

t 08 9485 2836 10 Out f 08 9321 6571 WEST PO Bo

10 Outram Street WEST PERTH WA 6005 PO Box 963 WEST PERTH WA 6872

www.meteoric.com.au METEORIC RESOURCES <sup>ℕL</sup> abn 64 107 985 651

# Webb Diamond Project Update

The Directors of Meteoric Resources NL (**Meteoric** or the **Company**) (**ASX:MEI**) are pleased to report on the Lozar radar surveys undertaken at the Webb Diamond Joint Venture by operator and manager GeoCrystal Ltd (**GeoCrystal**).

## HIGHLIGHTS

- Ground based Lozar Radar Surveys conducted over two programs were trialed over 15 selected kimberlite magnetic targets that occur within the Webb kimberlite field.
- In the 1st survey program, the radar data interpreted pipe like bodies occurring over 6 previously drilled magnetic target sites which had confirmed kimberlite.
- The most significant response from the 1st survey was associated with drilled magnetic target KJ244, which based on the radar and drilling data, is now interpreted as a 2ha kimberlite pipe.
- The most significant responses from the 2nd survey were associated with undrilled kimberlite magnetic targets KJ52 and KJ62 which are now interpreted as pipe like structures with surface areas of 4ha and 7ha respectively.
- To date, the JV has identified 51 kimberlites by the drilling of 64 kimberlite magnetic targets from the field of 280 magnetic targets. This represents 23% of the targets tested to date.

During September 2016, ground penetrating radar geophysical surveys were undertaken on selected kimberlite magnetic targets within the project area by Lozar Radar Australia.

These ground based trial surveys were focussed on both drill tested and untested kimberlite magnetic targets within and in close proximity to a broad microdiamond anomaly (Figure 1).

Lozar Radar is a ground scanning radar technology with a depth penetration of up to 200m and with the capability of mapping geological features such as faults and lithology boundaries. 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 magnetic targets.

The field program was in 2 parts with ground radar surveys completed on 15 kimberlite magnetic targets. At least 2 survey lines were completed over each target.



Figure 1. Webb Kimberlite Field with Lozar Radar tested targets

## First Radar Survey

The first radar survey was a trial to validate the radar technique against known kimberlite bodies at Webb that were previously drilled. A total of 6 drilled magnetic targets which had identified kimberlite were surveyed for a total 6.17 line km. Profile survey sections for the drilled targets KI244, KJ191 and KJ199 and are shown in Figures 2, 3, 4 & 5.

Based on the interpreted radar image, drilled magnetic target KJ244 presents a stark contrast between the kimberlite body and the host sediments and indicates a pipe-like body approximately **2ha** in area. Also based on the radar images, both drilled magnetic targets KJ191 and KJ199 are interpreted as small pipes with diameters of approximately 100m. In all cases the overlying sediments are also clearly identified.



Figure 2. Radar profile - Target KJ244



**Figure 3.** Radar profile, alternate image – Target KJ244



Figure 4. Radar profile - Target KJ191



Figure 5. Radar profile - Target KJ199

# Second Radar Survey

The second radar survey was to use the radar technique against undrilled kimberlite magnetic targets at Webb which resulted in 9 targets being surveyed for 5.56 line km. These surveyed targets are all contained within the broad microdiamond anomaly situated in the northern portion of the kimberlite field where a total of 42 undrilled kimberlite targets remain untested.

Profile radar survey sections for the undrilled magnetic targets KJ52 and KJ62 are shown below. Both these targets have been interpreted as kimberlite pipe bodies based on similarities in the signatures with the kimberlite bodies tested in the first survey. Targets KJ52 and KJ62 are now interpreted to have surface areas of **4ha** and **7ha** respectively.



Figure 6. Radar profile - Target KJ52



Figure 7. Radar profile, alternate image - KJ52



Figure 8. Radar profile - Target KJ62



Figure 9. Radar profile, alternate image - Target KJ62

## Discussion

The Lozar radar technique has the capability to clearly identify larger near surface potential kimberlite bodies in conjunction with the magnetics and hence is a valuable technique for targeting drill holes and defining the geometry of a pipe.

Lozar radar combined with detailed ground magnetic surveys will be used to prioritize targets for drill testing. The focus will be 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, will also be targeted.

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

-ENDS-

For more information on the company visit www.meteoric.com.au

Please direct enquiries to:

Graeme Clatworthy Executive Director Phone +61 8 9485 2836 Mob 0418 902 341

**GeoCrystal Limited** Suite 4 6 Richardson Street West Perth, Western Australia, 6005

Zlad Sas Director Mob 0412 198 878 George Sakalidis Executive Technical Director Phone +61 8 9485 2836 Mob 0411 640 337

http://www.geocrystal.com.au/

#### **Competent Person's Statement**

The information in this report that relates to exploration results is based on information compiled or reviewed by Tom Reddicliffe BSc(Hons), MSc, FAusIMM. Tom Reddicliffe is a self-employed consultant to the Meteoric Resources NL - GeoCrystal Limited joint venture and 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 2004 edition of the 'Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Tom Reddicliffe consents to the inclusion of this information in the form and context in which it appears in this report.

#### About Diamonds and Kimberlite

Diamonds occur naturally at depths greater than 150 kilometres beneath the earth's crust and are carried to the surface of the earth by volcanic activity. As this molten mixture of magma (molten rock), minerals, rock fragments and diamonds approaches the earth's surface it begins to form a pipe-like structure shaped like a champagne flute. These pipes of igneous rocks are called kimberlites or kimberlite pipes and are composed of certain minerals called kimberlite indicator minerals, upper mantle rock fragments and other trace minerals. Shallow lakes may form in the resulting inactive volcanic crater associated with an underlying kimberlite pipe. Kimberlite pipes are the most significant source of diamonds yet only 1 in about every 200 kimberlite pipes contains gem quality diamonds. Some kimberlite pipes contain very few diamonds or no diamonds and these are referred to as non-diamondiferous or sterile.

### About the Diamond Market

According to a report commissioned by the Antwerp World Diamond Centre published in 2012, the demand for diamonds is forecast to double by 2020, far outpacing supply, because of a lack of new mines. Industry commentators consider that the consumer appetite for diamonds is set to grow annually with the growth in demand over the next decade driven by increasing prosperity in China and India. This anticipated increase in world demand for diamonds is likely to outpace the growth in diamond production due to the impact of relatively flat growth in diamond supply towards the end of the decade, as no major new diamond deposits have been discovered since 1997. The expected consequence of this imbalance between supply and demand is that diamond prices are likely to continue to rise. The average price for global rough diamond in 2011 was US\$121.60 per carat.

Typically, gem and near-gem diamonds are used in jewellery whereas industrial diamonds are used principally for cutting and grinding purposes. Gem-quality diamonds account for over 80% of the value of the world diamond market. Antwerp is the largest diamond trading centre with other key centres including Mumbai, Johannesburg and Tel Aviv. It is estimated that approximately 80% of the world's annual production of rough diamonds is under the control of the De Beers Group and other major diamond producers including Rio Tinto, BHP Billiton and Alrosa Group.