ASX ANNOUNCEMENT

19 May 2021

Porphyry Drilling Update
Juruena Project, Brazil

Meteoric Resources NL (**ASX: MEI**) (the **Company**) encloses an updated ASX release relating to the Porphyry Drilling at the Juruena Project Brazil announced on 4 May 2021. The updated announcement provides an updated JORC Table 1.

The announcement has been authorised for release by:

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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 sulphides 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).

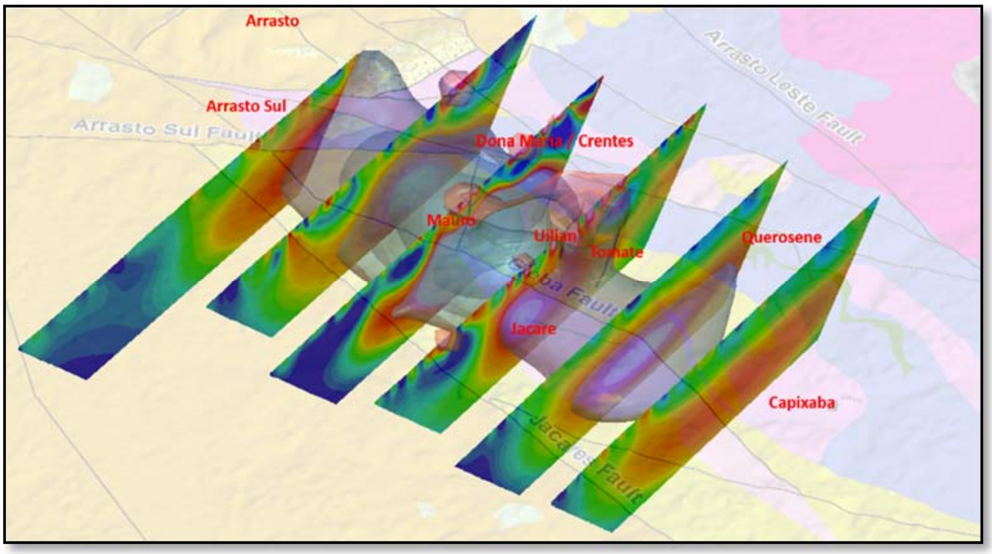

Figure 1: 3D Voxel with chargeability sections generated by the Deep IP survey at the Juruena Project. Prospects have also been highlighted. The 3D body was modeled using10mv/v.

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.

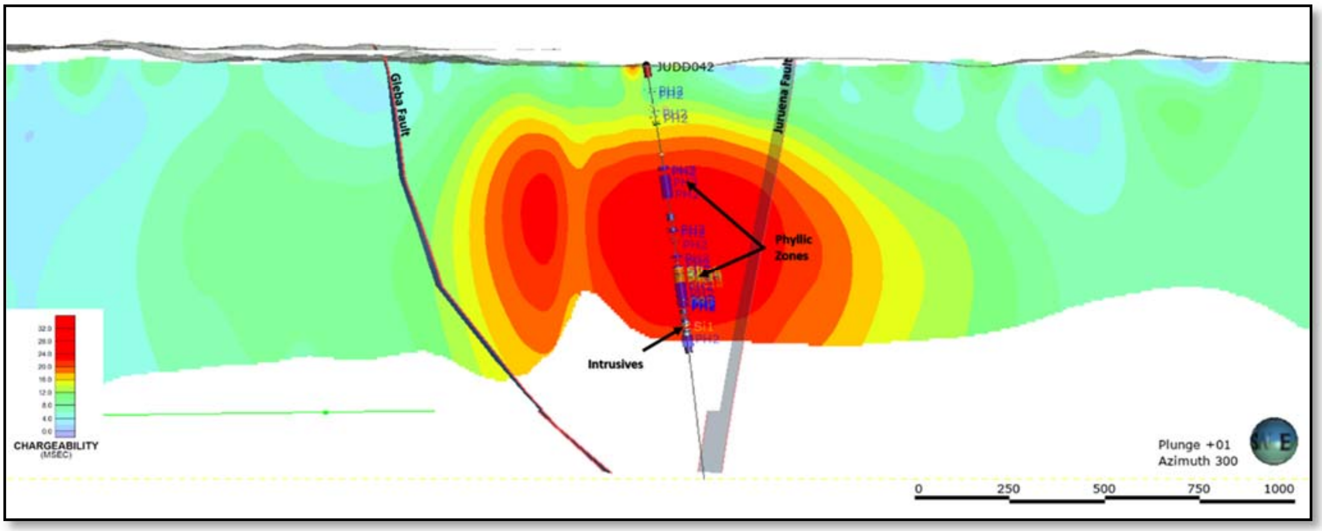

Figure 2: Line 1600 IP Chargeability section with major faults and JUDD042 drill hole trace, looking WNW

In the shallow portion of JUDD042 the most widespread and common alteration is a regional propylitic alteration overprinting the regional granite country rock (porphyritic granite) (Figure 3). This alteration is associated with moderate to weak carbonate and/or chlorite veining and locally epidote veins. This regional propylitic alteration commonly has around 1% very fine pyrite disseminations (ranging up to 3%), almost always associated with chlorite/magnetite spots.

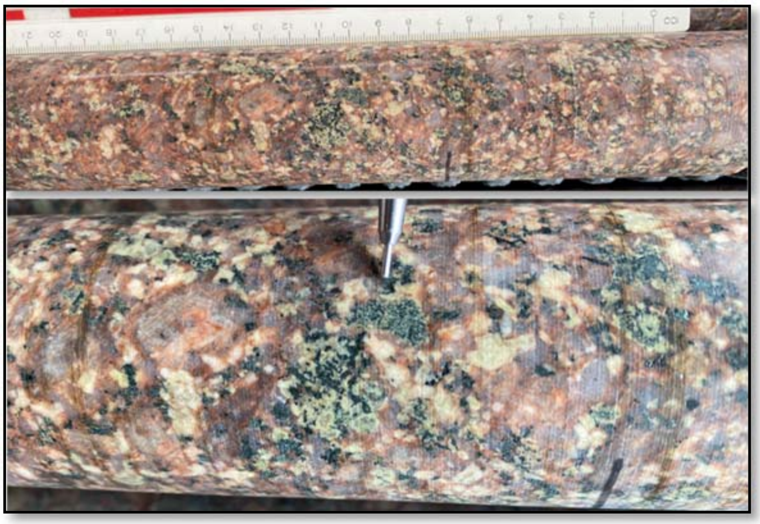

Figure 3: Regional propylitic alteration of granite country rock

Overprinting the regional propylitic alteration are phyllic alteration intersections which are most dominant from 534.66 to 645 metres (Table 1). These phyllic alteration zones are narrow, each varying from a few centimetres up to 30cm in width. The frequency of these zones varies within the 110m interval from 1-2 zones per metre up to 5 zones per metre, presenting a well-developed phyllic vein system (Figure 4).

Figure 4: Phyllic alteration and related veins

Inside the phyllic zones the alteration is pervasive and granitic textures are completely obliterated by intense sericitization (phengite composition) dominantly affecting the feldspars. Pyrite occurs as disseminations and as veinlets/stringers and varies in intensity from 1% where there is only disseminations up to 8% in the zones containing stringers. Rare blebs of chalcopyrite were observed in these zones. Where the alteration zones exhibit pyrite stringers, they appear very similar to those described in the classical Porphyry Deposits literature as D type veins.

Outside of the phyllic zones, the host granites (both fine grained and porphyritic) are well preserved.

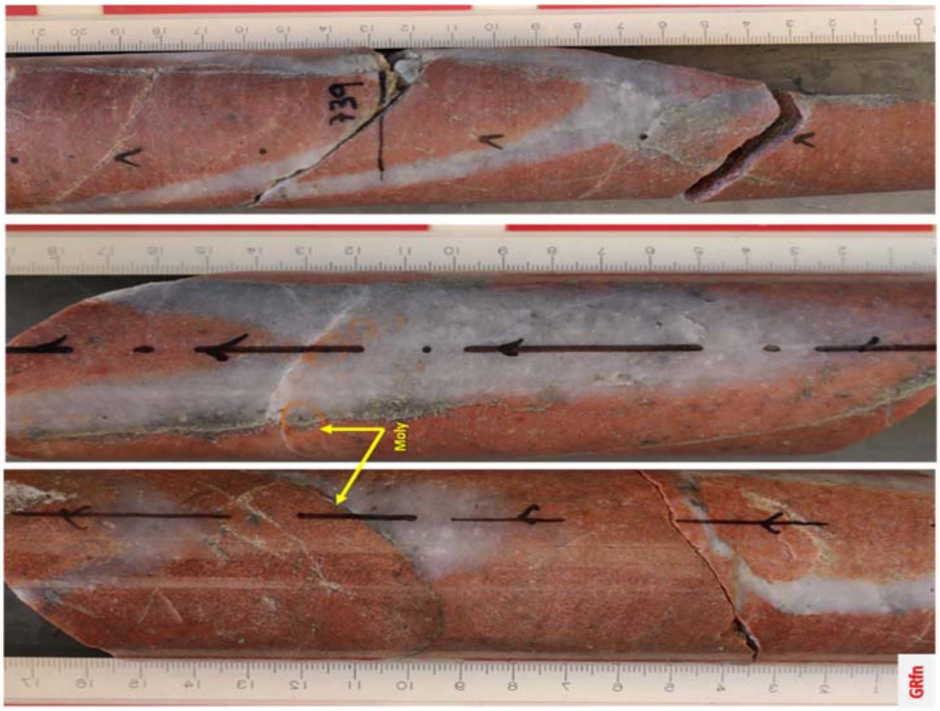

Figure 5: Quartz + molybdenite veins

Another local alteration seen to overprint the regional propylitic alteration is distinctive potassic alteration zones (Table 1). Two sets of veins likely accompany the potassic alteration zones:

Quartz veins with ~ 5% total sulphides characterised by disseminated pyrite + molybdenite +/- chalcopyrite (Figure 5). These veins are characterised by milky quartz and exhibit no associated haloes. They are common down the hole but more prominent from 471 to 579 metres.

Molybdenite occurs in the veins as filling fractures (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.

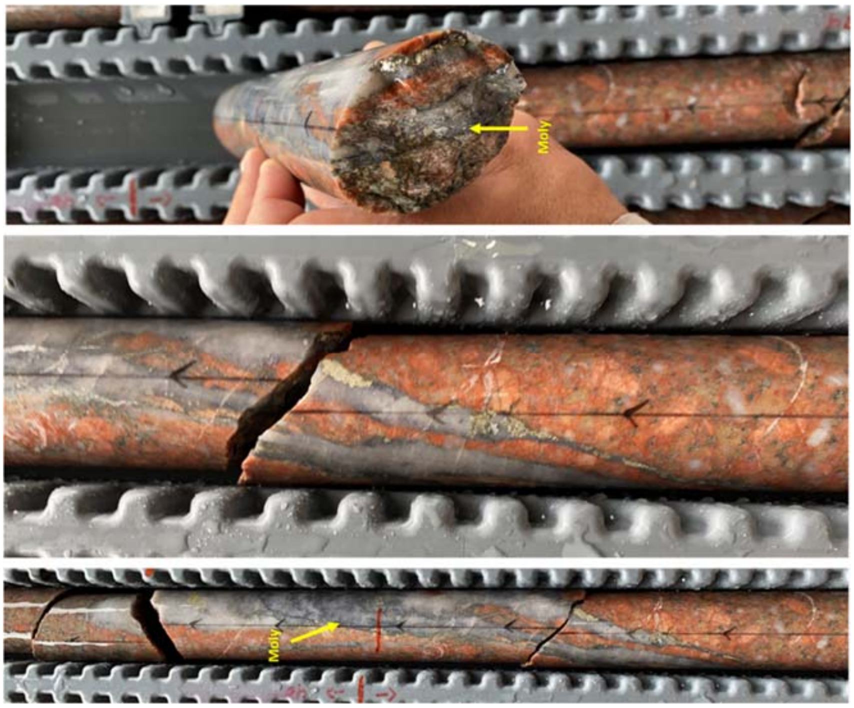

Figure 7: Quartz + pyrite + molybdenite bearing vein.

The second important vein set accompanying potassic alteration are bornite-bearing grey quartz veins, with disseminations of bornite occurring only as a trace mineral up to 1%. Bornite is typically very fine and occurs disseminated throughout the vein (Figure 8 & Table 1). Although bornite is rare, this type of association like the ones with molybdenite, are important for understanding the system and serves as an indication of higher temperature mineral assemblies and can be used as a vectoring tool to the magmatic system's hottest portions.

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

Figure 8: Quartz + pyrite + molybdenite bearing vein.

***Table 1**. Alteration log for JUDD042 including detailed visual estimations of sulphide occurrence, style, and intensity.*

Note: The Company cautions that the reporting of visual estimates in advance of analytical results is uncertain.

From	To	Lithology	Alteration	Veining %	Sulphide Occurrence	Intensity (%)	Cu minerals Cpy-Bo
63.14	71.85	Porphyritic Granite	Propyllitic	1-2%	Py in veinlets	1-3%	
123	123.95	Porphyritic Granite	Phyllic	4-6%	py disseminations in phengite haloes enveloping quartz veins	3-5%	
269.12	280.41	Porphyritic Granite	Phyllic	5-8%	py disseminations in phengite haloes enveloping quartz veins	3-5%	
292.61	319	Porphyritic Granite	Phyllic	4-6%	py disseminations in phengite haloes enveloping quartz veins	4-6%	
440.22	460.8	Porphyritic Granite	Propyllitic	1-2%	py disseminations and fine quartz veinlets bearing molybdenite	1-3%	
520.32	525.11	Porphyritic Granite	Propyllitic	1-2%	Quartz + molybdenite veinlets	1-3%	
534.66	537.46	Thin Granite	Phyllic	4-6%	Quartz + molybdenite veinlets	2-4%	
555.02	557.12	Thin Granite	Phyllic	2-4%	Quartz + molybdenite veinlets	3-5%	
560.68	562.09	Thin Granite	Propyllitic	1-3%	bornite and chalcopyrite bearing quartz veins	1-2%	0.5-1%
564.19	579.04	Thin Granite	Silicification	2-4%	Py and molybdenite in quartz veinlets	1-3%	
579.04	617.65	Thin Granite	Phyllic	4-6%	Molybdenite in quartz veins and py disseminations in phengite haloes enveloping quartz veins	2-4%	
617.65	620.97	Thin Granite	Phyllic	2-4%	py disseminations in phengite haloes enveloping quartz veins	3-5%	
625.67	630.54	Thin Granite	Phyllic	3-5%	py disseminations in phengite haloes enveloping quartz veins	2-4%	
631.56	645	Thin Granite	Phyllic	2-4%	py disseminations in phengite haloes enveloping quartz veins	4-6%	
650.12	661.6	Intermediate Porphyritic Dyke	Propyllitic	1-2%	Disseminated py	0.5-1%	
668.33	671.13	Intermediate Porphyritic Dyke	Propyllitic	1-2%	Disseminated py	0.5-1%	
692.77	696.25	Dolerite Dyke	Propyllitic	1-3%	py disseminations and strings	1-2%	
717.85	719.42	Dolerite Dyke	Propyllitic	1-3%	py disseminations and strings	0.5-2%	
719.42	748.8	Fine-Grained Granite	Phyllic	3-5%	py ± molybdenite in quartz veins	3-5%	
793.28	794.56	Fine-Grained Granite	Propyllitic	1-3%	py disseminations and quartz + molybdenite veinlets	1-2%	0.1-1%

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) and 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 between 0.5% and 1% are seen in almost the entire length of the intersections, with local zones showing a strong increase in pyrite up to 5% (Table 1).

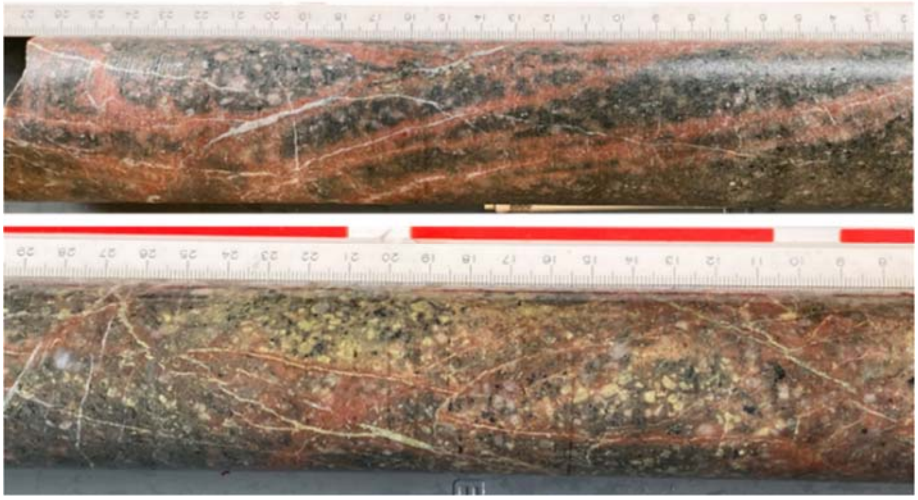

Figure 9: Intermediate porphyritic dikes

The 2 dolerites intersected (Table 1) are strongly chlorite altered with abundant carbonate as calcite veins hosted in the zones. Generally sulphides are absent however locally there are intersections where the sulphides increase noticeably, having locally pyrite as disseminations and stringers (Figure 10). 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 there is potential for high grade gold mineralisation and sampling of these zones is important.

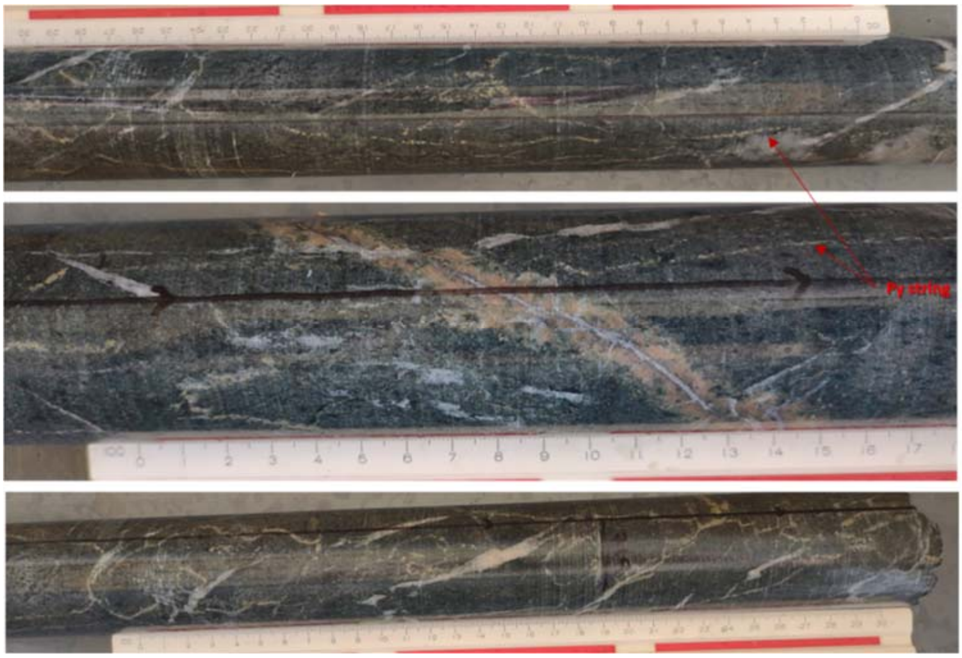

Figure 10: Dolerite dikes.

Drilling so far confirms that we are within a major mineralised magmatic hydrothermal system. The intercepted phyllic alteration zones (containing abundant sulphides) plus the mafic and porphyritic intermediate dikes (which also show considerable sulphide disseminations) conceivably explains the large chargeability anomaly generated in the 2020 Deep IP survey. However, drilling also confirms that we are only now approaching the intersection of the Deep IP chargeability anomaly and the Juruena fault, a priority copper-gold porphyry target,

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.

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. • 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.

Criteria	Commentary
	• No compositing was applied.
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.
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 Licences 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%