



**QUARTERLY REPORT for the Quarter Ended 31 March 2015**

**SUMMARY**

**Meteoric Resources  
NL**

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**ASX Codes:**

MEI and MEICA

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**Issued Capital:**

**Shares - Quoted:**

115,253,682 fully paid  
shares

27,504,727 contributing  
shares

**Options - Unquoted:**

230,000 options  
exercisable at \$0.2370  
by 21.12.2015

2,550,000 options  
exercisable at \$0.0915  
by 27.12.2016

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

**Directors:**

**Neville Bassett**

Non-Executive  
Chairman

**Graeme Clatworthy**

Executive Director

**George Sakalidis**

Executive Technical  
Director

**Webb:**

- 51 kimberlite bodies identified from the drilling of 63 targets, representing less than 20% of the kimberlite targets within the Webb kimberlite field.
- The source of the microdiamonds identified in the loam sampling is yet to be determined, however some 80% of the kimberlite targets in the Webb kimberlite field remain untested.
- Petrology and geochemical analyses classify the Webb kimberlites as typical Type 1 with both hypabyssal and diatreme facies identified.
- So far, no microdiamonds have been recovered from the kimberlite bodies but the indicator mineral chemistry for some chromite grains is consistent with some of the kimberlite bodies tapping the diamond stability field within the mantle. These deeper-sourced kimberlites occur in three pronounced clusters.
- Evidence that some of the kimberlite bodies tapped the diamond stability field and the presence of microdiamonds in loam samples supports the premise that deeper-sourced diamond-bearing kimberlites occur within the Webb kimberlite field.
- Copper sulphides identified in drill sample concentrates from kimberlite pipe KJ171 indicate that this pipe may have intersected copper mineralisation at depth.

**Barkly:**

- Downhole probing and test work identifies a 3D magnetic target for drilling adjacent to Bluebird.
- Planning for the next phase of drilling at Bluebird is in progress, with the aim of testing extensions to high grade copper-gold mineralisation and defining an initial mineral resource.

**Warrego North:**

- Farmin and joint venture agreement documentation is being finalised with Bulletin Resources, with drilling at Meteoric's 100%-owned Parakeet copper-gold prospect anticipated to commence mid-year.

**Coorara**

- A term sheet has been signed for the farmout of this iron ore project.

**WEBB** (Meteoric 30% and right to acquire 27% of E80/4506).

Processing of drill samples from the kimberlite bodies identified during the 2014 programme was completed during the quarter. The samples were processed for microdiamonds and indicator minerals, with additional samples taken for geochemical and petrological analysis. The 2014 drill programme comprised 6056m of RC drilling and tested 48 targets of which 41 proved to be kimberlite, bringing the number of kimberlite bodies identified to date to 51 (previously 50 in MEI Quarterly Report December 2014). This represents less than 20% of the kimberlite targets identified from the aeromagnetic survey (MEI ASX release 16 July 2014).

Samples were selected from 12 of the identified kimberlite bodies for detailed mineralogical identification and description. Eleven of the samples are described as Type 1 altered macrocrystic hypabyssal kimberlite, with one sample identified as an altered diatreme facies kimberlite. Kimberlites are classified as Type 1 or Type 2 based on their mineralogy. Kimberlites classified as Type 1 occur worldwide and include all diamondiferous kimberlites. Type 2 kimberlites can also be diamondiferous but have not been recognised outside of Africa.

A total 505 samples were collected for whole rock geochemical analysis from the kimberlite drill cuttings. The geochemical profiles of the kimberlite bodies reflected the effect of weathering with depletion in the upper portion of the bodies and in most cases significant secondary enrichment of many of the elements towards the base of weathering. In particular unusually high copper and cobalt concentrations up to 2317ppm and 1288ppm respectively were observed in kimberlite KJ171. This result is consistent with the fact that copper sulphides were observed in several of the heavy mineral concentrates from other kimberlite bodies and may indicate that the kimberlite intrusion intersected copper mineralisation at depth.

Mineral probing of indicator mineral grains recovered from the processing of drill samples of the kimberlite was completed. Interpretation of the mineral analyses, in particular for chromite reveals that some of the kimberlite bodies contain grains with mineral chemistry that is consistent with the grains originating from within the diamond stability field within the mantle. Significantly, these deeper sourced kimberlite bodies form three discrete sub-clusters within the broader kimberlite field, as shown in Figure 1. Only a few of the kimberlite targets have been drill tested within these more prospective sub-clusters.

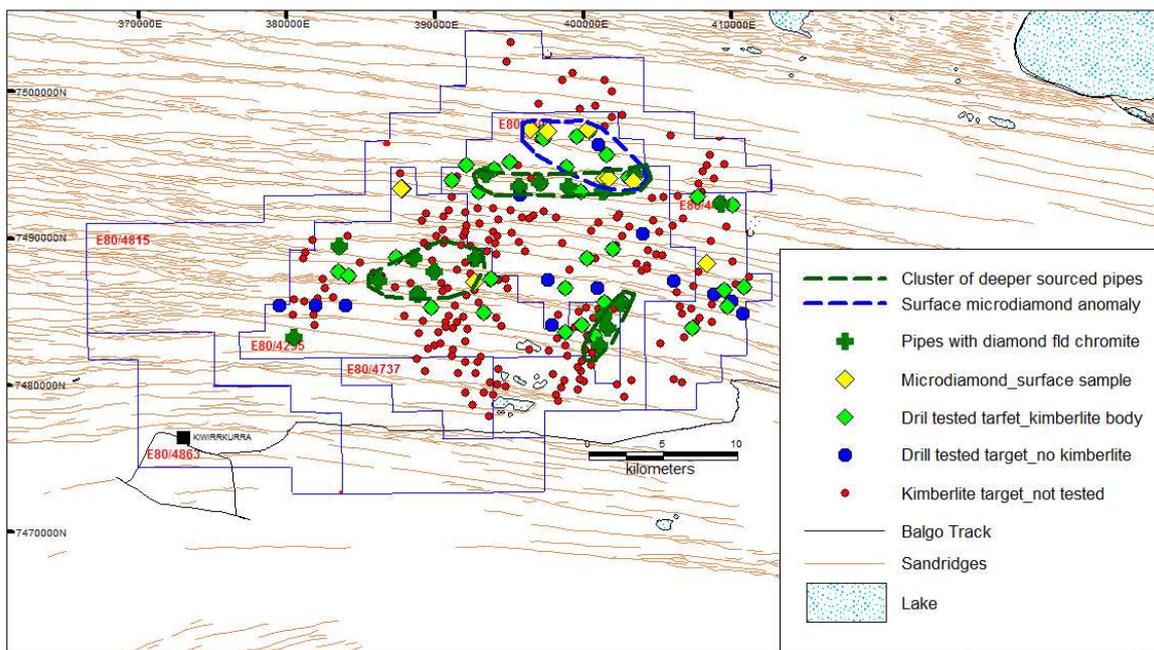


Figure 1  
**Location of Surface Microdiamonds and Kimberlite Bodies with Indicator Minerals Sourced from the Diamond Stability Field**

Approximately 100kg of drill sample was selected for testing for microdiamonds from each of the kimberlite bodies with no microdiamonds recovered from the samples. However the microdiamonds recovered from surface loam samples particularly in the northern part of the field, where they occur within a discrete cluster, indicate that one or more of the kimberlite occurrences within the field will be diamond bearing. Currently less than 20% of the targets have been tested.

Although microdiamonds have not been recovered from the kimberlite samples tested to date, they represent less than 20% of the targets identified from the aeromagnetic survey. The variation in mineral chemistry within the various kimberlite clusters tested to date within the field is interpreted as evidence of variation in the depth of origin of the kimberlites. This conclusion along with the presence of a surface microdiamond anomaly (MEI ASX release 6 October 2014) is supportive of the premise that deeper tapping of the diamond stability field in the mantle has occurred by kimberlites which remain untested. It is likely that kimberlites that tap deeper into the diamond stability field will be more prospective for diamonds. Further details of the test work can be seen in the MEI ASX release of 26 March 2015.

To this end the Webb JV is planning to undertake additional surface sampling focussed on the previously identified surface microdiamond anomaly with the aim of confirming previous results and better defining the surface extent of the anomaly. This field work is anticipated to commence in the next quarter. On the completion of this program and receipt of results, the planned next phase of drill testing of the kimberlite targets will be finalised.

#### **BARKLY** (Meteoric 30%, subject to farmout)

During the quarter field work at Bluebird, situated 30km east of Tennant Creek, was limited to downhole probing of several holes and physical property test work on the sulphide zone intersected by BBDD0004 (16m @ 3.02% Cu and 0.65g/t Au from 139m). Three component down hole magnetic surveys detected a strong magnetic source above and to the east of BBDD0004, providing a target for testing in the next phase of drilling.

Phase II drilling completed during the previous quarter confirmed and extended the mineralisation intersected by Phase I. The Phase II drilling identified a high grade transitional copper sulphide intersection in BBDD0004, as well as several other very encouraging intersections. This is a very positive development as the high grade, broad thickness and the sulphide association demonstrate potential for a significant primary sulphide mineral resource at Bluebird. Planning for a Phase III drilling programme is in progress with the aim of testing the following targets:

1. The interpreted high grade gold position on the lower ironstone contact intersected in the previous drilling (BBDD0002 20m @ 8.17g/t Au, 0.61% Cu and 0.22% Bi from 157m).
2. The extension of the primary copper-gold-bismuth mineralisation at depth (see the hatched lower target area in Figure 2).
3. The lateral extensions of the supergene enrichment zone (see the east and west hatched target areas in Figure 2).

The Phase III drilling is anticipated to commence in the next quarter and will aim at providing information for an initial mineral resource.

Joint venture partner Blaze International has confirmed that it has earned a 70% interest in the Barkly tenement and elected to continue to sole fund all exploration until the commencement of a bankable feasibility study, to earn a further 10% interest.

#### **PERSEVERANCE** (Meteoric 68.43%, Emmerson Resources 31.57%)

Following grant of a permit to carry out geophysical surveys and drilling, Meteoric has commenced discussions regarding a possible farmout of its interest in this copper-gold prospect near Bluebird, subject to agreement from its existing joint venture partner.

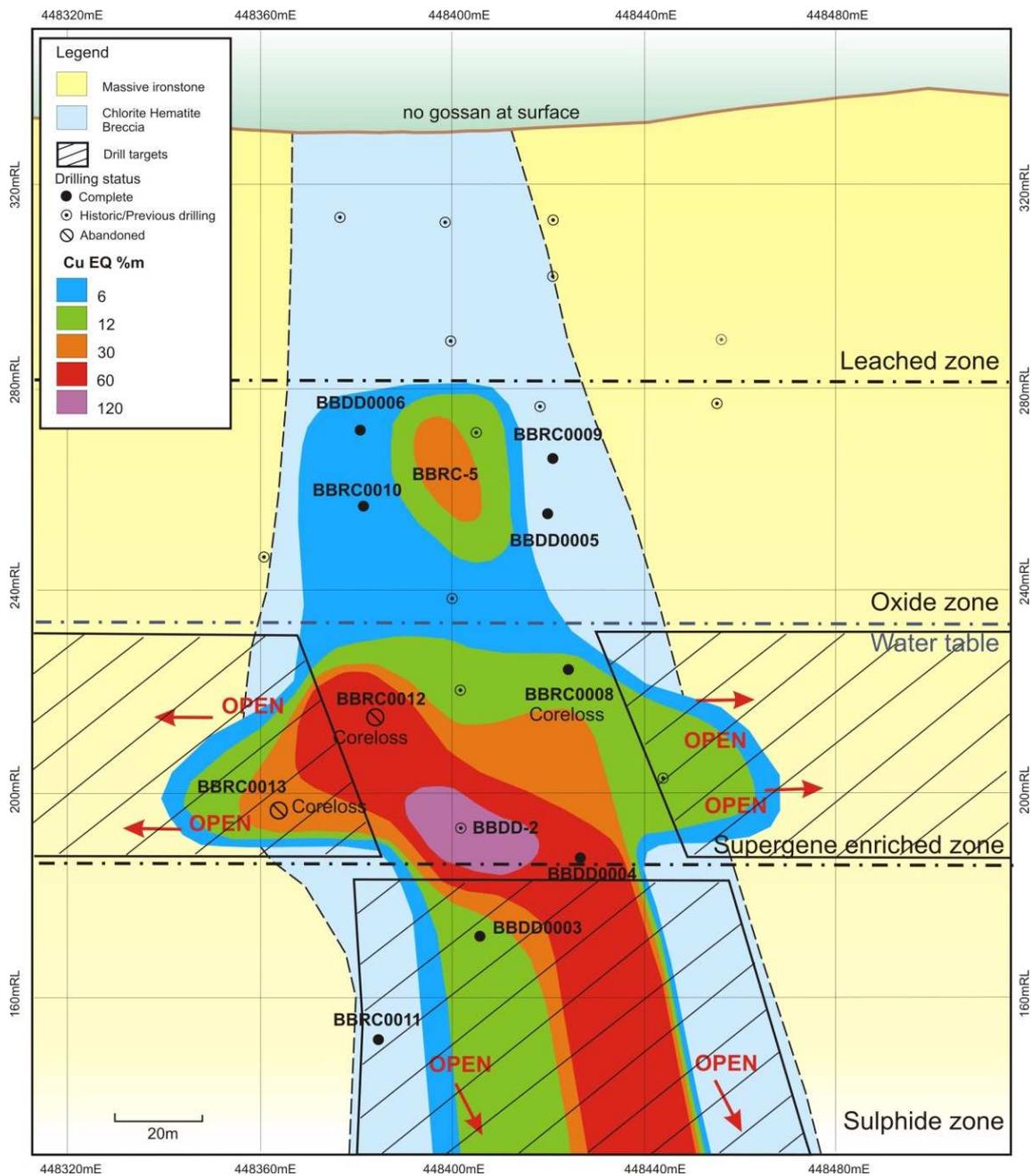


Figure 2  
**Long Section of Bluebird, Looking North Showing Copper Equivalent (CuEQ%) x m\*  
 Contours**

Note the priority drill targets marked by dark grey hatching, and the two abandoned holes BBRC0012 and BBRC0013.

\*CuEQ grade is calculated by combining the metals of interest based on their prices. In this case  $Cu\% + (Au\text{ ppm} \times 0.66) + (Bi\% \times 3.84) = CuEQ\%$ . It is used as a visualisation tool only and is required at Bluebird due to the poly metallic and strongly zoned nature of the mineralisation. In this situation a CuEQ% provides a better picture of the overall geometry of the mineralisation than by using copper or gold grade alone. Metallurgical recoveries were not taken into account when calculating CuEQ%. CuEQ% x m is used for the contouring to give a spatial representation of total metal accumulation.

## **WARREGO NORTH** (Meteoric 100%, subject to farmout)

Meteoric holds three granted exploration licences over magnetic anomalies near the old Warrego copper-gold mine (production 1.3Mozs gold and 91,000t copper), the largest mine in the Tennant Creek mineral field. Previous exploration has 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 largest target is Parakeet, 15km NW of Warrego, where drilling has intersected anomalous copper-gold-bismuth values and ironstone alteration. As previously reported, Meteoric has entered into a farmin and joint venture agreement with Bulletin Resources Ltd. Documentation of this agreement is being finalised, with drilling of the Parakeet target anticipated to commence mid-year.

## **WILTHORPE** (Meteoric 100%, subject to sale agreement)

Meteoric has entered into an agreement to acquire the remaining 10% interest in the Wilthorpe gold project and to sell this project to Resourceful Mining Group Pty Ltd (MEI ASX release 12 March 2015). The sale is conditional, amongst other things, upon the grant of a mining lease over the gold resources. A mining lease application has been lodged with the Department of Mines and Petroleum.

## **COORARA** (Meteoric 100%, subject to farmout)

Meteoric holds a 40km strike length of banded iron formations (BIF) in the South Yilgarn iron province within trucking distance of the multi-user Trans Australian Railway. The BIF sequences have demonstrated potential for both goethite-hematite and magnetite iron ores. During the quarter a term sheet for the farmout of this tenement was signed with Matsa Resources Ltd. Documentation of this agreement is in preparation.

## **CORTEGANA** (Meteoric 100%, application)

Meteoric has applied for a 65sq km Investigation Permit over crystalline, coarse flake graphite occurrences and old graphite mines in the Aracena Metamorphic Belt, Huelva province. No modern exploration has been carried out in this old mining district and Meteoric anticipates that airborne EM techniques should be very effective in identifying target areas for high grade graphite in an area close to markets in Europe.

For more information on the company visit [www.meteoric.com.au](http://www.meteoric.com.au)

Please direct enquiries to:

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## **Competent Person Statement**

The information in this report that relates to 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 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 March 2015

Tenement	Nature of Interest	Project	Ownership (%)	Change in Quarter
E16/0372	Granted	COORARA	Diluting from 100%	
E52/2067	Granted	WILTHORPE	90%	
E52/2627	Granted	WILTHORPE	90%	
M52/1067	Application	WILTHORPE	90%	
E80/4235	Granted	ELIZABETH HILLS (Webb JV)	30%	
E80/4407	Granted	ANGAS HILL (Webb JV)	30%	
E80/4506	Granted	WEBB DIAMONDS (Webb JV)	Rights to 24%	
E80/4737	Granted	WEBB DIAMONDS (Webb JV)	30%	
EL30057	Application	WEBB DIAMONDS (Webb JV)	30%	
E80/4815	Granted	LAKE MACKAY (Webb JV)	30%	
E80/4816	Granted	LAKE MACKAY (Webb JV)	30%	
E80/4863	Granted	KIWIRKURRA	30%	Tenement Granted
EL23764	Granted	WARREGO NORTH	100%	
EL24255	Granted	WARREGO NORTH	100%	
EL24257	Application	WARREGO SOUTH	100%	
EL24363	Granted	WARREGO NORTH	100%	
EL28693	Application	WARREGO NORTH	100%	
EL30666	Application	MONUMENT HILL	100%	
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%	JV Dilution
H14913	Application	CORTEGANA - SPAIN	100%	