

ASX ANNOUNCEMENT 18 February 2021

Deep Drilling Commenced on Potentially Giant Copper-Gold Porphyry Target at Juruena

Meteoric Resources NL (**ASX: MEI**) ("**the Company**") is pleased to advise that its 2021 drill program at the Juruena Copper-Gold Porphyry target commenced on schedule on Monday 15th of February. The drilling program has been designed to test an interpreted giant Cu-Au rich porphyry system identified in geological, geophysical and geochemical data below the high-grade gold, low-intermediate sulphidation epithermal Juruena Gold Deposit.

Key Highlights

- 3,600m drilling program, consisting of three drill holes each averaging 1,200m deep
- Drill program will test the large IP chargeability anomaly that lies beneath an historic shallow IP anomaly, major gold artisanal workings, giant soil Cu-Mo-Au anomaly, and fertile porphyry intrusive rocks
- Geology, geochemistry, and geophysics have all demonstrated that the Juruena Project is part of a large well preserved magmatic system, with high-grade low to intermediate sulphidation deposits outcropping at surface (Juruena Gold Deposits Dona Maria, Crentes and Querosene Prospects) and a potential Cu-Au Porphyry source approximately > 500m below the surface
- Historic drill holes (450m max.) into a shallow IP chargeability anomaly intersected strong hydrothermal alteration, typical porphyry-like veins, porphyry intrusive rocks and highly anomalous Au-Cu values, which confirm the potential for a Giant Porphyry system at depth
- Southern Geoscience Australia (SGC) and GEOMAG (Chile) independently completed 2D and 3D Inversions of recent deep IP data and both confirmed the presence of a large IP chargeability anomaly – see Figure 1.
- Historic drilling and Meteoric's own results highlight the Copper Gold Potential (refer ASX release 21/03/19)
 - 26m @ 0.64% Cu (JRND010: from 78.00m)
 - 41.3m @ 0.34% Cu (JRND001: from 21.00m)
 - 32m @ 0.38% Cu (JRND011: from 100.00m)
 - 54.3m @ 0.23% Cu & 1.33 g/t Au (JUDD010: from 171.25m)
 - 11m @ 0.28% Cu & 2.34 g/t Au (JUDD031 from 42m)
 - 14m @ 0.99% Cu & 10.94 g/t Au (JUDD024 from 100m)
- The full drill program is expected to take at least three months to complete, with the market to be updated on results on a regular basis as the program progresses



Meteoric Resources ABN 64 107 985 651 Level 1, 33 Ord Street West Perth WA 6005 www.meteoric.com.au **Managing Director, Andrew Tunks said**, "The geology team have drawn together many lines of geological evidence and interpret a significant Cu-Au porphyry system at depth related to the outcropping high-grade epithermal gold deposits at Juruena. The presence of the large IP chargeability anomaly defined in the late 2020 Deep IP survey, conducted by Geomag, gave us a definitive drill target.

"We successfully commenced drilling on the 15th of February, with the first of three holes initially targeting both the central portion of the IP chargeability anomaly and the Juruena Fault. Each hole is planned for around 1200m depth. The full program is expected to take at least three months to complete however we look forward to updating the market as we progress on this potential Company Making exploration program."

Magmatic Hydrothermal System and the 2021 Drilling Program

The 2021 drill program commenced on schedule at Juruena on the 15th of February. The program is the culmination of successful exploration programs carried out by Meteoric over the last two years. A combination of historic studies on the Project and the current database of information collated from recent programs shows that the Juruena high-grade Epithermal gold deposits are most likely part of a much larger magmatic-hydrothermal system, which encompasses several different gold and base-metal related deposits.



Figure 1 – Geomag (3D Voxel Block Model) and SGC (2D Vertical Section) data compared. Both interpretations of the Deep IP chargeability anomaly show the same position and intensity of anomaly. The three planned holes are also shown. The program will commence with the central hole DCIP003 testing the center of the IP anomaly and also the Juruena Fault at depth. The SGC and Geomag data are shown using a similar colour stretch but the Geomag Voxel model only shows blocks > 10mV/V. The blue section at the bottom of the SGC 2D section represents null data.

Geology

The high-grade gold mineralisation at Juruena is classified as a Low-Intermediate Sulphidation Epithermal gold deposit. Such deposits are shallow and are always related to a deeper magmatic source.

Geology of the Juruena Project illustrates a rock association that is typical of such mineralising systems. The regional host rock, the Juruena Granite, was intruded by a series of porphyry and mafic dykes and covered by an intermediate to acid volcanic rock of the Colider Group. The volcanic sequence is well preserved and shows that the erosion level was shallow, which allowed the preservation of these shallow metallic deposits.

Hydrothermal alteration defined in the drill core and outcrops shows an overprinting of two major mineralising events. Potassic, propylitic and phyllic alteration is typical and probably related to a porphyry intrusive source at depth and this is overprinted by shallow phyllic and silica alteration, closely related to the high-grade Epithermal gold deposits at the surface. **Figure 1** shows an interpretation of what we will call the Juruena Magmatic Hydrothermal System. The diagram shows the already defined epithermal high grade gold deposits and its probable links to a major porphyry source at depth.

Geochemistry

Drilling by Meteoric at Juruena has largely concentrated on three major Epithermal Gold targets: Dona Maria, Querosene and Crentes. Down hole multi-element geochemistry and surface geochemistry highlight at least two different metallogenetic styles of mineralisation. The high-grade gold Dona Maria and Querosene targets have a: structure, hydrothermal alteration and metal association typical of an Intermediate Sulphidation style of deposit. Associated Au-Ag-Te is typical of the ore from these targets.

However, the Crentes target exhibits a different metal association and structural characteristic. At this target, gold is closely related to copper mineralisation. Molybdenum values are significant and the major host rock for the Cu-Au mineralisation is a hydrothermal breccia. The metal association at Crentes is Cu-Au-Ag-Pb, showing a typical zonation across the epithermal deposit, in relation to the source, from low to intermediate sulphidation conditions. Best copper and copper-gold intersections include (refer ASX release 21/3/19):

- 26m @ 0.64% Cu (JRND010: from 78.00m)
- 41.3m @ 0.34% Cu (JRND001: from 21.00m)
- 32m @ 0.38% Cu (JRND011: from 100.00m)
- 54.3m @ 0.23% Cu & 1.33 g/t Au (JUDD010: from 171.25m)
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The Uiliam/Mauro Prospects were never the long term focus of exploration undertaken by former companies at Juruena. However, a shallow IP survey carried out by Lago Dourado over the greater Juruena area showed an IP chargeability anomaly centered on this target. The anomaly was coincident with a large zoned Au-Cu-Mo soil geochemistry anomaly (ASX:MEI 21/03/2019). In this instance, the Dona Maria/Querosene Prospects are interpreted to represent examples of distal low sulphidation style of mineralisation, while the Crentes Prospect seems to have an intermediate sulfidation association, and the Uiliam/Mauro Prospects exhibit a more typical proximal porphyry association (Figure 2).



Figure 2 illustrates the interpreted magmatic hydrothermal zonation association linked for a porphyry-epithermal Au-Cu-Mo-Ag style of related mineralisation. IS = Intermediate Sulphidation LS= Low Sulphidation

Based on available data, Lago Dourado drilled several holes into a shallow IP chargeability target. The geology of the cores showed an outstanding presence of porphyry intrusive rocks and thick low grade Cu intercepts, including (ASX:MEI 21/03/2019):

- JRND 54 21m @ 0.17% Cu
- JRND 61 33m @ 0.032% Cu
- JRND 46 29m @ 0.033% Cu

Those results, although not economic, are considered interesting because of the close association between the anomalous Cu values with porphyry intrusive rocks and alteration that includes typical porphyry systems A to D type veins.

Geophysics

The deep IP survey carried out over the Juruena Project at the end of 2020 was definitive in highlighting the Project's potential to contain major magmatic hydrothermal systems related Porphyry and Epithermal styles of Au-Cu mineralisation.

The Deep IP survey returned a large, high chargeability anomaly below the outcropping high-grade Epithermal gold deposits, centered beneath the Uiliam/Mauro Prospects. The top of the high chargeability anomaly (defined by >20mv/v in a central core of 1500m by 1000m) is located approximately 500m below the surface (ASX:MEI - 09/12/2020). Southern Geoscience Australia (SGC) independently completed a 2D Inversion of the geophysical survey data obtained by GEOMAG and confirmed the location of the chargeability anomaly.

When Meteoric combined the shallow and the deep IP surveys with the geology and the Cu values obtained in historical drilling, the following important features were highlighted:

- The deep high-chargeability anomaly appears to be linked with the shallow IP anomaly. The anomaly is centered just below Uiliam/Mauro Prospects and overlaps with most of the described porphyry intrusives, suggestive of the probable preservation of a buried porphyry-epithermal system, (**Figures 1, 2 & 3**).
- The best Cu intercepts obtained in shallow drilling to date are clearly related to the shallow IP anomaly and to the Juruena Fault at the Crentes Prospect. Crentes Cu anomalies appear to be part of the deeper system, telescoped to the surface by the Juruena Fault (**Figure 3**).
- The anomalous Cu intercepts at Uiliam/Mauro area do not extend deep enough to test the deep IP chargeability anomaly. The anomalous copper values can easily be related to a distal mineralised halo associated with a giant ore system at depth (Figure 3).



Figure 3: 3D Deep IP inversion showing the link between the deep and the shallow chargeability anomalies. Also showing the best drilling results at Crentes and the anomalous drilling at iam/Mauro in relation to the deep chargeability high. The scale bar on the left refers to down hole copper grades, the scale on the right refers to Voxel Model IP chargeability values. A yellow ellipse highlights the historic shallow IP anomaly.

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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