

Quarterly Report for quarter ended 31 December 2016

Meteoric Resources NL ABN 64 107 985 651

ASX Code: MEI

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Issued Capital: Shares - Quoted: 203,268,395 fully paid shares

Options - Unquoted:

5,000,000 options exercisable at \$0.045 by 31.1.2017

9,000,000 options exercisable at \$0.002 by 30.6.2018

9,000,000 options exercisable at \$0.012 by 9.9.2020

Directors:

Neville Bassett

Non-Executive Chairman

Graeme Clatworthy Executive Director

George Sakalidis Executive Technical Director WEBB (Meteoric 21% and right to acquire 15% of E80/4506).

The Webb Diamond Joint Venture is focussed on the evaluation of this large kimberlite field comprising some 280 bulls-eye magnetic targets of which 23% have been drill tested resulting in the identification of 51 kimberlite bodies. Successive surface loam sampling programs have resulted in the recovery of microdiamonds and the interpretation of a broad surface microdiamond dispersion anomaly in the northern portion of the kimberlite field.

While the significance of this broad microdiamond anomaly which encompasses an area of approximately 150km² is speculative, the company is highly encouraged by the persistence of the anomaly in repeated loam sampling programs and the presence of larger microdiamonds. There are 42 untested kimberlite targets within this broad microdiamond anomaly that are prioritized for future drill testing.

In the previous quarter it was reported that ground penetrating radar geophysical surveys were undertaken on selected kimberlite targets within the project area by Lozar Radar Australia. These trial surveys were focussed on both drilled and untested kimberlite targets within and in close proximity to the broad microdiamond anomaly. Lozar Radar is a ground scanning radar technology with depth penetration of up to 200m and with the capability of mapping geological features such as lithology boundaries and faults. This work was aimed at testing the effectiveness of this relatively new geophysical technique in remodelling the size, shape and depth extent of the Webb kimberlite targets. The results of this test work was reported in detail (refer to ASX:MEI 12 December 2016).

Kimberlite targets have been prioritized for drill testing with the focus being on the interpreted larger near- surface bodies associated with the large microdiamond anomaly in the northern portion of the Webb kimberlite field. Selected kimberlite targets in other parts of the kimberlite field, based on the size and intensity of their magnetic signatures, have also being targeted.

It is anticipated that this work will be undertaken in the 2017 field season.

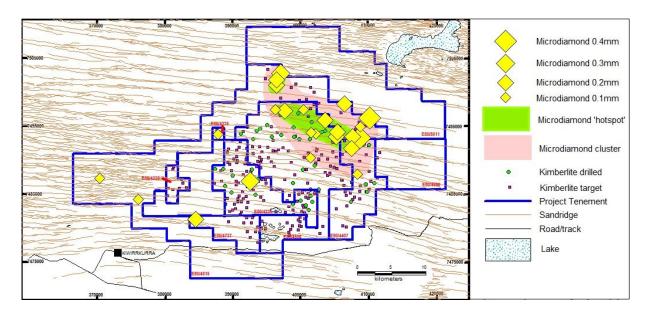


Figure 1. Webb Diamond Joint Venture Microdiamond clusters and Kimberlite Targets

Competent Person Statement

The information in this report that relates to Exploration Results is based on information compiled or reviewed by Tom Reddicliffe BSc (Hons), MSc., who is a Fellow of the Australasian Institute of Mining and Metallurgy. Tom Reddicliffe is a self-employed consultant to the Meteoric Resources NL - GeoCrystal Limited joint venture and a director of GeoCrystal Limited. Tom Reddicliffe has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Tom Reddicliffe consents to the inclusion in this report of his information in the form and context in which it appears.

WARREGO NORTH (Meteoric 100%, subject to farmout and JV)

Chalice Gold Mines Ltd ("**CGM**") may earn up to a 70% interest in the Warrego North project by expenditure of \$800,000 within five years.

The Warrego North Project is a farm-in and joint venture with Meteoric Resources NL (ASX: MEI) in the Tennant Creek Mineral Field in the Northern Territory of Australia.

During the quarter, CGM obtained all necessary approvals for proposed drilling activities at the Warrego North Project late in the quarter and drilling is now anticipated to commence as soon as possible at the end of the northern Australian wet season (March Quarter), weather permitting.

Chalice plans to undertake an initial 2-hole (800m) Reverse Circulation/diamond drilling program to test the Parakeet targets at depth (~300m depth) as shown in Figure 2. Drilling is targeted to test magnetic and gravity inversion models where these are interpreted to intersect with the apparent trend of mineralisation as defined from previous intersections of low-grade copper, bismuth and/or gold.

The target for the proposed drill holes is high-grade copper-gold-bismuth of the Tennant Creek-style ironstone-hosted deposits. However, it has been demonstrated from recent gold discoveries in the Tennant Creek Mineral Field that hematite ironstones are also important host rock (e.g. Edna Beryl, Emmerson Resources) and these deposits have a weak to non-magnetic expression.

The Company will evaluate the potential for hematite ironstones within the broader project area.

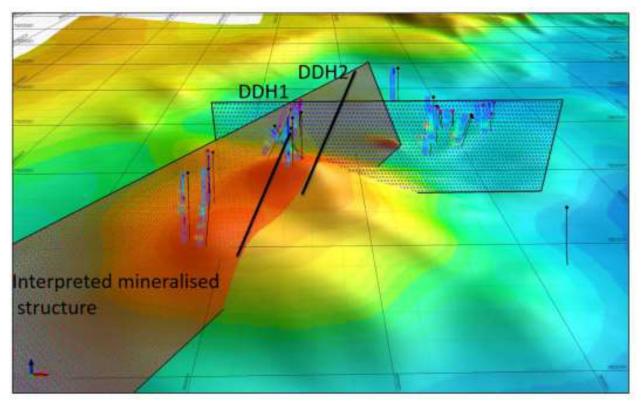


Figure 2. Parakeet target showing previous and proposed drilling and interpreted mineralised structure on a TMI image.

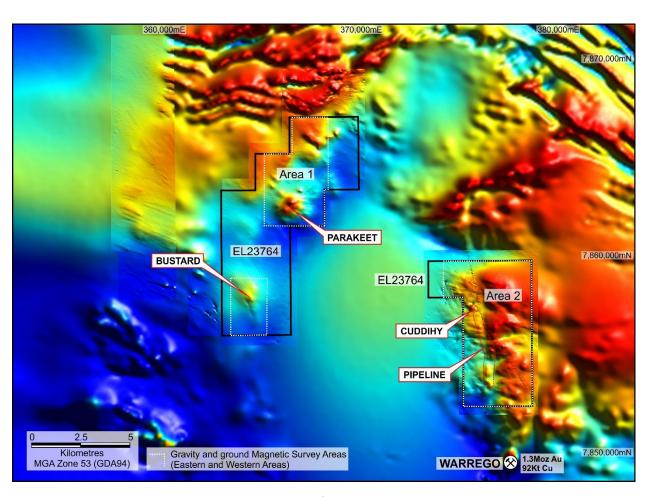


Figure 3. Warrego North Aeromagnetic Targets

Meteoric holds a granted exploration licence (EL23764, 74.5sq km) over magnetic and gravity anomalies near the old Warrego copper-gold mine (1.3M ozs gold, 91,000t copper), the largest mine in the Tennant Creek mineral field. Previous exploration results have identified several large high magnetic susceptibility targets some with pronounced coincident gravity anomalies similar in character to quartz- magnetite-chlorite ironstones associated with high-grade copper-gold-bismuth mineralisation elsewhere in the mineral field. The target areas are situated north and northwest of the Warrego mine as shown in Figure 3. The largest of these targets is Parakeet, situated 15km NW of Warrego.

Meteoric has carried out processing and interpretation of ground magnetic, gravity and induced polarisation (IP) data at Parakeet. The processing includes 3D forward and inversion modelling of the ground magnetic and gravity data as well as 2D modelling of the IP. The Parakeet prospect is associated with two strong magnetic anomalies comparable in intensity with magnetic anomalies associated with copper gold ore bodies in the mineral field.

Historical drilling to depths of up to 200m at Parakeet has demonstrated anomalous copper, gold and bismuth values and ironstone alteration characteristic of Tennant Creek style iron oxide-copper-gold mineralisation. In more detail, the ground magnetic anomalies and associated gravity anomalies highlight three specific targets at Parakeet. All three targets have recorded historical drill intercepts with anomalous copper, gold or bismuth values. 3D inversion modelling of the ground magnetic data has identified a further three bodies bringing to six the total number of modelled bodies at Parakeet with magnetic susceptibility values greater than 0.4 SI units, characteristic of ironstone bodies at Tennant Creek.

Significantly, modelling of the ground magnetics, together with results of down hole magnetic surveys, indicate that the source of the magnetic anomalies at Parakeet has not been tested by the previous drilling, which appears to have intersected what could be the copper halo over a large copper-gold system at depth. It should be noted that these targets are interpretive at this stage and there has been insufficient exploration to estimate a mineral resource and it is uncertain whether further exploration will result in the estimation of a mineral resource.

Interpretation of aeromagnetic data suggests the presence of a strong NW-trending structure through Parakeet which could be a parallel structure to, or the extension of, the Navigator Fault, a major structure associated with the Warrego deposit, indicating a favourable structural setting for Parakeet. Additional magnetic and gravity targets which have not been fully tested on EL23764 include Bustard, south of Parakeet and Cuddihy and Pipeline east of the Warrego granite. Further details on the Parakeet targets are shown in MEI ASX release of 14 May 2014.

Farmin Agreement

Under the terms of the agreement CGM has a minimum commitment to drill at least one deep diamond drill hole at Parakeet within the first year. The earn-in has two stages: CGM may earn a 51% interest by sole funding \$400,000 within three years and may elect to earn an additional 19% by sole funding another \$400,000 within a further two years. A full form agreement will be completed after CGM has completed its minimum commitment and confirmed its intention to continue to earn in. Upon CGM earning an interest a contributing joint venture will be formed with normal provisions for dilution and pre-emptive rights.

High grade Tennant Creek-style copper-gold deposits such as Warrego (7Mt at 8g/t Au and 2% Cu) are very attractive, high value targets. The directors of Meteoric are most encouraged by the results of the geophysical modelling which indicates potential for a large copper-gold system below the previous drilling at Parakeet and welcome the association with CGM which provides the opportunity to test this and other attractive targets near the Warrego mine.

CORTEGANA GRAPHITE PROJECT (Meteoric 100%, application)

No progress was made during the quarter regarding the granting of the application.

BARKLY JOINT VENTURE (MEI 70% subject to JV)

During the quarter no exploration was undertaken (Meteoric 30% subject to JV)

PERSEVERANCE (Meteoric 68.43%, Emmerson Resources 31.57%)

No exploration was undertaken during the quarter.

R29 BABBLER (MEI 100%)

No exploration was undertaken during the quarter.

NEW OPPORTUNITIES

During the quarter the company reviewed several opportunities to add shareholder value. As at 31 December 2016, no suitable transactions had been completed. The company continues to seek opportunities in the resource sector.

Competent Persons' Statements

The information in this report that relates to other Exploration Results is based on information compiled or reviewed by Roger Thomson BSc (Hons), ARSM, a Competent Person, who is a Member of the Australian Institute of Geoscientists and a Fellow of the Australasian Institute of Mining and Metallurgy. Roger Thomson is a self-employed consultant to Meteoric Resources. Roger Thomson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Roger Thomson consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

APPENDIX 1 TENEMENT HOLDINGS At 31 December 2016

Tenement	Nature of Interest	Project	Ownership (%)	Change in Quarter
E80/4235	Granted	ELIZABETH HILLS (Webb JV)	21%	Diluting
E80/4407	Granted	ANGAS HILL (Webb JV)	21%	Diluting
E80/4506	Granted	WEBB DIAMONDS (Webb JV)	Rights to 15%	Diluting
E80/4737	Granted	WEBB DIAMONDS (Webb JV)	21%	Diluting
EL30057	Application	WEBB DIAMONDS (Webb JV)	21%	Diluting
E80/4815	Granted	LAKE MACKAY (Webb JV)	21%	Diluting
E80/4816	Granted	LAKE MACKAY (Webb JV)	21%	Diluting
E80/4996	Application	WEBB DIAMONDS (Webb JV)	21%	Diluting
E80/5011	Application	WEBB DIAMONDS (Webb JV)	21%	Diluting
EL23764	Granted	WARREGO NORTH	100%	Farmout - JV
EL30701	Application	R29 BABBLER	100%	
MLC217	Granted	PERSEVERANCE	68.43%	
MLC218	Granted	PERSEVERANCE	68.43%	
MLC219	Granted	PERSEVERANCE	68.43%	
MLC220	Granted	PERSEVERANCE	68.43%	
MLC221	Granted	PERSEVERANCE	68.43%	
MLC222	Granted	PERSEVERANCE	68.43%	
MLC223	Granted	PERSEVERANCE	68.43%	
MLC224	Granted	PERSEVERANCE	68.43%	
MLC57	Granted	PERSEVERANCE	68.43%	
EL28620	Granted	BARKLY	30%	Diluting
H14913	Application	CORTEGANA - SPAIN	100%	Application