

ASX ANNOUNCEMENT

29 JULY 2021

Quarterly Report – June 2021

Meteoric Resources NL (ASX: MEI) (“Meteoric” or “the Company”) provides shareholders with its Quarterly Report for the three-month period ending 30 June 2021. The Company had another active quarter, with its **total portfolio of Resources across its Juruena and Palm Springs Projects now standing at ~750,000 oz Au.**

Highlights from the quarter include:

Western Australia - Palm Springs Gold Project

- Maiden Global Mineral Resource Estimate (**MRE**) of **5.6 Mt @ 2.0 g/t for 357,000 oz** of gold (including 139,000 oz of Indicated Resources) from two (2) deposits:-
 - Butchers Creek (includes remaining resources below the historic Pit)
 - Indicated 1.9 Mt @ 2.24 g/t for 139,000 oz Au; and
 - Inferred 3.3 Mt @ 1.7g /t for 180,000 oz Au
 - Golden Crown (restated under JORC 2012)
 - Inferred 390 Kt @ 3.1 g/t for 38,000 oz Au
- 40% of MRE reported in indicated categories – significantly reducing planned exploration and development timelines
- A large portion of the Indicated Resource at Butchers Creek occurs in the floor and beneath the historic pit, providing immediate ore for future development
- The Butchers Creek Resource largely sits within granted Mining Leases, potentially cutting approval times for development
- Classification of Indicated Resources immediately below the Butchers Creek pit means the Company no longer needs to dewater the historic pit or complete verification drilling, a significant saving in expenditure and time as the project moves toward economic studies/pre-feasibility
- 2021 Exploration drill program underway at Palm Springs, 2 drill rigs currently operating to extend the mineralisation envelope down plunge to the Southeast, further test the high-grade fold hinge and convert additional ounces from Inferred into the Indicated Resource category

Brazil – Juruena Gold

- Updated Global Mineral Resource Estimate (**MRE**) of **387,000 oz @ 6.3g/t Au including a 170% increase in Indicated Resources to 156,800 oz @ 17.0g/t Au**
- The Juruena Resource comprises 3 separate but adjacent gold deposits:
 - High-grade Epithermal Gold deposits at Dona Maria and Querosene:
 - Indicated 286,000t @ 17.0 g/t Au for 156,000 ounces Au; and
 - Inferred 692,000t @ 7.6 g/t Au for 170,000 ounces Au
 - The Crentes Gold-Copper deposit hosted in the Juruena fault:
 - Inferred 943,000t @ 2.0 g/t Au for 60,900 ounces Au

- 40% of the MRE is classified into the Indicated Category, representing a 100,000 ounce gold increase, with the bulk of the increase at Dona Maria where the orebody has been significantly extended down plunge
- The updated MRE at Juruena gives the Company the confidence to consider Scoping Studies and begin the application process for Mining Licenses over the key areas
- All three deposits remain open at depth with the potential to further increase the Mineral Resource. In addition, Crentes has significant copper potential that was not estimated due to a lack of historic Cu sampling

Brazil – Juruena Porphyry

- Two deep holes were completed during the quarter testing the Giant IP anomaly discovered late in 2020 (ASX:MEI 09/12/2020) and the Juruena Fault zone
- Both holes intercepted broad zones of molybdenite and chalcopyrite with more localised zones of bornite within strong potassic alteration typical of a porphyry copper-gold system
- Lateral and depth variation in the alteration and mineralisation observed in the drilling is vectoring the exploration efforts towards the west of the project where higher temperature alteration and intrusive porphyry dykes are seen in JUDD043 related to in excess of 400m of altered and copper /moly sulphides have been recognised
- Based on the confidence of these strong early indications, an additional 5 holes are planned to test the porphyry model

Corporate

- Cash and liquid assets at the end of the Quarter of approximately \$4.75 million

Palm Springs Gold Project, WA

Palm Springs Gold Project (PSGP) - Global Mineral Resource Estimate

During the Quarter, Meteoric made impressive progress at Palm Springs in WA, including the early delivery of the Company's Maiden Resource Estimate. This underpins the Company's ability to grow and develop the project, which has a history of gold production.

The maiden Mineral Resource Estimate for the Palm Springs Gold Project (PSGP) comprises mineralisation at Butchers Creek and Golden Crown. The Global Resource, using a 0.8g/t Au lower cut-off, contains a total of 357,000 oz of gold comprising 139,000 ounces @ 2.24 g/t Au in the Indicated category and 218,000 ounces @ 1.9 g/t in the Inferred category.

Table 1. Meteoric's Maiden Global Mineral Resource Estimate for the Palm Springs Gold Project

Deposit	Lower Cut-off (g/t)	Resource Classification	Tonnes (Mt)	Gold Grade (g/t)	Contained Gold (oz)
Butchers Creek	0.8	Indicated	1.9	2.2	139,000
	0.8	Inferred	3.3	1.7	180,000
Sub-total		Ind +Inf	5.2	1.9	319,000
Golden Crown	0.8	Inferred	0.4	3.1	38,000
PSPG Global Resource			5.6	2.0	357,000

Note: Figures may not add up due to rounding.

Butchers Creek Geologic interpretation and mineralisation

Mineralisation at Butchers Creek is interpreted to be stratabound within a trachytic unit that intrudes a sequence of interbedded sedimentary rocks. The trachyte acts as a host to gold mineralisation (Figure 1). The stratigraphy is metamorphosed to greenschist facies and the main deformation is represented as a tight, anticlinal fold that plunges shallowly SW and has an axial plane dipping approximately 70 degrees to NW. The fold hinge zone is strongly thickened but the mechanism for this is not yet clear.

The true thickness of the trachytic unit is approximately 20 to 30m along the fold limbs but is structurally thickened in the hinge region. Significantly, higher grade gold mineralisation is observed in this hinge region of the fold. Figures 1 illustrates a cross-section through the central and southern parts of the orebody with thick, robust intersections in the hinge region and narrower, generally lower grade intersections on the fold limbs.

Gold mineralisation is strongly associate with quartz-albite-carbonate veins and strong sulphidation with pyrite, pyrrhotite and arsenopyrite (in decreasing percentages). As mentioned, gold mineralisation is observed to be substantially thicker and generally higher grade in the hinge of the anticline. Therefore, the trachyte unit has been modelled as one domain, with a second higher-grade domain modelled within the fold hinge so as not to smear the higher grades.

The trachyte host has been modelled along a strike length of approximately 1,600m (Figure 2).

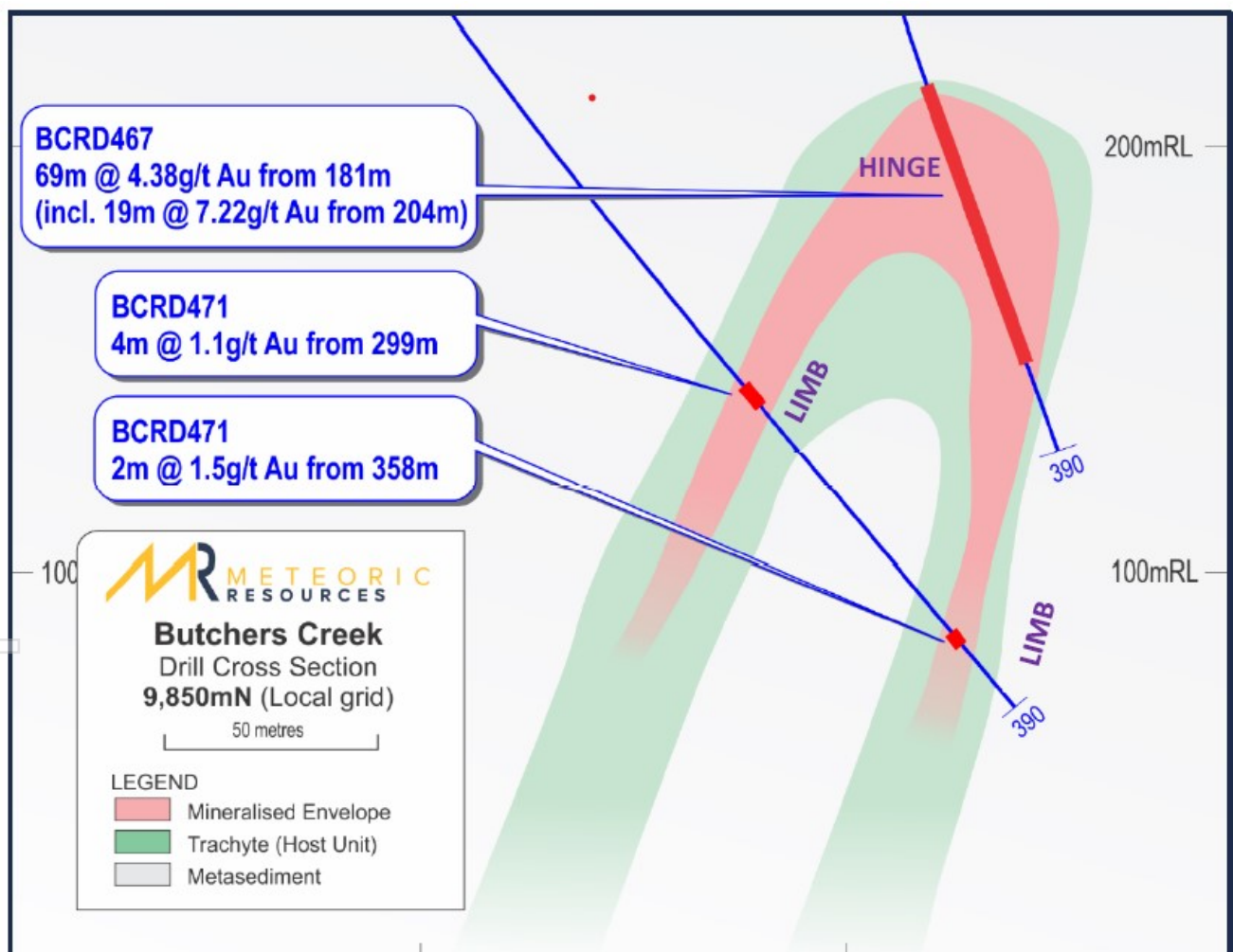


Figure 1. Section 9850N (150m south of Butchers Creek Open Pit) demonstrating southern extension of mineralisation with continued thick, higher grade intersections in the hinge region (modelled as a higher grade domain) and generally narrower, lower grade intersections down the fold limbs (modelled as a separate domain).

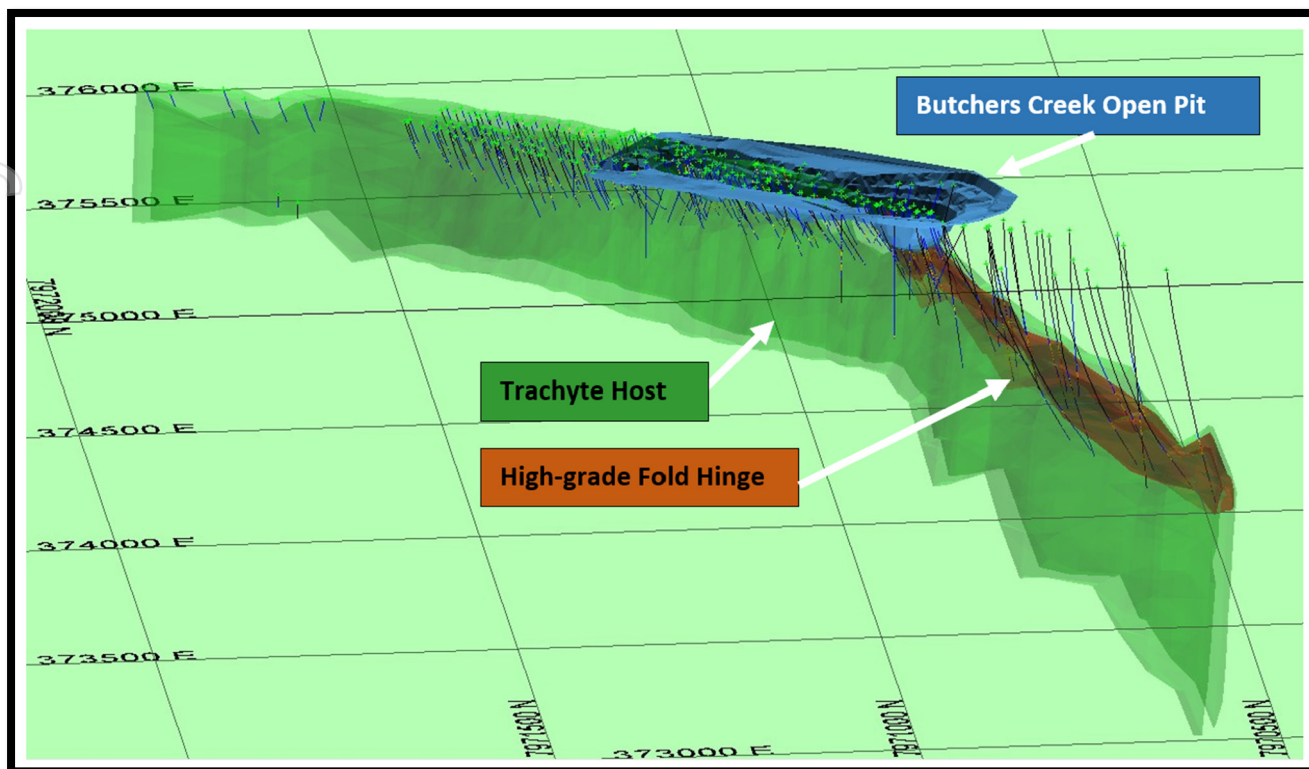


Figure 2. Mineralised Trachyte (dark green) and the internal high-grade domain on the fold hinge (brown).

Figure 2 shows an oblique view of the mineralised trachyte host rock with the higher-grade domain internal to the fold hinge shown in brown. This high-grade domain extends up dip into the south pit where it outcrops at the base of the southern wall of the pit. Heading north the fold hinge and high-grade domain has been eroded, leaving only the mineralised limbs of the trachyte containing the gold mineralisation.

Golden Crown Mineral Resources Estimate

The Golden Crown Mineral Resource Estimate (MRE) is based on historic RC and DD drilling. The Golden Crown MRE is made up of two (2) prospects, inclusive of historic workings at Golden Crown and Faugh-a-Ballagh. These prospects are approximately 3 km NE of Butchers Creek

Geology and geological interpretation

The gold mineralisation at Golden Crown and Faugh-a-Ballagh is stratabound within a trachyte unit which has a north-easterly strike and variable dip from sub vertical to 35°. Having a known strike length of over 3km and a width of up to 50m, the trachyte has intruded the metavolcanics and sediments.

Mineralisation at the Golden Crown and Faugh-a-Ballagh is restricted to zones of quartz veining within the trachyte body with no gold mineralisation in the immediate surrounding rock. The main zones of quartz veining at Golden Crown and Faugh-a-Ballagh appear to crosscut the host body in a north westerly direction with variable dips from sub vertical to 60°W. Multiple quartz vein sets have been mapped at the prospects although the dominant vein sets have yet to be identified.

The quartz veining and the edge of the trachyte body was generally used as the edge of gold mineralisation. Where this was not available, a 0.3g/t Au cut-off was used for the construction the wireframes. Selection of 0.3g/t Au as the secondary mineralised threshold for defining the wireframes was based on visual review of the grade distribution and was supported by the analysis of raw sample data. A log probability plot and histogram were produced from the raw sample data and reviewed for sharp breaks in distribution indicating natural gold enrichment levels.

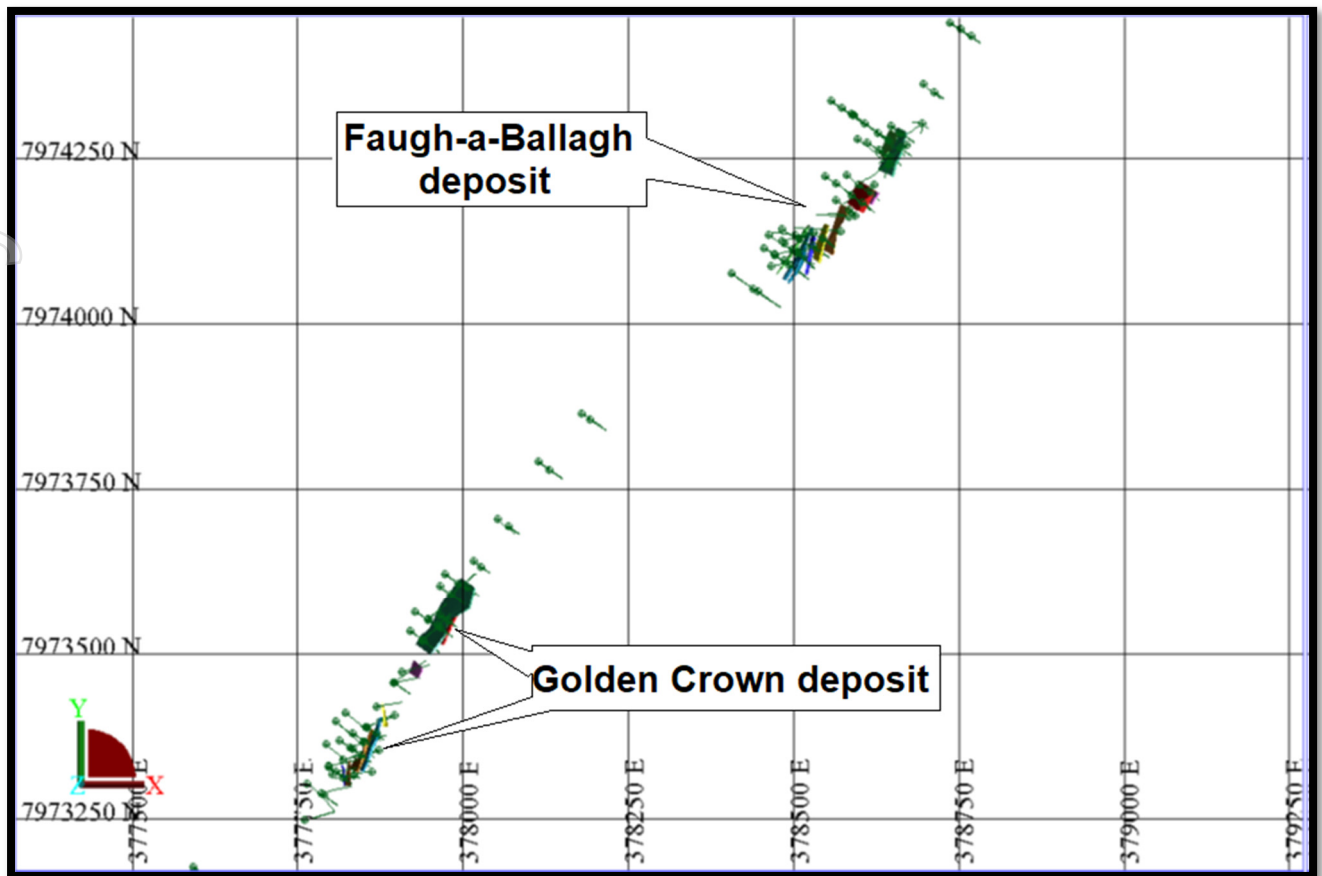


Figure 3. Relative location of Golden Crown and Faugh-a-Ballagh Gold Deposits

For full details of the MRE see ASX Announcement 3rd June 2021.

2021 Drill Program

The Palm Springs Exploration drilling program is underway. Drilling to target mineralisation on Mining License M80/106, south of Butchers Creek Pit with infill drilling of spectacular 2020 drilling results designed to improve confidence in any stated resources, and several sections designed to extend the mineralisation another 160m south.

Wizard Drilling is overseeing the two drill rig ~3,800m program. A multi-purpose rig will drill all reverse circulation (RC) holes and pre-collars before converting over to a core rig and assisting the second dedicated core rig completing the diamond tails (DD).

Ten (10) holes were initially planned on the Mining License south of the Butchers Creek pit for ~3,800m of drilling will consist of a combination of RC pre-collars with DD tails (the majority of holes), and 1 DD tail (re-entry into RC hole drilled in 2020). Six (6) holes will intercept the hinge region of the folds on sections where there is currently no intersection into the hinge, and 4 holes will extend the gold mineralisation a further 160m to the southwest which coincides with the southern boundary of the Mining License (Figures 1).

Drilling will feed into additional Resource estimation work, with the intention of increasing the size of the MRE and converting additional ounces from Inferred into the Indicated Resource category and mining studies (economic and pre-feasibility studies) expected to commence in Q3/4 2021.

Juruena Copper-Gold Porphyry Project, Brazil -Increase in Juruena Resources Estimate

In June, the Company provided an updated Mineral Resource Estimate for the Juruena Project, comprising gold mineralisation from the adjacent Dona Maria, Querosene and Crentes deposits. The updated Global Mineral Resource now stands at **1.9Mt @ 6.3 g/t Au for 387,000 ounces of gold, an increase of 50% over the previous resource.**

June 2021 Mineral Resources										
Deposit	Cut-Off (g/t Au)	Indicated Resource			Inferred Resources			Total Resource		
		Dry Tonnes	Grade (g/t Au)	Insitu Gold (oz)	Dry Tonnes	Grade (g/t Au)	Insitu Gold (oz)	Dry Tonnes	Grade (g/t Au)	Insitu Gold (oz)
Dona Maria < 100m depth	0.8	125,000	11.0	44,000	164,000	2.8	15,000	289,000	6.3	59,000
Quereosene < 100m depth	0.8	25,000	27.4	22,000	151,000	13.5	65,000	176,000	15.4	87,000
Crentes < 100m depth	0.8	-	-	-	897,000	1.9	54,700	897,000	1.9	54,700
Sub total < 100m	0.8	150,000	13.7	66,000	1,212,000	3.5	134,700	1,362,000	4.6	200,700
Dona Maria > 100m depth	2.5	130,000	16.2	84,000	274,000	6.4	57,000	404,000	10.9	141,000
Quereosene > 100m depth	2.5	6,000	13.5	6,000	103,000	13.6	33,000	109,000	11.1	39,000
Crentes > 100m depth	2.5	-	-	-	46,000	4.2	6,200	46,000	4.2	6,200
Sub total > 100m	2.5	136,000	20.6	90,000	423,000	7.1	96,200	559,000	10.4	186,200
JURUENA TOTALS		286,000	17.0	156,000	1,635,000	4.4	230,900	1,921,000	6.3	386,900

For full details of the MRE upgrade see ASX Announcement 15th June 2021.

The growth in the Juruena Resource has largely been underpinned by growth at the Dona Maria and Crentes deposits with significant extensions at depth where both orebodies remain open. A similar approach is under planning for the Querosene as the next major target.

The significant 2021 Mineral Resource Upgrade, which includes 40% of the gold endowment in the Indicated Category, allows the Company to update the existing 2017 Scoping Study and prepare to apply for a Mining Licence with Brazilian mining authorities. In addition, the high-grade epithermal gold projects remain open at depth so there remains considerable opportunity for further resource growth with additional drilling. Tenders for the Scoping Study update at Juruena have been called for in both Brazil and Australia.

Porphyry Copper Drilling - JUDD042

The first deep drill hole (JUDD042) designed to test the deep high-chargeability IP anomaly at the Juruena Project area confirms the potential for a major Cu-Au porphyry environment, closely related to the shallow epithermal deposits (Dona Maria, Crentes and Querosene, among others).

The geology in JUDD042 confirms the Company's interpretation of a magmatic Porphyry environment being responsible for the high-grade gold and copper mineralisation at shallower levels. Drilling of JUDD042 has been temporarily halted (940m) awaiting delivery of narrower drill rods to site to enable deeper drilling - the temporary halt has occurred in the most prospective zone yet encountered, comprising intense hydrothermal alteration with copper and molybdenum sulphides in veins¹ within the Juruena Fault Corridor.

JUDD042 was designed using all available geological and geophysical data including; hydrothermal alteration, structural interpretation, soil and rock-chip sampling and two (2) phases of IP to test a porphyry model for Cu-Au mineralisation associated with a deep high chargeability IP anomaly generated by the geophysical survey executed in 2020 (ASX:MEI 09/12/20). The drill hole is currently stopped at 940 metres, within the Juruena Fault, in a very promising copper sulphide-bearing breccia.

The core shows features that are typical of porphyry environments and the detailed description and interpretation of those features is being used to generate exploration vectors. Those vectors, albeit in 2D, are very useful in planning follow up drilling and particularly for targeting the source of known Cu-Au mineralisation. It will be possible to generate 3D vectors as soon as we have additional holes.

Deep Diamond Hole JUDD043

At the end of the quarter Meteoric was continuing with 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. Hole JUDD043 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.

Subsequently JUDD043 was finalised at 820m depth (ASX MEI:20/06/21) molybdenum and copper sulphides have been observed in over 600m of core from JUDD043, pointing to the presence of a potentially large mineralised porphyry copper-moly system

The intermediate porphyritic intrusions seen in JUDD043 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.

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 400km². 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.

Corporate

The Company's cash and liquid assets at the end of the Quarter were approximately \$4.75 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 \$1,256,000. Full details of exploration activity during the June 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 \$206,000 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 7 April 2021, '2021 Palm Springs Field Season Commences & Juruena Update'

- The report released 4 May 2021, 'Porphyry Drilling Update Juruena Project, Brazil'
- The report released 24 May 2021, '2021 Drilling Program Commences at Palm Springs'
- The report released 27 May 2021, 'Juruena Deep Drilling Confirms Porphyry System'
- The report released 3 June 2021, 'Palm Springs Maiden Resource'
- The report released 15 June 2021, 'Significant Increase in Juruena Resource'

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. Additionally, Mr Sheehan confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report. Additionally, Mr Sheehan confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report.

APPENDIX 1

TENEMENT HOLDINGS AS AT 30 JUNE 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%	-
P80/1769	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 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%	-

Novo Astro Project				
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%	-