration with abundant sulphides including copper sulfides and possible gold mineralised zones.
- Even more significantly, quartz + pyrite + molybdenite and quartz + chalcopyrite ± bornite veins have been encountered from approximately 700m depth.
- The rocks have undergone intense brittle-ductile deformation resulting in strong phyllic alteration and complex vein arrays indicating Meteoric may be approaching its main copper-gold porphyry target, the Juruena fault, earlier than expected.
- In addition, several zones of potassic alteration with pyrite have also been intersected and will be assayed for gold.

Meteoric Resources NL (**ASX: MEI**) (the **Company**) is pleased to announce the ongoing drilling progress of JUDD042 designed to test the giant IP chargeability anomaly detected in late 2020 (ASX:MEI 09/12/20).

Managing Director, Andrew Tunks said, *"We are intersecting the right rocks and alteration styles to indicate we are within a major magmatic system. From around 600m depth we have been logging quartz molybdenite veins and from 700m we have progressed into a zone with quartz, chalcopyrite bornite veins. We appear to be entering a zone of intense alteration overprinting porphyritic and mafic intrusives cut by hydrothermal breccias all with abundant stockwork veining. The hole will continue for approximately another 250m into our main copper-gold porphyry target, the Juruena Fault."*

JUDD042 GEOLOGY DETAIL

Drill-hole JUDD042 was designed to investigate the main chargeability anomaly along line L1600 (Figure 1), surveyed during the second half of 2020. The drillhole was drilled towards 030° azimuth with an -80° dip, aiming to intersect the whole IP/Chargeability anomaly and then hit the projected Juruena fault system at depth (Figure 2) (refer ASX release 17 March 2021 for drill collar information).

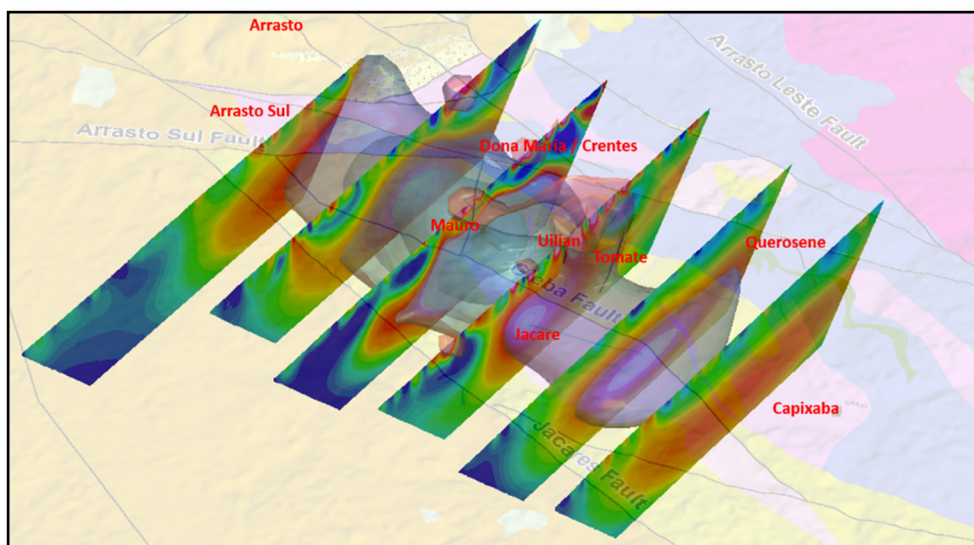


Figure 1: 3D Voxel with chargeability sections generated by the Deep IP survey at the Juruena Project. Prospects have also been highlighted. The 3D body was modeled using 10mV/v.

The geology expected at target is part of a large breccia pipe with magmatic hydrothermal alteration first investigated by Lago Dourado, in a shallow IP survey and some diamond and RC drilling.

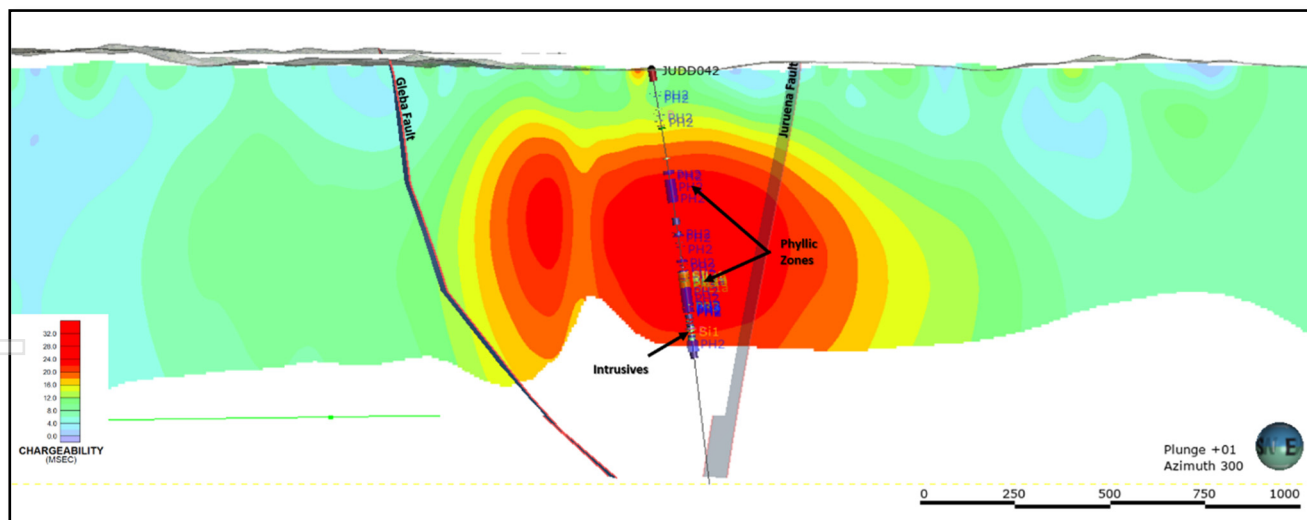


Figure 2: Line 1600 IP Chargeability section with major faults and JUDD042 drill hole trace, looking WNW

In the shallow portion of JUDD042 the most widespread and common alteration was a regional propylitic alteration overprinting the regional granite country rock (porphyritic granite) (Figure 3). This alteration assemblage presents moderate to weak associated carbonate and/or chlorite veining and locally epidote veins.

Sulphides in this assemblage are represented by very fine pyrite disseminations almost always associated with chlorite/magnetite spots.

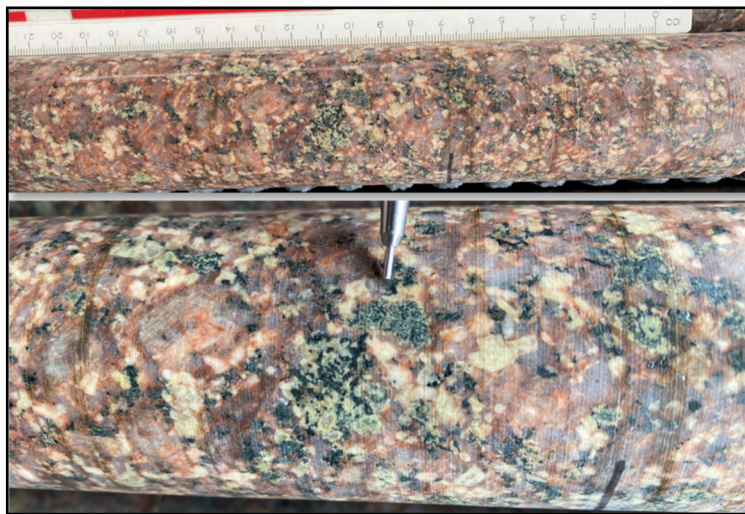


Figure 3: Regional propylitic alteration of granite country rock

Phyllic alteration intersections are most dominant from 534.66 to 645 metres. These zones are narrow, varying from few centimetres up to 30cm in width, characterising a well-developed phyllic vein system (Figure 4).



Figure 4: Phyllic alteration and related veins

Inside the phyllic zones the alteration is always pervasive, granitic textures are completely obliterated by intense sericitization (phengite composition) affecting mainly the feldspars. Outside of these zones, the host granites (thin or porphyritic) are well preserved. Disseminated pyrite is abundant and pyrite strings are moderate. Veins are accompanied by phyllic envelopes showing perfect pyrite sutures, and these are very similar to those described in the classical Porphyry Deposits literature as D type veins.

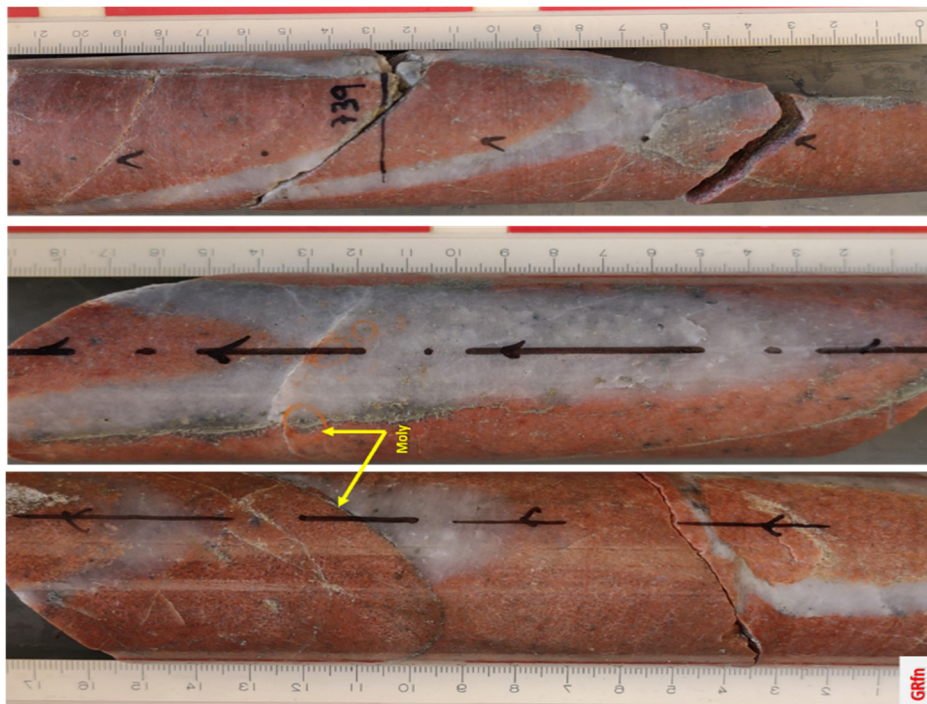


Figure 5: Quartz + molybdenite veins

Two sets of veins likely accompany the potassic alteration: the first are molybdenite + pyrite +/- chalcopyrite bearing quartz veins (Figure 5). These veins are characterised by milky quartz, that exhibit no associated haloes. They are common but more important from 471 to 579 metres.

Molybdenite occurs as filling fractures in the granites (Figure 6). Pyrite is typically very fine, but locally can become coarser (Figure 7). The sulphides are commonly deposited at vein boundaries (B-type veins) and may reflect more proximal conditions in relation to the intrusions responsible for the magmatic hydrothermal mineralisation. B-type veins can be used as a vector into the hotter portions of the magmatic system. These veins can be strongly overprinted by both phyllic and propylitic assemblages.



Figure 6: Molybdenite filling fractures.

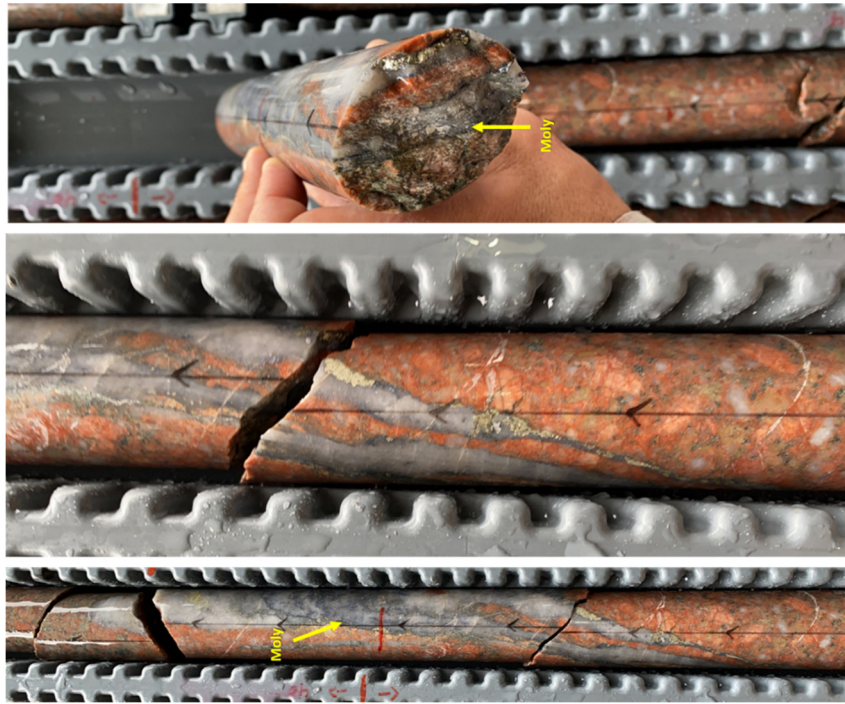


Figure 7: Quartz + pyrite + molybdenite bearing vein.

The second important vein set accompanying phyllic alteration are bornite-bearing grey quartz veins. Bornite is typically very fine and occurs disseminated throughout the vein (Figure 8). Although bornite is found locally in the drillhole, this type of association, like the ones with molybdenite, are important for understanding the system and also serves as an indication of higher temperature mineral assemblages and can be used as a vectoring tool to the magmatic system's hottest portions.

The bornite/chalcopyrite mineral assemblages indicates that copper is present in this zoned magmatic hydrothermal system.



Figure 8: Quartz + pyrite + molybdenite bearing vein.

The two main intrusives seen within the country rock are intermediate porphyritic intrusives and mafic dolerites. The intermediate porphyritic intrusive rocks are rich in chlorites (Figure 9), have undergone some potassic alteration (potassic haloes preserved around quartz veins), but the intense overprinting by the late propylitic alteration makes it difficult to

decipher. Epidote is also quite common in these rocks. Pyrite disseminations are seen in almost the entire length of the intersections, but local zones show a strong increase in pyrite above 5%.

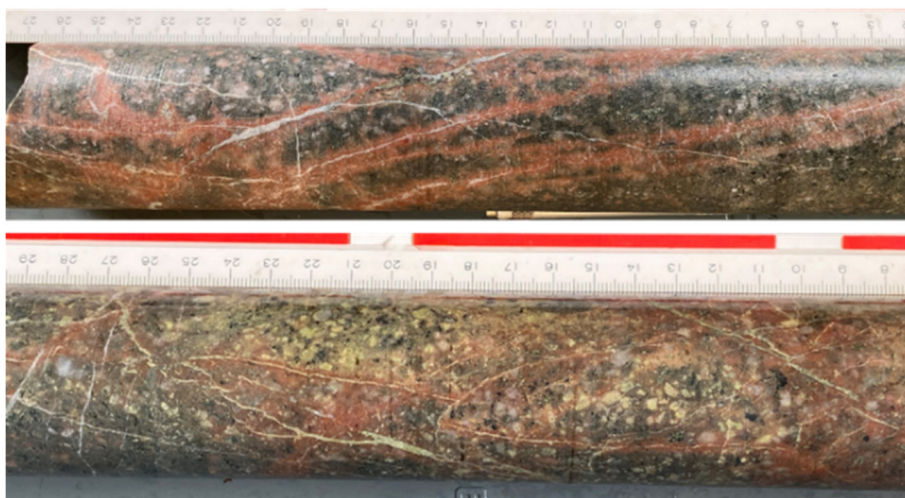


Figure 9: Intermediate porphyritic dikes

Dolerites are always strongly chloritized and carbonate is also abundant especially as calcite veining hosted in the zones. There are intersections where the sulphides increase noticeably (Figure 10), having locally pyrite up to >10% as disseminations and stringers. Sometimes pyrite is also deposited in local foliations near the contacts. Gold enrichment has been previously noted at Dona Maria and Querosene associated with the mafic dykes so sampling of these zones is important.

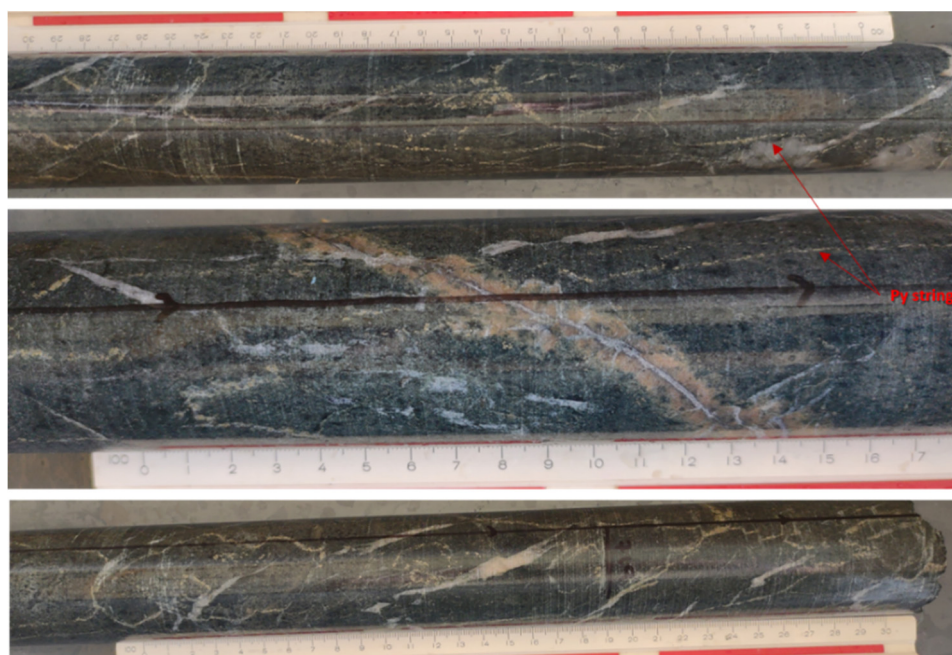


Figure 10: Dolerite dikes.

The intercepted phyllic alteration zones containing abundant sulphides and the mafic and porphyritic intermediate dikes show considerable sulphide disseminations and geologically may explain the chargeability anomaly. Furthermore, drilling does provide confirmation that we are within a major mineralised magmatic hydrothermal system as we approach our main copper-gold porphyry target, the Juruena fault.

The announcement has been authorised for release by the Directors of the Company.

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The information in this announcement that relates to mineral resource estimates and exploration results is based on information reviewed, collated and fairly represented by Mr Peter Sheehan who is a Member of the Australasian Institute of Mining and Metallurgy and a consultant to Meteoric Resources NL. Mr Sheehan has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which has been undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Sheehan consents to the inclusion in this report of the matters based on this information in the form and context in which it appears