

ASX ANNOUNCEMENT

29 APRIL 2022

Quarterly Report – March 2022

Meteoric Resources NL (ASX: MEI) (“Meteoric” or “the Company”) provides shareholders with its Quarterly Report for the three-month period ending 31 March 2022.

Highlights from the Quarter include:

Western Australia - Palm Springs Gold Project

- Additional positive metallurgical testwork from Palm Springs confirms gold recoveries above 95%
- Work on Scoping Level Study designed to identify potential paths to development and map out future work programs continued and will be finalised in Q2
- 2022 Field season to commence in May 2022 with IP survey followed by drilling campaign designed to test for Butchers Creek extensions and repeats on several targets across the Company’s extensive tenement position
- In addition, reinterpretation of the geology at Golden Crown - 400Kt @ 3.1 g/t Au for 38,000 oz - has identified several new targets which will be initially tested by the IP survey and then followed up as part of the drilling campaign.
- Global Resource for the Palm Springs Gold Project stands at 5.6Mt @ 2.0 g/t Au for 357K oz of gold with over 38% of the resource classified in the Indicated category

Brazil – Juruena

- Work on the Scoping Study for the development of Dona Maria, Crentes and Querosene deposits continued and will be finalised in Q2
- The Scoping Study has focussed strongly on optimisation of the bulk of the current Mineral Resource into Open Pits with additional underground development at Querosene and Dona Maria
- The Global Resource for Juruena gold stands at 1.9Mt @ 6.3 g/t Au for 390K oz of gold with over 40% of the resource classified in the Indicated category, underpinning the development opportunity
- Several site visits were held at Juruena and Novo Astro to showcase the porphyry copper opportunity to various major mining companies

Corporate

- Cash and liquid assets of approximately \$3.0m

Palm Springs Gold Project, WA

During the Quarter, Meteoric announced the final results for metallurgical test work completed on Composite #2 from the sulphide zones at the Butchers Creek Gold Deposit, located at the Company's wholly owned Palm Springs Project in Western Australia, where the Company's Resource stand at:

June 2021 Mineral Resources												
Country	Project	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)
Australia	PSPG	Butchers Creek	0.8	1,900,000	2.3	139,000	3,300,000	1.7	180,000	5,200,000	1.9	319,000
		Golden Crown	0.8	-	-	-	400,000	3.1	38,000	400,000	3.1	38,000
PSGP		PSPG TOTALS		1,900,000	2.3	139,000	3,700,000	1.8	218,000	5,600,000	2.0	357,000

The metallurgical testwork program is designed as a series of tests to gauge the complexity required to recover gold using standard sulphide ore screening techniques.

Samples of half core from Butchers Creek holes BCRD484 (Composite #1) and BCRD486 (Composite #2) were sent to ALS laboratories in Perth where the two composites, one from each hole, were formulated.

Prior to compositing, half-core samples were set aside to measure the physical characteristics – UCS, Crushing Index (CWi) and Ball Milling Index (BBMi).

Head samples were examined by XRD to gauge the extent of sulphide minerals present, then subjected to the following standard test regime:

- Grind Establishment.
- Gravity followed by direct cyanide leach.
- Gravity recovery followed by flotation, ultra fine grinding to 10 microns of the concentrate and leaching of the tailings.
- Whole of ore leaching.

Composites

Table 1. Composite # 1 details

Sample ID	Sample Description	Composite ID	As Received	Composite	Assay
			Weight (kg)	Gold g/t	Sulphur %
BCRD484	Half Core	Palm Springs BCRD484 Fresh Composite #1	48.3	1.42	1.44

Table 2. Composite # 2 details

Sample ID	Sample Description	Composite ID	As Received	Composite	Assay
			Weight (kg)	Gold g/t	Sulphur %
BCRD486	Half Core, Surface Moisture	Palm Springs BCRD486 Fresh Composite #2	42.5	1.94	1.46

Mineralogy

The XRD analyses for testwork samples confirmed 1% combined sulphides mainly as the sulphides pyrite and pyrrhotite and also contained calcite and carbonate-rich minerals, ~4% by mass. The presence of carbonate in the ore zones will assist with moderating any potential acid forming properties of the tailings and reduce lime consumption in the process.

Leaching Tests

Composite #2

Gravity gold recovery was determined in a mini-Knelson Concentrator and the results of 48% gravity recoverable gold were obtained for Composite #2. However, the overall gold recoveries at 24 hours leach time, even in conjunction with flotation, were only marginally improved from 95% to 96%. As such, as detailed in results reported in December, the extra capital and operating cost of gravity and flotation may not be justifiable. This will be subject to further close examination as development of Palm Springs continues.

The “Whole of Ore” leach tests produced the highly encouraging recovery of 95-96% gold after a leach time of only 24 hours. Further test work will be undertaken to see if these recoveries can be improved with extra cyanide residence time as suggested by Composite #2 results.

The most important outcome from all the test work is the high leach recovery of gold achieved on straight “Whole of Ore” leaching, which indicates the gold is well liberated and not locked up or influenced by the presence of moderate amounts of sulphides.

Scoping Study and 2022 Field Season

During the Quarter the Company progressed a Scoping Level Study on the Butchers Creek deposit designed to identify potential paths to development and map out the future work programs required to achieve this. Optimisation, Pit Design and Mine Scheduling work is ongoing and with final Metallurgy results received during the Quarter work is also continuing on the Process Route and Economics.

Meteoric anticipates reporting the results of the Scoping Level Study in Q2 2022.

The Palm Springs field season will commence in May 2022 with field reconnaissance and geophysics. An Induced Polarisation (IP) survey will be conducted over selected targets at: Butchers Creek North and West, Golden Crown, and Halls Gully. Eight (8) lines are planned for approximately 5 line kilometres. The characteristics of mineralisation at Butchers Creek and Golden Crown (with up to 10% sulphides) makes IP an ideal tool for exploring for additional lodes/lenses. Petrophysical measurements from 25 samples submitted to Southern Geoscience Consultants (Perth) show that the mineralised syenite has a good chargeability contrast with unmineralised syenite and adjacent sediments, except for a carbonaceous shale unit which also exhibits high chargeability. The mineralised syenite has low resistivity which will help discriminate it.

The results of this IP survey will drive the 2022 drilling program designed to test for Butchers Creek extensions and repeats on several targets across the Company’s extensive and prospective tenement position.

In addition, recent reinterpretation of the geology and historical drilling at Golden Crown, which has an Inferred Resource of 38,000 oz of gold @ 3.1g/t, has identified new targets that will be refined in the IP survey and subsequently drilled as part of the upcoming drill campaign.

Juruena Copper-Gold Porphyry Project, Brazil

During the Quarter the Company progressed the Juruena Scoping Study with Brazilian mining consultancy, GE 21. Meteoric anticipates reporting the results of the Scoping Study in Q2 2022.

The Scoping Study will be comprehensive, focussing on:

1. Evaluation of the Mineral Resources
2. Design and optimization of Open Pit mining plans and schedules for Dona Maria and Crentes
3. Design of optimization of Underground mining schedule scenarios for Dona Maria and Querosene
4. Design of three stage crushing circuit
5. Design of Grinding circuit
6. Design of CIL circuit
7. Design of Gold recovery and smelting
8. Water Balance for plant
9. Project Infrastructure
 - a. Power Supply
 - b. Tailing Dump
 - c. Offices, warehouses, workshop, accommodation
10. Environmental Studies and Community Impact
11. Capital and Operating Cost Estimates

and will form the basis for the development of the exciting Juruena Project.

The Company has in parallel commenced the application process for mining licences over the key areas proposed for open-pit and underground mining.

June 2021 Mineral Resources												
Country	Project	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)
Brazil	Juruena	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

Table 1. Juruena Project Mineral Resource Estimate – ASX:MEI 15th June 2021.

Other Projects

Webb Diamond JV (Ownership 15.5% MEI / 84.5% 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.

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.

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 \$610,000. Full details of exploration activity during the March 2022 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 \$92,000 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 3 June 2021, "Palm Springs Maiden Resource".
- The report released 15 June 2021, "Significant Increase in Juruena Resource".
- The report released 22 September 2021, "Thick gold mineralised zones at Butchers Creek".
- The report released 26 October 2021, "Thick gold mineralised zones at Butchers Creek".
- The report released 13 December 2021, "Butchers Creek Metallurgical Test Work". Confirms Gold Recoveries Above 96%".
- The report released 9 February 2022, "Exceptional Gold Recoveries Confirmed at Butchers Creek".

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

For further information, please contact:

Dr Andrew Tunks

Managing Director

Meteoric Resources

E: aitunks@meteoric.com.au

T: +61 400 205 555

Victoria Humphries

Investor and Media Relations

NWR Communications

E: victoria@nwrcommunications.com.au

T: +61 431 151 676

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.

APPENDIX 1

TENEMENT HOLDINGS AS AT 31 MARCH 2022

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)	15.5%	(0.5%)
E80/5471	Granted	WEBB DIAMONDS (Webb JV)	15.5%	(0.5%)
E80/5496	Granted	WEBB DIAMONDS (Webb JV)	15.5%	(0.5%)
E80/5499	Application	WEBB DIAMONDS (Webb JV)	15.5%	(0.5%)
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%	-
E80/5584	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%	-