

24 June 2020



## EXPLORATION UPDATE

Meteoric Resources NL (**ASX: MEI**) ("**Meteoric**" or "**the Company**") is pleased to advise that it has commenced its 2020 field season at the Palm Springs Gold Project ("**Palm Springs**") located 30km SE of Halls Creek in the Kimberley of Western Australia, pending the imminent completion of its acquisition of the Project. The Company is commencing its WA exploration program in tandem with its current drilling program in Brazil at its wholly owned Juruena Project and as such, MEI provides the following update on its current ongoing work programs across its multinational gold portfolio.

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### **PALM SPRINGS – W.A.**

- **Palm Springs Gold Project** is an advanced exploration play with spectacular historical drill intercepts sitting under an historical open pit operation as announced to ASX on 15 June 2020, including:
  - **BCP036 – 68m @ 2.5g/t Au from 44m**
  - **BCR250 – 19m @ 8.8 g/t Au from 56m**
  - **BCP017 – 50m @ 3.31 g/t Au from 50m**
- Drilling will focus on adding to the historic resource at **Butchers Creek** Open Pit gold mine by targeting shear hosted high grade mineralisation **open at depth and down plunge** to the south
- 1996 RC drill intercept of **73m @ 2.26g/t Au from 169m** (ASX announcement 15/05/20) located 100m south of Butchers Creek open pit – the down plunge potential remains almost completely untested to date
- Exploration and drill planning underway with MEI geologists currently on-site planning to commence drilling in Q3

### **JURUENA – BRAZIL**

- 2020 Diamond drilling has commenced at Juruena targeting the Dona Maria Prospect with JUDD024
- JUDD024 has been completed for 302m intersecting a strong alteration at the target depth
- JUDD025 is currently at 210 metres with a target depth of 380m which is more than 150m below deepest hole from 2019 (JUDD022 - 4.4m @ 13.5 g/t Au from 300m) (ASX announcement 27/2/20)
- The Donna Maria drilling is targeting down plunge of Bonanza 2019 Intercepts - JUDD001 which intersected 20.6m @ 94.9 g/t Au from 96.8m JUDD008: 14.0m @ 81.7 g/t Au from 142m (ASX announcement 14/10/2019)
- Gold assay results expected to flow from August 2020
- The second stage of the program will follow up gold-copper porphyry potential and in particular 2019 results at Crentes where JUDD010 intercepted - 53.3m @ 1.33 g/t Au and 0.23% Cu (ASX announcement 16/11/19)

**Managing Director Dr Andrew Tunks said,**

*“We are delighted to have been in a position to move swiftly to enter into an agreement to secure an Australian asset in the Palm Springs Project and we already have boots on the ground (within a week of announcing its acquisition) thus officially kicking-off our 2020 field season in the Kimberley. The Palm Springs Project has significant upside potential for shear hosted high grade mineralisation, as demonstrated by the historical drill intercepts. Our plan is to heed the advice of numerous geologists previously working at the project by engaging structural experts to commence a detailed exploration program to gain an understanding of the structural setting and its controls on mineralisation. Following this we will compile a 3D model and get busy drill testing these high-grade gold targets.*

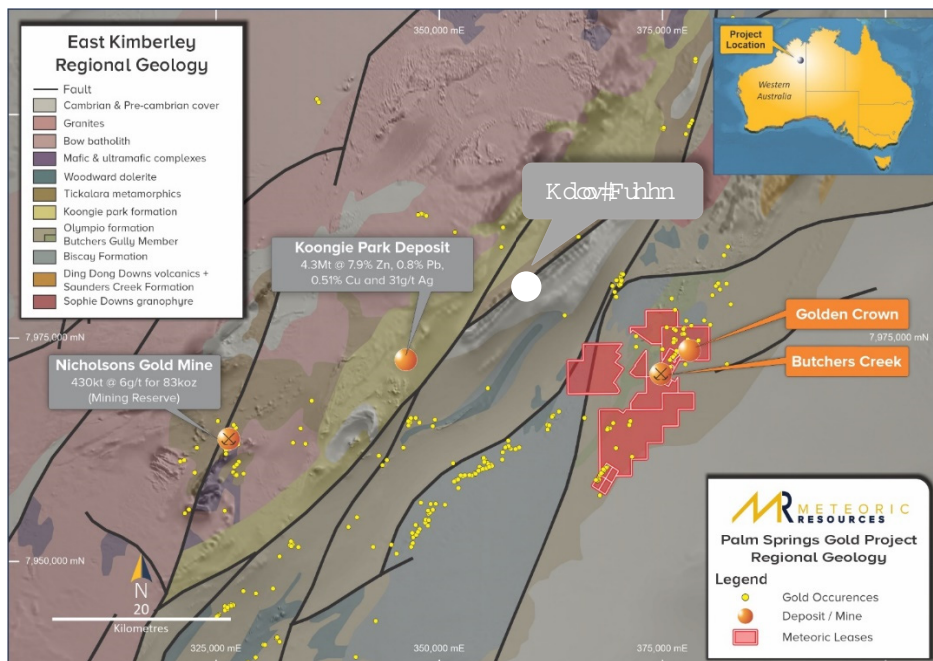
*“At Juruena in Brazil we have successfully executed our back to work strategy and we are already on hole two of our Resource expansion program targeting the Dona Maria and Crenes prospects. We have commenced work at the very high-grade Dona Maria project where we are looking to convert inferred resources to indicated and extend the resource down plunge. After Dona Maria we will move onto a potential Company maker where we look for the source of the high-grade mineralisation, namely the gold copper porphyry system which we believe is driving the entire Juruena mineralised system.”*

### **Palm Springs Gold Project, Western Australia**

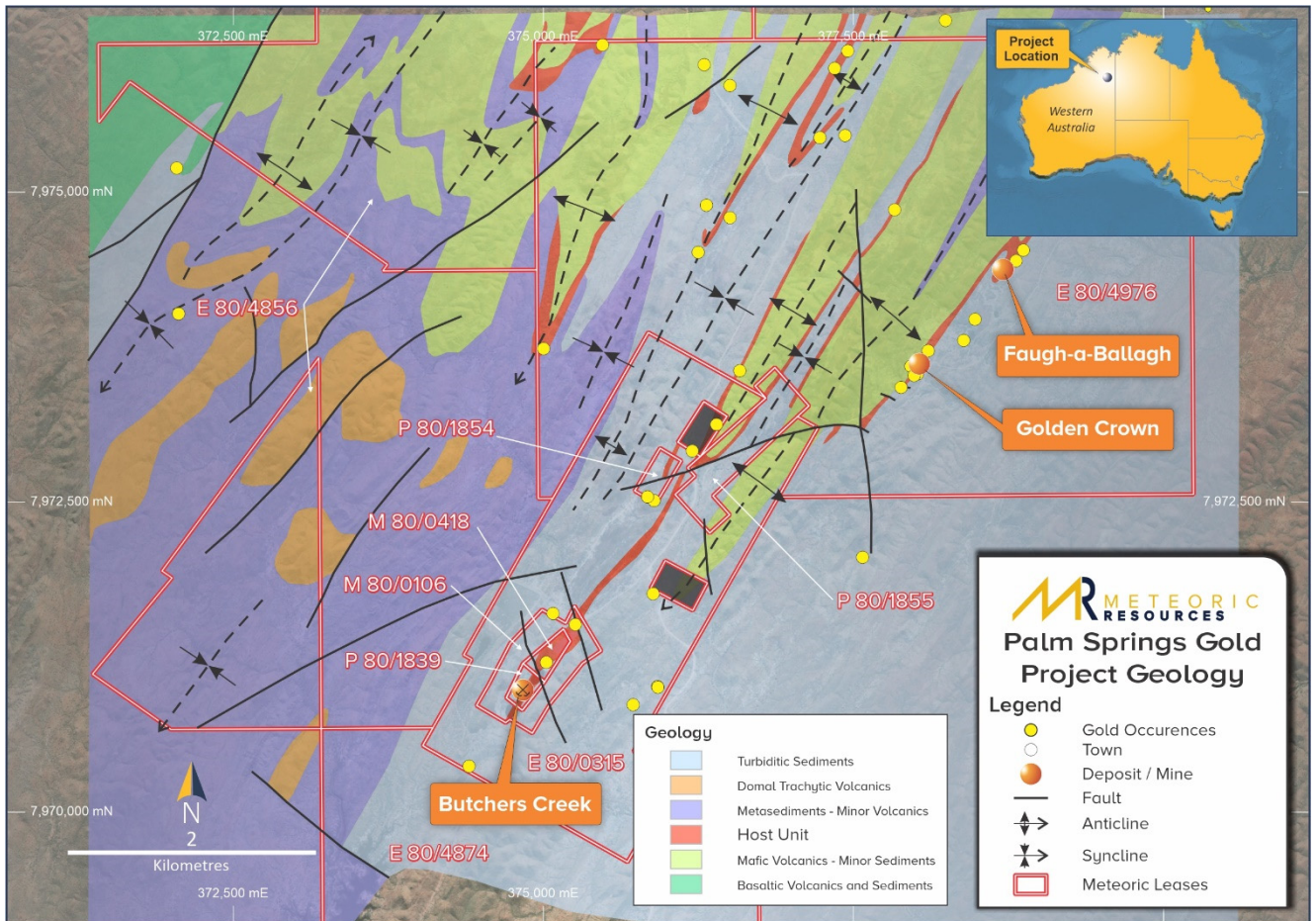
Pending the imminent completion of the acquisition of the Palm Springs Project, the Company has already mobilised to site in preparation of its initial exploration and drilling program which is expected to commence in Q3.

This initial program will include:

1. RC and Diamond Drilling Program to explore for extensions of the Butchers Creek Orebody where historic intercepts below the base of the open pit include (ASX announcement 15/06/2020):
  - **BCP036 – 68m @ 2.5g/t Au from 44m**
  - **BCR250 – 19m @ 8.8 g/t Au from 56m**
  - **BCRC322 – 6m @ 13.9 g/t Au from 150m**
  - **BCP017 – 50m @ 3.31 g/t Au from 50m**
2. Evaluation of Regional Structural targets focussing in on the “Host Unit”, a trachyte host rock that concentrates gold mineralisation, following which the Company will build a 3D model across the licences.
3. Baseline geophysical studies to identify and target non-outcropping host unit and sulphide alteration.



**Figure 1.** Regional Geology of the Halls Creek Orogen showing the location of the Palm Springs Gold Project. Note the concentration of known gold deposits within the Eastern edge of the Block specifically within the units of the Biscay and Olympic Formations.



**Figure 2.** Geological map of the Main Prospects at the Palm Springs Project where mineral Resources have been previously defined. The concentration of historic workings can clearly be seen in relation to the outcrop patterns of the **host unit**.

Company Geologists are currently in the field planning and putting the required systems in place to commence our exploration efforts as soon as possible. We look forward to updating the market with our initial exploration plan by mid-July and expect to be able to commence our drilling programs within the third quarter 2020.

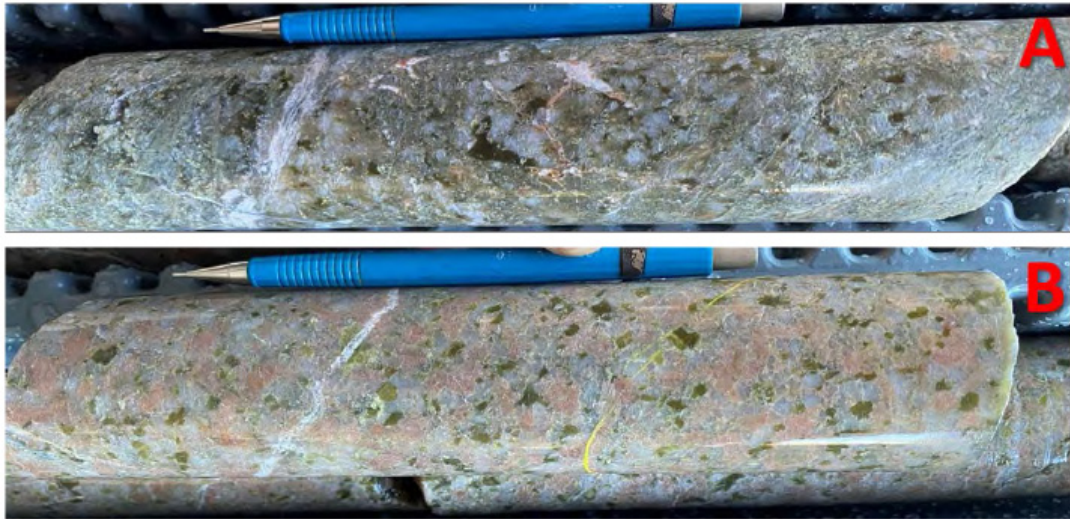
## Juruena Gold Project, Brazil

Meteoric commenced its 2020 Brazilian diamond drilling program on 8<sup>th</sup> of June following the arrival of its new drilling contractor, Willemita Sondagem Ltda. Progress has been excellent with 510m drilled to date.

The first hole at Dona Maria JUDD024 was drilled to a depth of 302m and intersected a zone with strong phengitic alteration at the target depth (256.70 to 262.86 metres, Figure 3).

A second hole (JUDD025) to test 150m below the current high-grade resource at Dona Maria is underway, currently at 208m. Logging and sampling of the holes is underway and samples will be despatched to the laboratory in the coming weeks. At this stage it is anticipated that assay results will begin to flow from the laboratory in August.





**Figure 3.** Phengite and quartz + carbonate zone in JUDD024 at Juruena (intercept 256.7m-264.7m).

Target	HOLE_ID	Easting	Northing	RL	Depth	Azi.	Dip
Dona Maria	JUDD024	327975	8990092	231	302.05	090	-60
Dona Maria	JUDD025	327985	8990029	231	450*	090	-72
Geographic Datum: UTM_SAD69 (z21S)							
* Target Depth (hole in progress)							

**Table 1:** Collar Table for 2020 Program to date

## 2020 Drilling Program -Background

Meteoric commenced its 4,000m drilling program at Juruena on 8<sup>th</sup> June 2020. The program will initially target the Dona Maria gold prospect where the 2019 drilling program confirmed continuity of two high-grade shoots (north & south) that remain open at depth beneath the existing resource.

- Increasing the size of the current epithermal gold Mineral Resource across Juruena;
- Converting Inferred resource ounces into the Indicated category; and
- Following up gold-copper porphyry-style mineralisation at Crentes prospect.

The program has commenced at Dona Maria targeting the Southern Shoot in two separate zones:

- Zone 1 within the existing resource with an aim to improve estimation confidence.
- Zone 2 below the existing resource with an aim to further grow the resource.

The 2020 program will follow up bonanza grade gold intercepts achieved in the 2019 program which included:

- JUDD001 - **20.6m @ 94.9 g/t Au from 96.8m (1,954 g/t.m)** including 3.65m @ 508.4 g/t Au from 107.5m (1,885 g/t.m) (refer ASX announcement 18/9/19)
- JUDD008 - **14.0m @ 81.7 g/t Au from 142.0m (1,144 g/t.m)** including 2.0m @ 71.6 g/t Au from 144.5m (143 g/t.m) and 2.5m @ 287.4 g/t Au from 149.0m (716 g/t.m) (refer ASX announcement 14/10/19)
- JUDD0022 - **4.4m @ 13.5 g/t Au from 300m (59 g/t.m)** including 2.0m @ 27.3 g/t Au from 302m (55 g/t.m) (ASX announcement 27/2/20)
- JUDD010 - **53.3m @ 1.33 g/t Au and 0.23% Cu** (refer ASX announcement 16/11/19)

This release has been authorised by the Board of Meteoric Resources NL. For further information contact:

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### Competent Person Statement

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"> <li>Diamond core was split in half lengthways and sampled at 0.5 – 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.</li> <li>Samples were placed in high density plastic sample bags and sealed shut with cable ties.</li> <li>Sample mass varied according to the sample length, typically mass varied between 1- 6kg.</li> </ul>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>Coring was done by Willemita Sondagem 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 800 (eight hundred) meters in NQ.</li> <li>Holes were collared to fresh rock using HQ diameter, and the hole was completed using NQ diameter.</li> <li>Drilling was standard tube (not triple tube).</li> <li>Drill hole inclinations ranged from -45 to -77 degrees.</li> <li>Down-hole surveys were carried out by Willemita Sondagem Ltda at the completion of each hole using a MAXIBORE tool.</li> <li>The drill core was oriented every 3m in NQ core using a REFLEX ACT2 tool.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>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 &gt; 90% recovery.</li> <li>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.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>All drill-holes are geologically and geotechnically logged, and the data stored in a digital database.</li> <li>Logging of diamond drill-core is a combination of qualitative and quantitative and records: weathering, colour, texture, lithology, alteration, mineralisation, and structure.</li> <li>The core is also photographed and catalogued.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>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.</li> <li>Duplicate samples are routinely done by cutting half of the core for sampling into quarter, and both pieces are analysed.</li> <li>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.</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>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 106µm.</li> <li>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 &gt;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.</li> <li>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.</li> <li>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.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>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.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>No twin holes were employed in this drilling campaign.</li> <li>No adjustments or calibrations were made to any assay data .</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>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.</li> <li>The grid system used for all data types in a UTM projection, SAD69 Zone 21 Southern Hemisphere.</li> <li>Topographic control in the area of the drilling is generally poor (+/- 10m), control is made using topographic maps and hand-held GPS.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>The drilling carried out is on a wide spaced and variable grid given the early stage of the exploration drilling.</li> <li>The density of information is considered insufficient for conducting a mineral resource estimate to the standards required by the JORC 2012 mineral resource code.</li> <li>No compositing was applied.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>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 .</li> <li>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.</li> <li>None of the reported significant intersections are a result of intentional sample bias.</li> <li>There is discussion in the text as to possible true widths.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>The sampling techniques and data have been reviewed by the Competent Person and are found to be of industry standard.</li> <li>No audits were completed by any external parties.</li> </ul>

## 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"> <li>A full listing of the tenements is shown in Appendix 2.</li> <li>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.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>See body of report</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>See included Figure(s) in the announcement.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>Results are reported from all significant intercepts in Appendix 1.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>None.</li> </ul>

*Further work*

- Further work is discussed in the body of the report.