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METEORIC RESOURCES

ASX ANNOUNCEMENT

29 OCTOBER 2021

Quarterly Report – September 2021

Meteoric Resources NL (ASX: MEI) ("Meteoric" or "the Company") provides shareholders with its Quarterly Report for the three-month period ending 30 September 2021.

Highlights from the quarter include:

Western Australia - Palm Springs Gold Project

- 2021 Exploration Drilling Program at Butchers Creek completed 10 holes for 3,240m of diamond with RC precollars
- Visible gold observed at three intervals in BCRD484 with a 79m intersection of gold-hosting syenite
- Results from drilling demonstrate anticlinal hinge zone intersections, confirming large, robust intervals including:
  - **BCRD483 – 57m @ 1.6g/t Au from 223m including 18m @ 3.1g/t Au from 234m**
  - **BCRD484 – 32m @ 1.4g/t Au from 266m including 4m @ 6.0g/t Au from 266m**
  - **BCRD486[1] – 29m @ 2.0g/t Au from 286m including 2m @ 5.9g/t Au from 291m & including – 2m @ 8.8g/t Au from 312m**
  - **BCRD482 – 9m @ 1.4g/t Au from 311m**
- Results further enhance Meteoric's progress at Palm Springs and provide confidence to move ahead with a Scoping Study considering open pit and underground development scenarios
- Regional exploration activities such as mapping, rock-chip sampling, aerial and ground surveys receive Heritage clearance from Kimberley Land Council and Traditional Owners

Brazil - Juruena

- Drilling of diamond holes testing the deep IP chargeability anomaly at Juruena was completed during the quarter with 3 holes for 2,400m
- Results were finalised subsequent to the quarter and the Company confirmed the intersection of significant thickness of anomalous copper reported in hole JUDD043 in excess of 600m at greater than 200 ppm copper2
- Observed porphyritic intrusives, veining and alteration indicate presence of a magmatic hydrothermal (porphyry) mineralised system
- Scoping Study for the development of Juruena Gold deposits has commenced and Mining licence applications underway

[1] Holes BCRD486 and 483 released subsequent to quarter (ASX:MEI 26/10/2021)
[2] ASX:MEI 25/10/2021

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Corporate

- Dr Marcelo De Carvalho appointed to Meteoric's board, bringing in-depth knowledge of the Juruena Project and years of Brazilian exploration experience
- Cash and liquid assets of approximately $3.0 million

Palm Springs Gold Project, WA

During the Quarter, Meteoric's follow-up drilling program at Palm Springs Gold Project confirmed the presence of thick, robust zones of mineralisation to the south of the 2020 Mineral Resource Estimate (MRE) for Butchers Creek, confirming the orebody extends and remains open to the southwest.

Meteoric's drill program at Palm Springs was carefully planned to improve confidence in the high-grade portions of the resource (5.2Mt @ 1.9g/t Au [319,000 oz]) by targeting the hinge zone position in areas with insufficient drilling, and, also testing for continuations of mineralised syenite south of the current resource. The program was designed as seven reverse circulation (RC) pre-collars with diamond tails and one diamond tail as a re-entry of BCRC482 from its 2020 drilling program, however the Company completed 10 drill holes for a total of 3,241m (1,959m RC and 1,282m DD) which comprised nine RC pre-collars (only five received diamond tails) and one diamond tail re-entry of BCRC482 from the 2020 drill campaign.

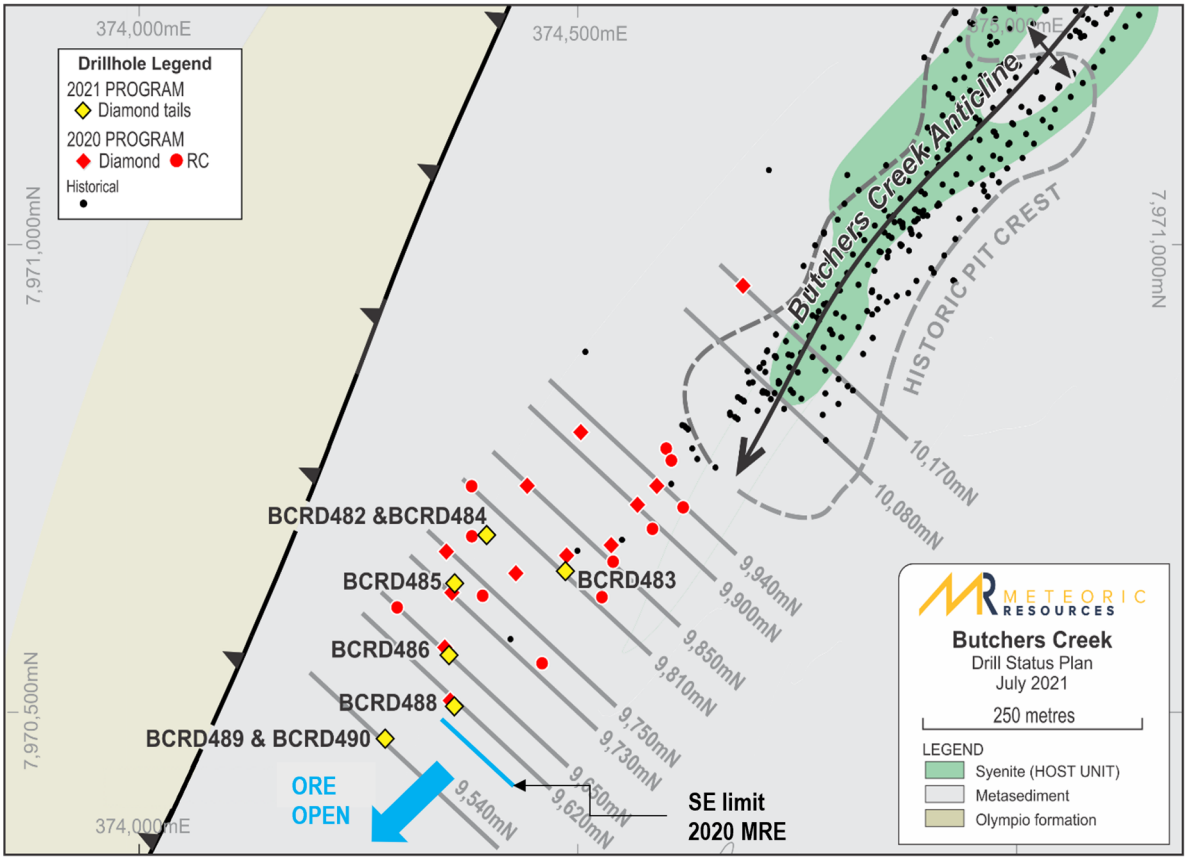

Figure 1. *Project geology and collar plan showing historic drill holes and MEI's 2020 & 2021 programs. Blue line shows SE limit of 2020 MRE. Solid blue arrow shows direction of fold plunge and orebody which remains open.*

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Geology and Mineralisation

Mineralisation at Butchers Creek is stratabound within a single intermediate intrusive unit (syenite). The localisation of alteration, including intense sulfidation and related gold mineralisation within the syenite appears to be related to a rheology contrast between the syenite and the surrounding sedimentary rocks. The syenite deforms in a brittle manner allowing veining, fracturing and alteration to concentrate there. This is most prevalent in the hinge zone region of a northeast striking, shallowly southwest plunging fold where thick zones of mineralisation (up to 70m down hole) are often intersected.

The syenite is generally albitised with abundant quartz + carbonate + chlorite veins and localised sulphide veinlets and alteration haloes containing pyrite > pyrrhotite >> arsenopyrite. The best mineralised intercepts exhibit strong albite alteration and abundant sulphides. In addition, recent petrological investigation clearly shows the gold is related to the sulphides present in the syenite with gold occurring dominantly as inclusions within pyrite and pyrrhotite.

Drilling Highlights for the quarter

- **BCRD483 – 57m @ 1.6g/t Au from 223m**
  including 18m @ 3.1g/t Au from 234m
- **BCRD484 – 32m @ 1.4g/t Au from 266m**
  including 4m @ 6.0g/t Au from 266m
- **BCRD486[3] – 29m @ 2.0g/t Au from 286m**
  including 2m @ 5.9g/t Au from 291m
  & including – 2m @ 8.8g/t Au from 312m
- **BCRD482 – 9m @ 1.4g/t Au from [311m]**

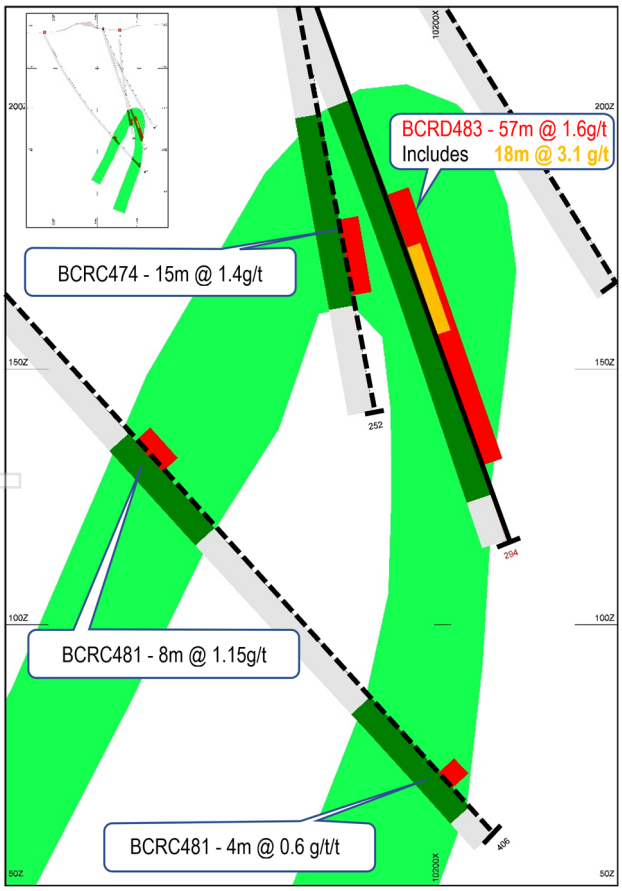

Figure 2. Detailed X-Section 9810m N: BCRD483 geology and mineralised intercept.

Hole BCRD483 intercepted a broad hinge zone of 57m @ 1.6 g/t with an internal high-grade zone of 18m @ 3.1 g/t.

Solid drill traces are holes from 2021 Drilling Program Geology is shown to left of trace and significant gold grades to right. Host Syenite = Green.

Dashed drill traces are holes BRCD 481 and BCRC 474 are from 2020 Drilling Program.

Inset shows complete x- section from surface.

[3] Holes BCRD486 and 483 released subsequent to quarter (ASX:MEI 26/10/2021)

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Heritage Impact Assessment Meeting

In July, the Company attended a successful meeting with a representative from the Kimberley Land Council and members of the Koongie-Elvire (Traditional Owners) in Halls Creek. Meteoric presented its proposed 2021-2022 Exploration Programs on the exploration tenements surrounding the Butchers Creek mining licenses to the group. The Company received approval to commence work on activities not related to any ground disturbance, including mapping and rock chipping, an aerial survey and several ground IP surveys.

Reconnaissance mapping and surface sampling was carried out on eleven (11) transects up to 500m in length, and from 400m to 1,000m apart, along the strike of the syenite (Figure 5). The majority of targets displayed abundant Fe-oxide alteration plus boxwork textures presumable after sulphides and/or carbonates +/- albite. Assays are expected in November

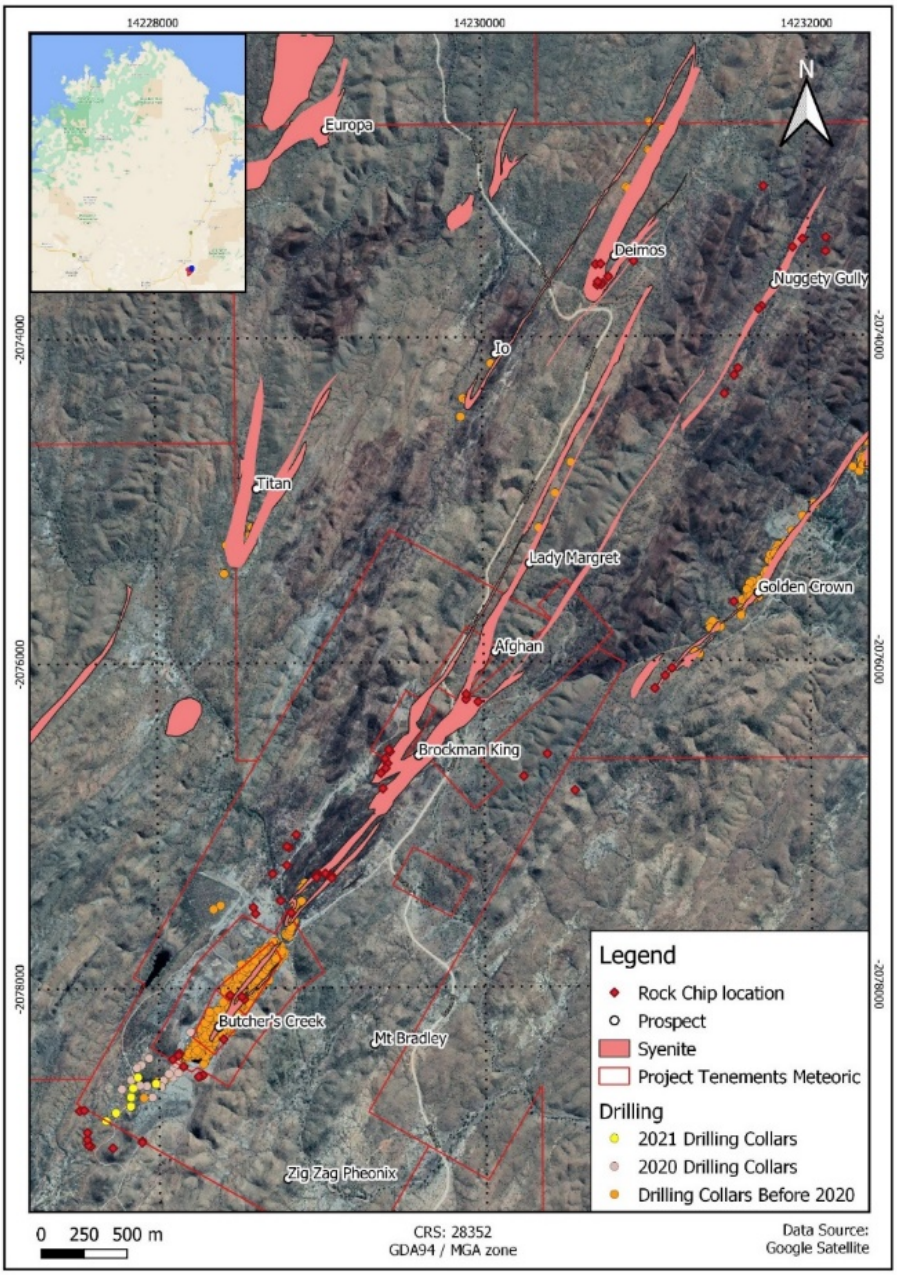

Figure 3. *Regional soil and rock chip sampling locations (RED diamonds) – Sep-Oct 2021. MEI and Historic drill collar locations for Butchers Creek and Golden Crown are shown as orange circles.*

Juruena Copper-Gold Porphyry Project, Brazil

In July, Meteoric reported an update on the geology of hole JUDD043 at Juruena in Brazil. JUDD043 is the second of three planned drillholes into the Juruena Porphyry System, targeting the western portion of the large IP chargeability anomaly above 15 mv/v (ASX:MEI 09/12/2020), immediately below a strong Cu-Mo soil anomaly, zones of copper sulphides in a mineralised intermediate porphyry intrusion with strong proximal-propylitic alteration, and is located in close proximity to the Juruena Fault.

The hole was completed to 820m, intercepting further intermediate porphrytic intrustives, and 320m of moderate to strong phyllic alteration, accompanied by mixed pyrite, molybdenite, chalcopyrite and bornite.

Molybdenum and copper sulphides were observed in over 600m of core from JUDD043, pointing to the presence of a potentially large mineralised porphyry copper-moly system. Subsequent to the quarter the Company released all results from the 3 hole program the highlight was a 600m zone od anomalous copper in JUDD043 which reported significant thickness of anomalous copper reported in hole JUDD043 in excess of 600m at greater than 200 ppm copper[4]

At the completion of JUDD043, the rig returned to hole JUDD042 which was suspended at 940.6m awaiting additional drilling equipment. The continuation of the hole aimed to cross the Juruena Fault zone which showed strong hydrothermal alteration and copper sulphides and explore onto the footwall of the Juruena Fault. Unfortunately, due to excessive broken ground in the Juruena Fault, the hole was abandoned at 946m depth. The rig then moved onto hole JUDD044 approximately 550m west which was finished September, subsequent to the quarter the Company reported no significant mineralisation in Hole JUDD044 .

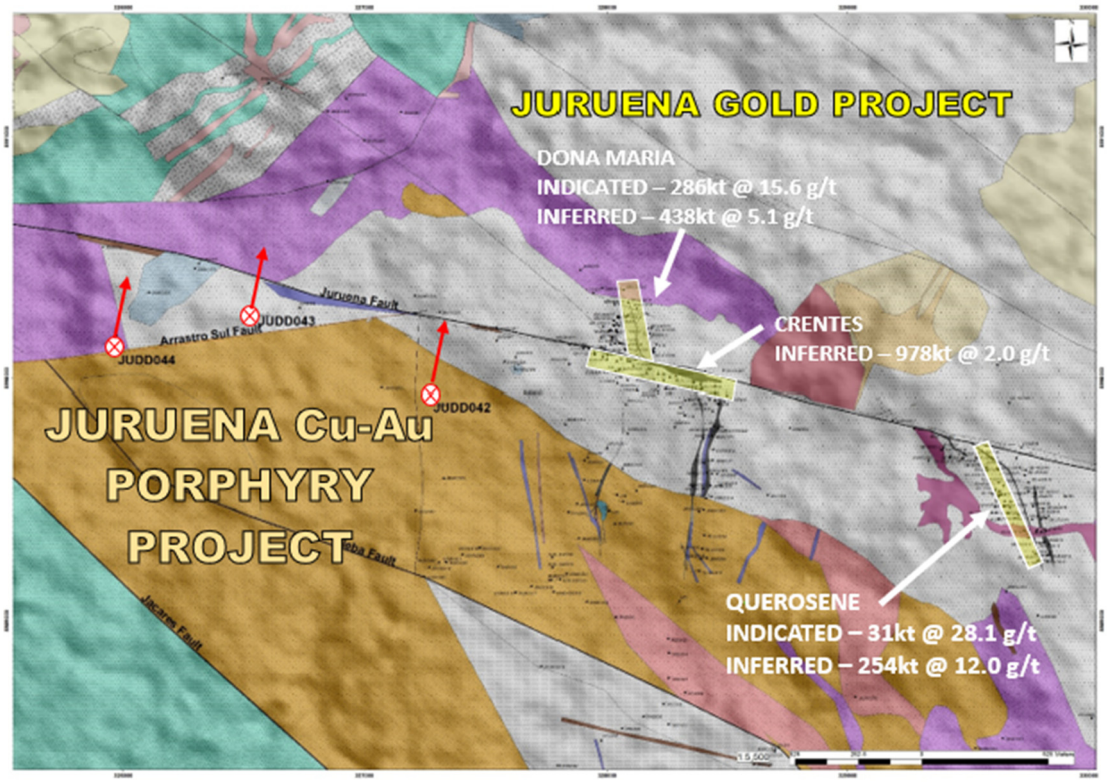

Figure 4. *Drillhole collar plan with geology background – highlighting the 3 deep porphyry exploration holes and the shallow epithermal gold resources.*

[4] ASX:MEI 25/10/2021

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Juruena Gold Project – Scoping Study

During 2021 the Company updated the Mineral Resources for Juruena on June 15th 2021.

Prospect & Depth	RESOURCE CATEGORY	CUT-OFF (g/t)	TONNES	GRADE (g/t)	GOLD (oz)
All < 100m	Indicated	0.8	150,000	13.7	66,300
All > 100m	Indicated	2.5	136,300	20.6	90,500
Indicated	Sub Total	0.8	286,300	17.0	156,800
All < 100m	Inferred	0.8	1,211,000	3.5	134,700
All > 100m	Inferred	2.5	423,000	7.0	95,800
Inferred	Sub Total	2.5	1,634,000	4.4	230,500
Global MRE			**1,920,500**	**6.3**	**387,200**

On the basis of the increase in resource estimates, the Company has commenced a Scoping Study to quantify the underlying economics of development of a stand-alone gold operation at Juruena. A Brazilian Mining Consultancy GE 21 has been contracted to: review the Mineral Resource Estimate, complete initial open pit and underground mine designs, propose a process route, schedule mine production, personnel requirements and formulate an economic model for the project. The results of the Scoping study will be reported in Q1 2022.

Other Australian Projects

Webb Diamond JV (Ownership 16% MEI / 82% Geocrystal Pty Ltd)

The Webb Diamond JV is focused on the evaluation of a large kimberlite field comprising 280 nulls-eye targets and covers an area of 400km^2. About 23% of the targets have been drill tested with 51 kimberlite bodies identified. There was no activity reported during the quarter.

Warrego North IOCG Project (Ownership 49% MEI / 51% Chalice Gold Mines Limited)

Located in the Northern Territory, the Warrego North Project is approximately 20km north west of the historical high-grade Warrego Copper-Gold Mine, the largest deposit mined in the area producing 1.3 Moz Au and 90,000 tonnes of copper.

Chalice Gold Mines Limited (ASX:CHN) can earn up to 70% interest in the project by sole funding $800,000. There was no activity reported during the quarter.

Canadian Projects

The Company's Canadian cobalt projects (Mulligan, Mulligan East Beauchamp, and Iron Mask) remain under review. There was no activity reported during the quarter.

Corporate

Board Changes

In July 2021, Meteoric appointed Dr Marcelo De Carvalho to its Board to oversee the Company's Brazilian operations.

Dr Carvalho graduated from the State University of Sao Paulo in 1996 with a Bachelor of Geology and commenced his exploration career in Brazil, working for Anglo Gold exploring for gold in the Amazon and subsequently with Vale, exploring for base metals.

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In 2004, Dr Carvalho moved to Perth (UWA) to complete a PhD in Metalogenesis. Returning to Brazil, he joined Yamana Gold and rose to the role of Greenfields Exploration Manager before departing in 2012. During that time, he led an experienced exploration team and was part of a several gold discoveries, taking projects from project generation through to Mining Reserves and development. With the experience acquired over these years, Dr Carvalho cofounded his own consultancy company, Target Latin America (TLA) and has consulted to explorers from across the globe, selecting and managing exploration projects in the Americas over the past 10 years.

In September, Meteoric announced Patrick Burke, who has served as Executive Chairman would step back into his Non-Executive Chairman role with immediate effect.

Annual General Meeting

Meteoric's 2021 Annual General Meeting will be held on Tuesday, 30 November 2021. Further details in respect of the Annual General Meeting will be provided in the Notice of Meeting to be dispatched to Shareholders. The Company will follow any measures that may be set in place by the Australian and West Australian governments with regards to restrictions of gatherings and the implementation of social distancing requirements, at the time of the meeting.

The Company's cash and liquid assets is approximately $3.0 million.

ASX Additional Information

Meteoric provides the following information pursuant to ASX Listing Rule requirements:

1. ASX Listing Rule 5.3.1: Exploration and Evaluation Expenditure spend during the quarter was 1,516,000. Full details of exploration activity during the September 2021 quarter are set out in this report.
2. ASX Listing Rule 5.3.2: There were no substantive mining production and development activities during the quarter.
3. ASX Listing Rule 5.3.5: Payment to related parties of the Company and their associates during the quarter was $133,000 cash.

End Notes

The information contained in this announcement related to the Company's past exploration results is extracted from, or was set out in, the following ASX announcements which are referred to in this Quarterly Activities Report:

- The report released 20 July 2021, "Meteoric appoints Brazilian Director and reports further copper sulphides in JUDD043"
- The report released 2 August 2021, "Visual gold and confirmation mineralisation extends further south at Palm Springs"
- The report released 22 September 2021, "Thick gold mineralised zones at Butchers Creek".

This release has been authorised by the Board of Meteoric Resources NL.

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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.

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APPENDIX 1

TENEMENT HOLDINGS AS AT 30 SEPTEMBER 2021

Tenement	Status	Project	Ownership %	Change in Quarter
E80/4407	Granted	ANGAS HILL (Webb JV)	16%	-
E80/4815	Granted	LAKE MACKAY (Webb JV)	16%	-
E80/5121	Granted	WEBB DIAMONDS (Webb JV)	16%	-
E80/5471	Granted	WEBB DIAMONDS (Webb JV)	16%	-
E80/5496	Granted	WEBB DIAMONDS (Webb JV)	16%	-
E80/5499	Application	WEBB DIAMONDS (Webb JV)	16%	-
EL23764	Granted	WARREGO NORTH	49%	-
M80/0106	Granted	PALM SPRINGS	97%	-
M80/0315	Granted	PALM SPRINGS	97%	-
M80/0418	Granted	PALM SPRINGS	100%	-
P80/1766	Granted	PALM SPRINGS	100%	-
P80/1768	Granted	PALM SPRINGS	100%	-
P80/1839	Granted	PALM SPRINGS	100%	-
P80/1854	Granted	PALM SPRINGS	100%	-
P80/1855	Granted	PALM SPRINGS	100%	-
E80/4856	Granted	PALM SPRINGS	100%	-
E80/4874	Granted	PALM SPRINGS	100%	-
E80/4976	Granted	PALM SPRINGS	100%	-
E80/5059	Granted	PALM SPRINGS	100%	-

BRAZIL

Claim No.	Status	City	Ownership %	Change in Quarter
Juruena Project				
866.079/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-
866.081/2009	Granted Exploration Permit	COTRIGUAÇU/MT, NOVA BANDEIRANT	100%	-
866.082/2009	Granted Exploration Permit	COTRIGUAÇU/MT, NOVA BANDEIRANT	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 BANDEIRANT	100%	-
Novo Astro Project				

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867.246/2005	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-

CANADA

Claim No.	Province	Project	Ownership %	Change in Quarter
Various	Ontario	IRON MASK	100%	-
Various	Ontario	MULLIGAN	100%	-
Various	Ontario	MULLIGAN EAST	100%	-
517797 - 517963	Ontario	BEAUCHAMP	100%	-

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