

ASX ANNOUNCEMENT

24 June 2021

JUDD043 intersects shallow 200m thick zone of disseminated sulphides

Meteoric is currently drilling JUDD043, a deep diamond hole at its Juruena Project, designed to test a significant chargeability anomaly recognised in a Deep IP Survey and reported to the ASX on 09/12/2020.

Highlights

- Hole JUDD043 has intersected multiple zones of sulphides, including important porphyry indicator minerals; molybdenite, chalcopyrite, bornite with traces of chalcocite and covellite
- A 50m thick zone of intense alteration with disseminated copper sulphides composing up to 10% of the rock mass (187-240m) is related to two intermediate porphyritic intrusives
- A distal zone of molybdenite + pyrite with zones chalcopyrite has been recorded in veins and disseminations from 110m to 350m (zone of over 200m thickness) around the porphyry intrusives
- JUDD043 is currently logged to 350m depth and is planned to intercept the Juruena Fault at approximately 470m and then push on to test a large IP chargeability anomaly beneath the fault
- Initial core samples have been submitted for assay and results are expected in approximately 6 weeks

Meteoric Resources NL (**ASX: MEI**) (the **Company**) is pleased to announce the ongoing drilling progress of JUDD043 designed to test the giant IP chargeability anomaly detected in late 2020 (ASX:MEI 09/12/20).

Dr Andrew Tunks Meteoric's Managing Director said:

"Exploration is a funny game! We had to stop our first deep copper hole, JUDD042, due to issues with the drill rig and decided to commence JUDD043 while awaiting additional drilling equipment. The plan being to go back to JUDD042 as soon as equipment arrived. However, we will now not be doing that until the current hole finishes because JUDD043 has intersected a significant zone of disseminated molybdenite and copper sulphides over 200m thick and still growing. This zone of alteration and sulphides is centred on two intermediate porphyry intrusives.

Importantly we have intercepted this potential mineralisation much earlier than anticipated in an area where there is virtually no historic drilling. The intensity of the alteration and high temperature mineral assemblages combined with the sulphide minerals suggest we are significantly closer or within the magmatic hydrothermal system and we are already planning additional holes to test this exciting opportunity."



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Detail of JUDD043

The information in this release is a geological summary of JUDD043 to 350m depth to which the detailed logging has been completed. The drill hole has currently reached 450m depth and close to the expected position of the Juruena Fault. The drilling will push on through the fault to test a large IP Chargeability anomaly modelled in the footwall of the Juruena Fault. The geological details for JUDD043 are shown in the graphic log presented in Figure 1.

The graphic log shown in Figure 1 records the parent (original) rock type or lithology. Observed alteration types and vein types together with their intensity and abundance is illustrated graphically. The percentage abundance of important economic copper and molybdenum bearing minerals is also recorded in the geologic log.

JUDD043 intersected barren coarse-grained granite down to 117m. At 117m the drilling moved into a mixed intrusive zone with mafic and intermediate porphyritic intrusives. All rocks are overprinted by strong alteration, multiple phases of veins and variable amounts of sulphide minerals. Molybdenite and pyrite are especially common being between 1 and 10% of the rockmass throughout the interval from 117m to 350m.

Disseminated chalcopyrite occurs throughout the JUDD043 but is more abundant between 187m to 240m (approx. 1% by volume). Bornite is also present throughout the interval 197m to 241m varying from an estimated 0.5% to 1% abundance. The onsite geological team believe this zone of copper mineralisation relates to the presence of a mineralised intermediate-porphyry intrusion with strong proximal-propylitic alteration overprinting early potassic alteration.

This zone, although hosting strong pyrite and molybdenite; moderate chalcopyrite and bornite, (plus trace amounts of galena & sphalerite), is still above the highest IP chargeability anomaly, expected to be reached by 450m in proximity of the Juruena Fault.

Vein textures, mineralogy, and composition (widespread D-style veins within aplite's in hole JUDD0042, and B-style veins in JUDD0043) suggests an increasing temperature gradient towards the west of the current drilling. Strong potassic alteration characterized by K-feldspar veins and halos, associated with copper sulfides define a strong gradient in the hydrothermal alteration fluid temperature, increasing to the west where JUDD043 is located.

The intermediate porphyritic intrusions are similar to porphyries previously observed at Crentes Prospect, however the presence of bornite, molybdenite and chalcopyrite within the porphyries in JUDD043 suggests a coincident association with copper porphyry mineralisation events. In layman's terms we believe the intermediate intrusive porphyries are responsible for the widespread copper mineralisation observed in the hole.

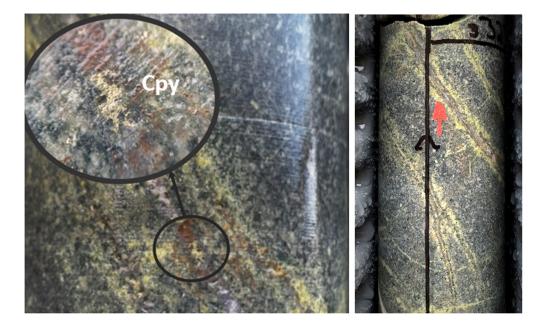


Photo 1. JUDD043 downhole depth of 175m - early quartz + molybdenite +chalcopyrite veins overprinted by strong pyrite + chlorite + epidote veins within a pervasive zone of propylitic alteration of gabbro host (NQ core).

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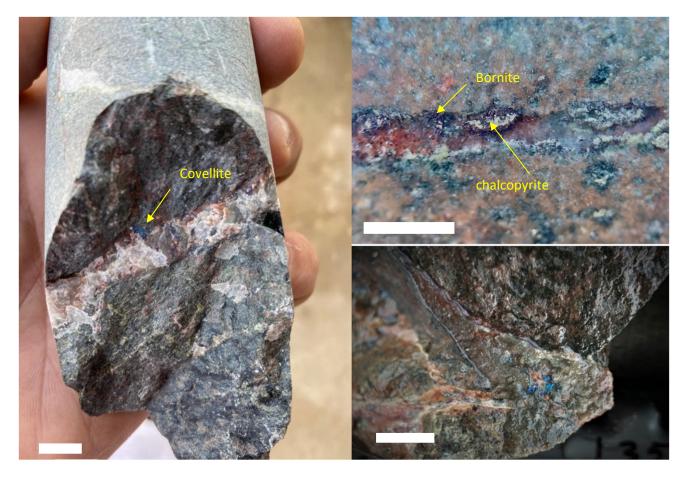


Photo 2. JUDD043 downhole depth of 220m - examples of strong potassic alteration within intermediate porphyry. B veins contain quartz + molybdenite ± bornite ± covellite. Core is NQ size – white scale bar approx. 1cm

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

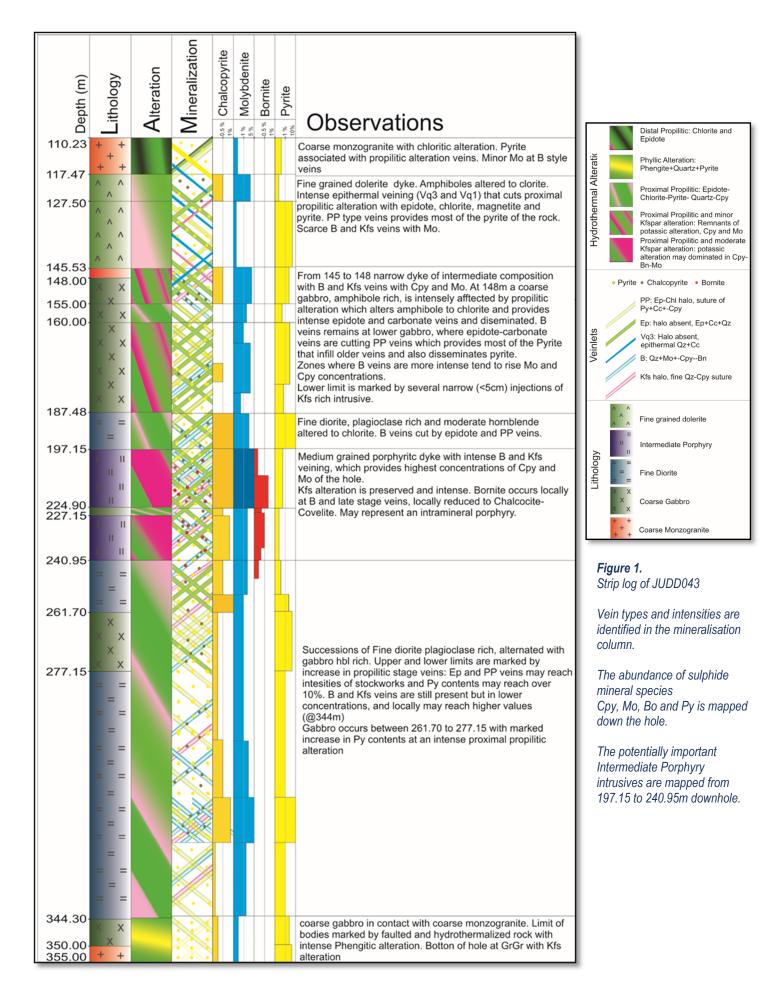
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The information in this announcement that relates to mineral resource estimates and exploration results is based on information reviewed, collated and fairly represented by Mr Peter Sheehan who is a Member of the Australasian Institute of Mining and 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.



Appendix 1 – JORC Code, 2012 Edition – Table 1 Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections).

Criteria	Commentary
Sampling techniques	 Diamond core was split in half lengthways and sampled at 1.0 m intervals inside alteration zones and 1.0 m intervals outside this. Half core was retained on site in Juruena for future reference. Samples were placed in high density plastic sample bags and sealed shut with cable ties. Sample mass varied according to the sample length, typically mass varied between 1- 6kg.
Drilling techniques	 Coring was done by Willemita Sondagens Ltda using a Sondas MACH-1200 diamond drill rig with conventional wireline technology. It had a capacity of 600 (six hundred) meters deep in HQ diameter and 1,000 (one thousand) meters in NQ, and 1,200 (twelve hundred) metres in BQ. Holes were collared to fresh rock using HQ diameter, and the hole was completed using NQ diameter. Drilling was standard tube (not triple tube). Drill hole inclinations ranged from -45 to -77 degrees. Down-hole surveys were carried out by Willemita at the completion of each hole using a MAXIBORE 2 tool. The drill was oriented every 3m in NQ core using a REFLEX ACT2 tool.
Drill sample recovery	 Diamond core recovery is recorded by measuring the length of core recovered compared to the length drill run. Drill recoveries were considered very good with over 90% of the drill runs > 90% recovery. Gold mineralisation does not apparently correlate to zones of low sample recovery; sample bias due to poor sample recovery is therefore not believed to be an issue.
Logging	 All drill-holes are geologically and geotechnically logged, and the data stored in a digital database. Logging of diamond drill-core is a combination of qualitative and quantitative and records: weathering, colour, texture, lithology, alteration, mineralisation, and structure. The core is also photographed and catalogued.
Sub-sampling techniques and sample preparation	 Diamond drill-core is cut in half lengthways using a diamond saw. The core is consistently cut to the right of a cut/orientation line (looking downhole), and piece of core without the line is sampled. This ensures samples are representative and minimises any bias. Duplicate samples are routinely done by cutting half of the core for sampling into quarter, and both pieces are analysed. Sample lengths are determined by geology: 1.0m inside alteration zones and 1.0m outside them. This is considered appropriate for the style of mineralisation.
Quality of assay data and laboratory tests	 Sample preparation was undertaken by ALS Laboratories (Goiania, Brasil). Preparation included: coarse crushing of entire sample, fine crushing to 90% passing 2mm, and pulverising a 1 kg split to 95% passing 106um. The samples were analysed for Au by ALS Laboratories (Lima, Peru) using Fire Assay Au-AA26 with 50g aliquots followed by Atomic Absorption Spectroscopy (AAS), a technique designed to report total gold. On occasions where 'visible gold' was present or Fire Assay results were >100g/t Au a Screen Fire Assay (Au-SCR24) was requested. These are considered appropriate methods for this style of mineralisation. Additionally, a multi element suite of ME-MS61 48 element 4 acid ICP-MS was done. Standards (certified reference material), blanks and duplicates were inserted into the sample stream at the rate of 1:20, 1:25 and 1:40 samples, respectively for the sample batches of 50. Routine analysis of the results of the Blanks, Standards and Duplicates are carried out and any variation away from pre-determined limits are discussed with the lab. Any issues not resolved to Meteoric's satisfaction are re-analysed on a batch basis. No external check laboratory assays have been completed on these samples.

Criteria Commentary				
	 The coarse and pulp sample rejects from the preparation and analytical laboratories were retained and stored at the laboratory, allowing for re-assaying in the future if required. All pulps are stored indefinitely. 			
Verification of sampling and assaying	 Significant intercepts have been checked and replicated by the Independent qualified person for this release. Meteoric geologists also revisit the drill core for visual inspection and verification. All drill-hole data is recorded in Microsoft Excel spreadsheets and appended/merged into a Microsoft Access database. The entry of data is controlled by a database administrator. Standardised geological codes and checks have been employed to ensure standardised geological logging and required observations performed. The database is stored by a 'Cloud' storage service. Work procedures exist for all actions concerning data management. No twin holes were employed in this drilling campaign. No adjustments or calibrations were made to any assay data . 			
Location of data points	 Collar surveys are initially performed using handheld GPS with accuracy to ~5m. A licensed surveyor will check the locations using a total station (later in the field season. All drill-holes have been checked spatially in 3D and all obvious errors addressed. The grid system used for all data types in a UTM projection, SIRGAS2000 Zone 21 Southern Hemisphere. Topographic control in the area of the drilling is generally poor (+/- 10m), control is made using topographic maps and hand-held GPS. 			
Data spacing and distribution	 The drilling carried out is on a variable grid, depending on the targeting stage of the drilling. Grid spacing varies from 25m x 25m to approximate 50m x 50m grid, both horizontally and vertically (in the plane of the mineralised structure, which is sub- vertical). The density of information is considered insufficient for conducting a mineral resource estimate to the standards required by the JORC 2012 mineral resource code. No compositing was applied. 			
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Orientation of data in relation to geological structure	 Mineralised structures were targeted and planned to be intersected so that minimal sample bias would occur. All structures were planned to be intersected as perpendicular as possible and to pass through the entire structure . Wherever possible, all drill holes were oriented to intersect the intended structure perpendicular to the strike and a minimum of 40 degrees to the dip of the mineralised zone. The mineralised structures are visible from within the artisanal miners' workings which allowed drill holes to be oriented to minimise introducing a sample bias. None of the reported significant intersections are a result of intentional sample bias. There is discussion in the text as to possible true widths. 			
Sample security	 Sampled core is packed flat in plastic bags and sealed with tape. These individual bags are then put in plastic woven bags which are tied and have a metal seal attached. A packing list (confirming the number of sacks for transport) is prepared and samples are transported by Meteoric staff to commercial transport company in Nova Bandeirantes and recorded on a consignment note. Upon receipt at the laboratory, samples were checked in and the list of received samples immediately sent back to the company's database administrator as a security check that all samples were received, and all were fully intact and not opened. 			
Audits or reviews	 The sampling techniques and data have been reviewed by the Competent Person and are found to be of industry standard. No audits were completed by any external parties. 			

Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
Mineral tenement and land tenure status	 License details are shown in Appendix 2. There is an existing 1% net smelter return payable to a previous owner. There are three Garimpo mining licences within the tenement package, allowing the Garimperos to legally work under certain restrictions. The tenements are not subject to any native title interests but is located within the border zone around a national park. Within this border zone further conditions may be required to gain an operating licence. Cattle grazing and legal timber felling are the two primary industries and land uses for the area.
Exploration done by other parties	 Garimperos first discovered the mineralised areas around Juruena in the 1970's Garimperos have been active in the region since, recovering gold from alluvial, colluvial and some oxidised rock. The area has been explored on and off from the mid 1990's through to the present, with the majority of drilling taking place over the last four to five years. Madison Minerals Ltd first explored and carried out some drilling evaluation of the Juruena core area in 1995/1996. Lago Dourado Minerals drill tested several anomalies and zones from 2010 to 2013. All work undertaken by Lago Dourado Minerals was performed to a JORC compliant standard and the data generated is considered sufficient to be used for a JORC compliant mineral resource estimate, should further results confirm continuity, grade and geological interpretation in the future.
Geology	 The Juruena mineralisation is considered to have resulted from magmatic activity (intrusions and fluids) which could be sourced from a gold rich source rock and concentrated along structural zones. The mineralisation is hosted by Paleoproterozoic volcanic and granitoid rocks of varying composition. The host rocks are found within the Juruena-Rondonia block of the Amazon Craton.
Drill hole Information	See body of report
Data aggregation methods	 Significant intercepts are calculated using a 0.5 Au ppm lower cut-off, no upper cut, and up to 4m of consecutive dilution. Sample intervals were not equal to 1 m were weight averaged.
Relationship between mineralisation widths and intercept lengths	 As far as practically possible and with the geological interpretation available, The drill targets were tested with the aim of intersecting the interpreted mineralised structure as perpendicular as possible to the strike. All positive holes to date intersected the mineralisation are minimum of 40 degrees to the dip, which will cause a slight overstatement of the actual intercept width. All results are reported as downhole widths.
Diagrams	See included Figure(s) in the announcement.
Balanced reporting	Where results are reported the company intends to report all significant intercepts either in the text or as an Appendix.
Other substantive exploration data	No other substantive data is mentioned in this release.
Further work	Further work is discussed in the body of the report.



Appendix 2: Table of Brazil Licenses for Juruena and Novo Astro Projects

Claim No.	Status	City	Ownership %
866.079/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%
866.081/2009	Granted Exploration Permit	COTRIGUAÇU/MT, NOVA BANDEIRANTES/ MT	100%
866.082/2009	Granted Exploration Permit	COTRIGUAÇU/MT, NOVA BANDEIRANTES/ MT	100%
866.084/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%
866.778/2006	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%
866.085/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%
866.080/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%
866.086/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%
866.247/2011	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%
866.578/2006	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%
866.105/2013	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%
866.934/2012	Granted Exploration Permit	COTRIGUAÇU/MT	100%
866.632/2006	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%
866.633/2006	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%
866.294/2013	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%
866.513/2013	Granted Exploration Permit	COTRIGUAÇU/MT, NOVA BANDEIRANTES/ MT	100%
867.246/2005	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%



