

16 December 2019

HIGH-GRADE GOLD INTERSECTED IN FIRST NOVO ASTRO HOLE

Highlights

- **First ever drill-hole at Novo Astro (NADD001) the José Prospect intersects 0.5m @ 38.8g/t Au confirming primary gold mineralisation at depth**
- **Twelve drill holes now completed with two more in progress to complete the initial 2,500m Novo Astro 2019 diamond drilling program**
- **Steady stream of assay results for both Novo Astro and Juruena expected through January and February 2020**

Meteoric Resources NL (**ASX: MEI**) (“**Meteoric**” or “**the Company**”) is pleased to announce it has received the first assay results from drilling at the Company’s 100% owned Novo Astro Gold Project in Brazil. Drilling at both the Novo Astro and Juruena Projects will be completed this week, ending the Company’s Brazilian exploration program for 2019. Onsite at both projects, core logging, sampling and sample dispatch will continue throughout December and into January after the Christmas break, ensuring a steady flow of assay results in Q1 2020.

Managing Director Andrew Tunks said:

*“Results through from the first ever drilling at Novo Astro on the José Prospect has provided confirmation that gold mineralisation continues beneath the Garimpeiro open pits and that gold is associated with both veining and pyrite alteration of the granitic host rocks. Our very first drill hole intersected **0.5m @ 38.8g/t Au** from 72.3m confirming the depth continuity of a high-grade mineralised vein below the Jose Pit. This is a crucial observation as it is the first confirmation that gold exists in the primary rocks below the artisanal open pits in the oxide.*

“At the Graça and Matteus Prospects, where we are currently awaiting results, we have seen stronger alteration and veining than witnessed at José. On the ground there is an expectation of significant gold intercepts at Matteus and Graça, where more intense shearing, alteration and higher sulphide contents have been observed. We anticipate receiving the next batch of results from Novo Astro in January 2020 as well as further results from Juruena.

“The Meteoric Exploration Team have completed an excellent first field season in Brazil which has seen the Company evaluate, acquire and commence exploration which included over 6,000m of diamond drilling and intersection of significant gold mineralisation. As we continue to grow our knowledge of these exciting projects, we are confident of continued success in our 2020 campaign which is currently in planning stage and will commence in Q1, as soon as the tropical rain allows access.

“Finally, I would like to thank all our shareholders for their support during this year which has been a period of great change for Meteoric and wish them a Merry Christmas and a Happy New Year and I look forward to a fruitful 2020 together.”

Novo Astro Drilling Update & Assay Results

Twelve holes have now been drilled at the Novo Astro Project (NADD001 - NADD012), with a final two holes in progress (Figure 1 & Table 1).

Four holes were drilled in and around the José Prospect (towards the western end of a 5km long mineralised corridor), seven drill holes in and around the Matteus Prospect (central zone of 5km long mineralised corridor), and three drill holes into the Graça Prospect (into a parallel E-NE structure).

A total of 2,600m will be drilled at Novo Astro, completing the 2019 Diamond Drilling program. Assay results are now available for NADD001-003 (580m or ~20% of total program).

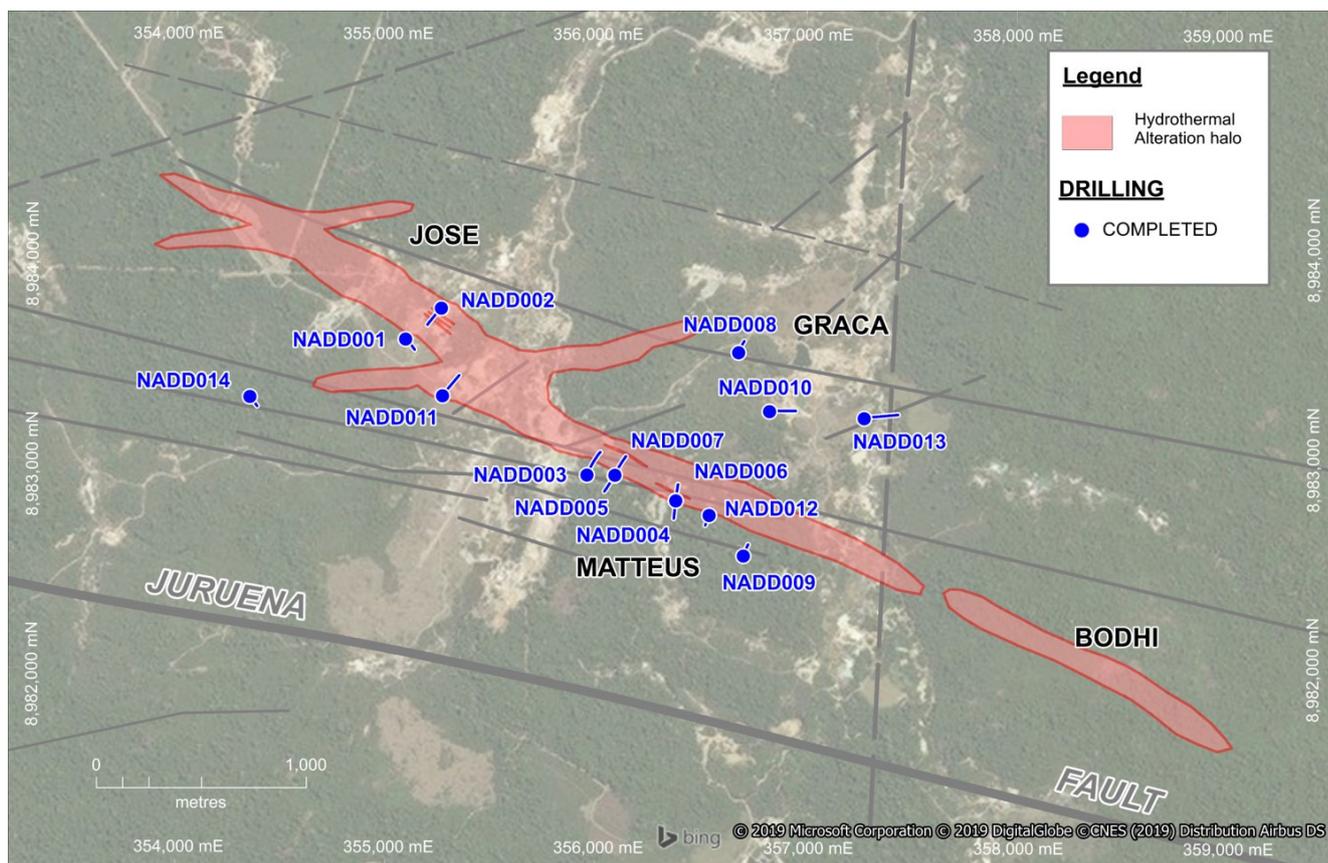


Figure 1. Novo Astro Project – drill hole location map with Prospect locations.

Table 1. Novo Astro drill collar table.

Prospect	Hole_ID	Easting	Northing	RL	Depth	Azimuth	Dip	Comments
José	NADD001	355094	8983574	221	135.30	140	-60	
José	NADD002	355263	8983722	214	218.88	220	-60	
Matteus	NADD003	355960	8982930	195	224.22	025	-70	
Matteus	NADD004	356383	8982808	241	204.00	005	-70	
Matteus	NADD005	356091	8982927	207	168.97	205	-60	
Matteus	NADD006	356383	8982810	255	252.96	185	-60	
Matteus	NADD007	356093	8982929	207	191.28	025	-60	
Graça	NADD008	356680	8983515	219	108.23	025	-60	
Matteus	NADD009	356706	8982547	225	107.57	025	-60	
Graça	NADD010	356828	8983234	222	261.39	090	-60	
José	NADD011	355270	8983304	215	191.40	040	-50	
Matteus	NADD012	356542	8982739	230	130.76	200	-65	
Graça	NADD013	357279	8983202	206	250.00	085	-50	Design depth
José	NADD014	354352	8983298	226	120.00	145	-60	Design depth

*Datum: UTM_SIRGAS2000 (Zone 21S)

José Target

Two holes were completed at José for 354m. NADD001 targeted N-NE trending mineralisation and veining sampled in the José Pit (best result 93g/t Au (ASX: BRV 11/09/2013)) and intersected **0.5m @ 38.8g/t Au** from 72.3m (Figure 2). This confirms the depth continuity of a high-grade mineralised vein below the Jose Pit and well into the fresh rock. This intercept occurs within one of the zones of weak to moderate sericite-pyrite alteration (70.2m - 80.1m). This is extremely encouraging and shows the potential for more high-grade veins within the extensive sericite-pyrite alteration zones which pervade the prospects at Novo Astro.

NADD002 targeted the E-SE mineralised corridor below the José Pit and intersected a significant **13m zone of anomalous gold**, namely 13m @ 0.34g/t Au from 46m (Figure 3 & Table 2). Anomalism occurs in a zone of weathered and variably sheared and altered porphyritic granite.

Table 2. Novo Astro (NADD001-003) mineralised intercept table.

Hole_ID	From (m)	Interval (m)	Au Grade (g/t)
NADD001	0.0	3.0	0.45
	72.3	3.0	6.52
including	72.3	0.5	38.80
NADD002	42.0	13.0	0.34
<i>including</i>	<i>46.0</i>	<i>1.0</i>	<i>1.32</i>
	84.6	3.4	0.17
NADD003	27.0	5.7	0.70
<i>including</i>	<i>28.0</i>	<i>2.0</i>	<i>1.30</i>

**min 2m width, bottom cut 0.1g/t Au, max 2m internal dilution*

Whilst the alteration observed below the José Pit (corresponding to the E-SE trending mineralised corridor) shows several zones of moderate sericite alteration, the sulphide content is generally lower than that observed further east along the trend at Matteus and Graça Prospects (Figures 5 & 6). The Company believes there is a realistic expectation that gold grades will be higher at Matteus and Graça where there are substantially larger artisanal workings and higher sulphide contents.

Matteus Target

Results from only one hole (NADD003) at Matteus has been received to date. A zone of anomalous gold was intersected in saprolite from 27m depth with 5.7m @ 0.70g/t Au. The hole was collared at the western end of the prospect (Figure 1) and was drilled to 224m. Drilling intersected several zones of moderate to strong sericite alteration but like José, the sulphide (pyrite) content was generally weak (Figure 4).

Holes drilled further east along the trend intersected zones of moderate to strong sericite with much greater sulphide content, up to 20% (Figures 5 & 6), than the generally weaker zones observed in holes NADD001-003 (1%-3% pyrite).

Assay results for holes NADD004-009 are expected to be available progressively from mid-January.

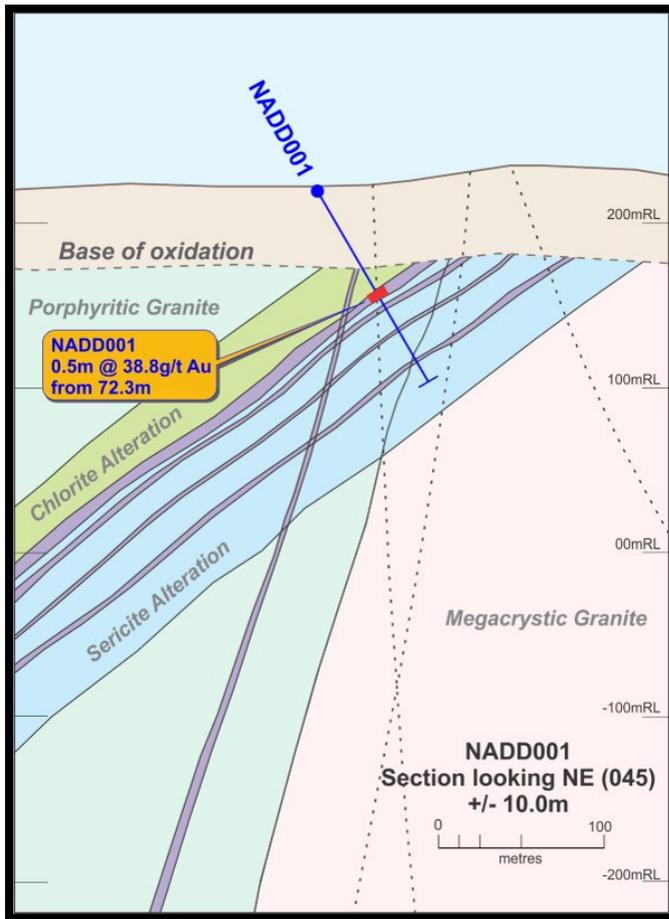


Figure 2: Cross Section of NADD001 showing mineralised intersection. (INSET – NADD001 72.5m): weak hydrothermal alteration marked by the presence of sericite + chlorite + pyrite veinlets and quartz + pyrite vein.

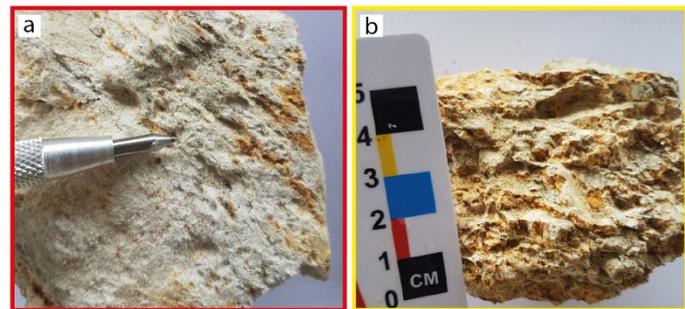
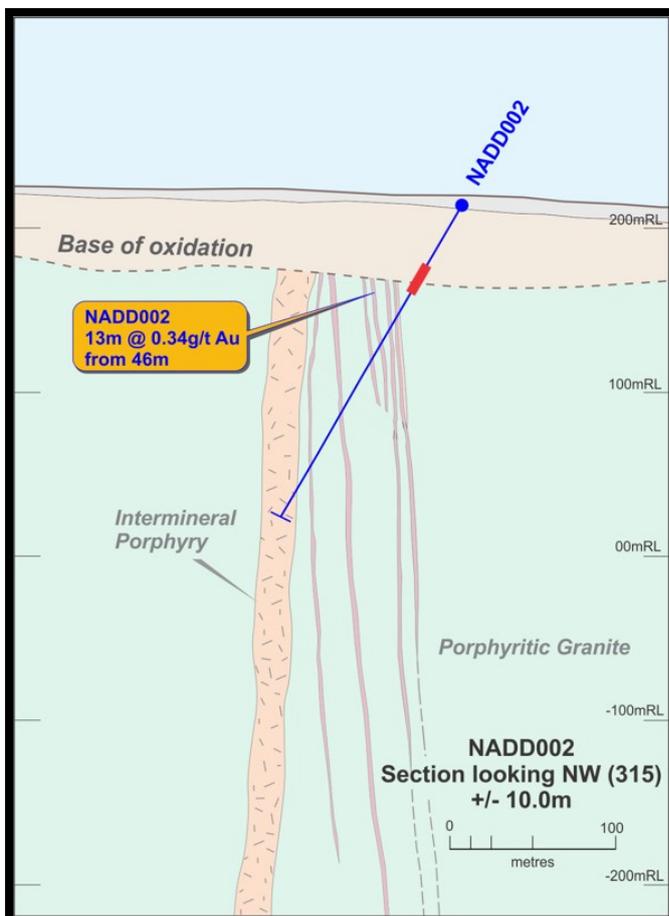
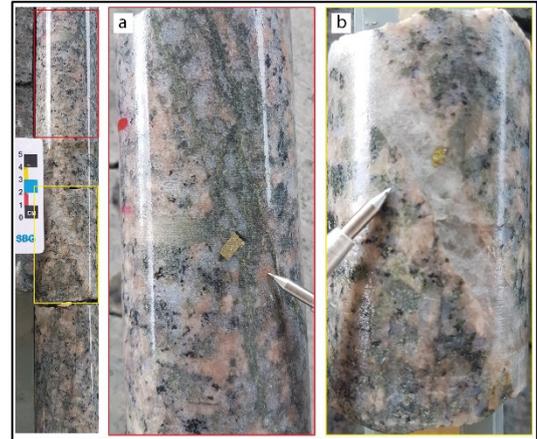


Figure 3: Cross Section of NADD002 showing mineralised intersection. (INSET): Foliated saprolite from within mineralised intersection (possibly sheared granite) with presence of orange, brownish and black oxides.

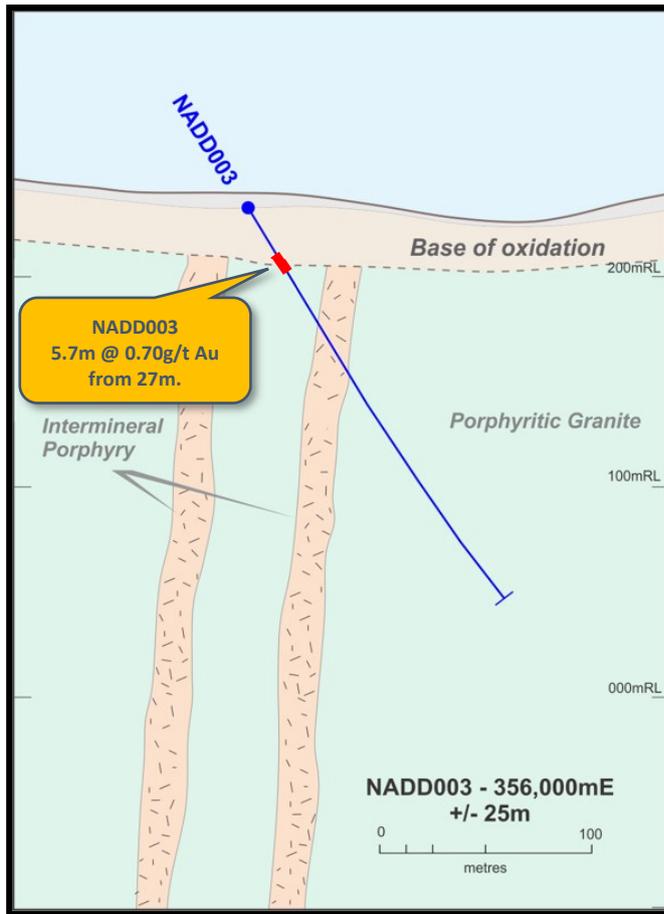


Figure 4: Cross Section 356,000mE (NADD003) showing mineralised intersection. (INSET – NADD003 58.5m): Anomalous intersection with 0.2g/t Au in sheared, moderate to strongly sericite altered porphyritic granite (note presence of only weak pyrite <1%).



Matteus and Graça Prospects

Inspection and logging of drill holes in the central portion of the 5km long mineralised corridor at Novo Astro generally shows a greater abundance of sulphides (pyrite). Examples can be seen in NADD007 & 008 (Figures 5 & 6 respectively). This also coincides with the larger Garimpeiro workings at Matteus and Graça.

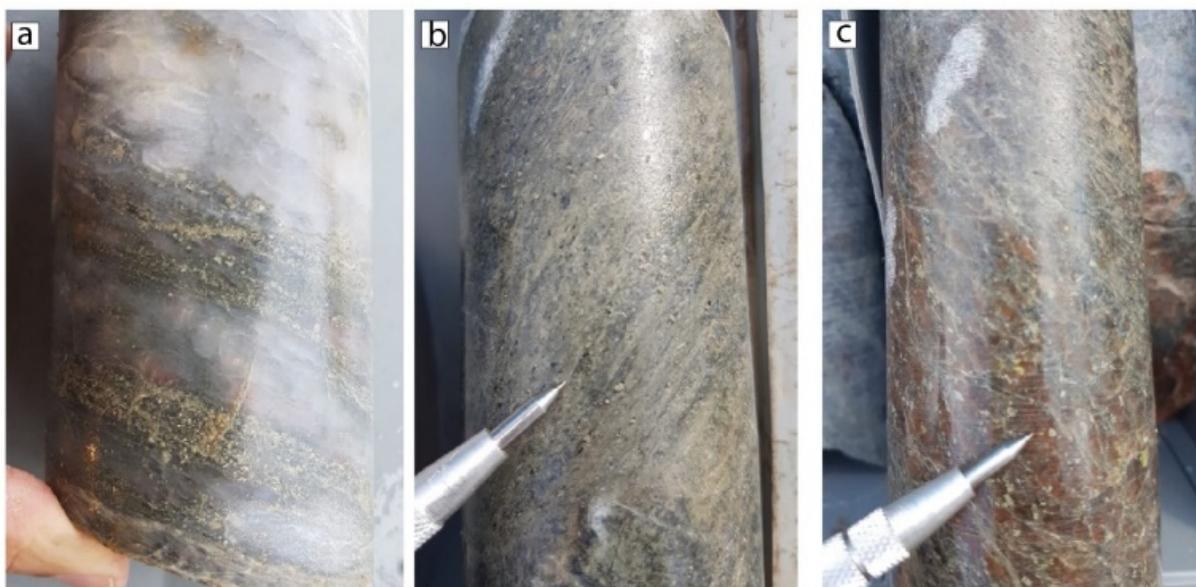


Figure 5: NADD007 - Matteus Prospect. Strong pyrite alteration seen at: a) 58m and, b) & c) 172-180m.

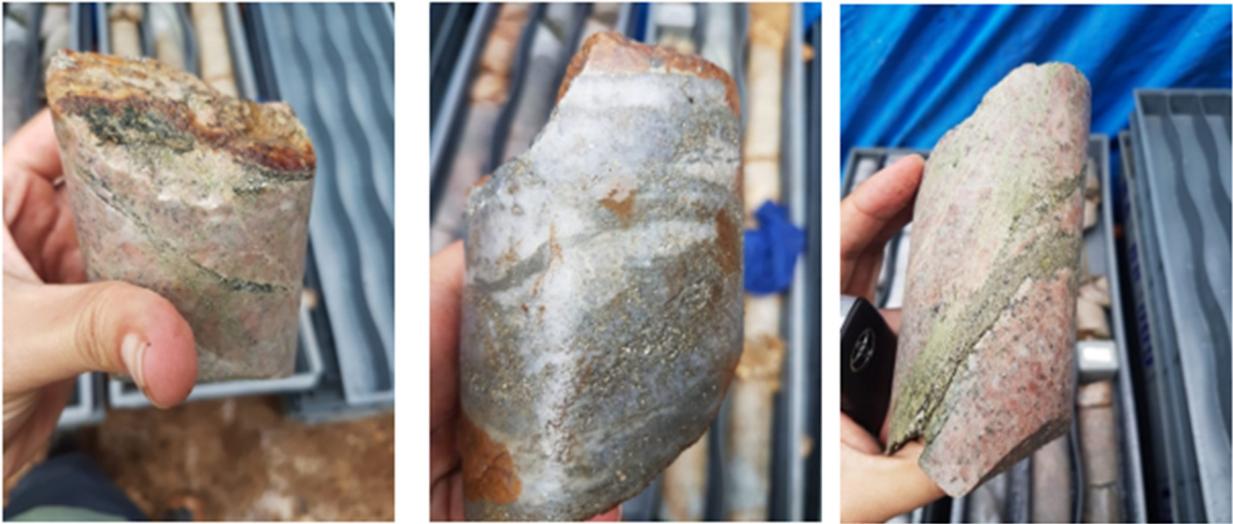


Figure 6: NADD008 - Graça Prospect. Strong pyrite alteration associated with shearing and veins observed down the hole.

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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
<i>Sampling techniques</i>	<ul style="list-style-type: none"> • Diamond core was split in half lengthways and sampled at 0.5 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.
<i>Drilling techniques</i>	<ul style="list-style-type: none"> • Coring was done by GEOSOL Brasil 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 800 (eight hundred) meters in NQ. • 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 GEOSOL at the completion of each hole using a MAXIBORE tool. • The drill core was oriented every 3m in NQ core using a REFLEX ACT2 tool.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> • 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.
<i>Logging</i>	<ul style="list-style-type: none"> • 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.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> • 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: 0.5m inside alteration zones and 1.0m outside them. This is considered appropriate for the style of mineralisation.
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> • 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.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> • 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 .
<i>Location of data points</i>	<ul style="list-style-type: none"> • Collar surveys are initially performed using handheld GPS with accuracy to ~5m . At the completion of drilling collar locations will be picked up using a Trimble total station (+/- 5cm). 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, SAD69 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.

Criteria	Commentary
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> The drilling carried out is on a wide spaced and variable grid given the early stage of the exploration drilling. 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.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> 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.
<i>Sample security</i>	<ul style="list-style-type: none"> 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.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> 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
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> A full listing of the tenements is shown in Appendix 2. There is an existing 1% net smelter return payable interests, historical sites, wilderness or national to a previous owner. There are three Garimpo mining licences within the tenement package, allowing the Garimpeiros 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.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> Garimpeiros first discovered the mineralised areas around Jurueña in the 1970's . Garimpeiros 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. 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.
<i>Geology</i>	<ul style="list-style-type: none"> The Novo Astro 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 Jurueña-Rondonia block of the Amazon Craton.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> See body of report
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> Significant intercepts were 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.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> 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.
<i>Diagrams</i>	<ul style="list-style-type: none"> See included Figure(s) in the announcement.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> Results are reported from all significant intercepts in Appendix 1.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> None.
<i>Further work</i>	<ul style="list-style-type: none"> Further work is discussed in the body of the report.

Appendix 2: Table of 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%
866.531/2015	Granted Exploration Permit	COLNIZA/MT, COTRIGUAÇU/MT	100%
866.532/2015	Granted Exploration Permit	COTRIGUAÇU/MT	100%
866.533/2015	Granted Exploration Permit	COLNIZA/MT, COTRIGUAÇU/MT	100%
866.534/2015	Granted Exploration Permit	COLNIZA/MT, COTRIGUAÇU/MT	100%
866.535/2015	Granted Exploration Permit	COLNIZA/MT, COTRIGUAÇU/MT	100%
866.537/2015	Granted Exploration Permit	COLNIZA/MT, COTRIGUAÇU/MT	100%
866.538/2015	Granted Exploration Permit	COTRIGUAÇU/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%

