

14 March 2019

# IMAGE RESOURCES TARGETING ORE RESERVE UPGRADE AT BOONANARRING IN RESPONSE TO SUBSTANTIALLY HIGHER THAN EXPECTED ORE GRADES

Image Resources NL (ASX: IMA) ("Image" or "the Company") is pleased to advise that the Company will be embarking on a drilling and study programme ("Programme") aimed at upgrading the Mineral Resource and Ore Reserve estimates at its 100%-owned, high-grade, zircon-rich Boonanarring mineral sands project located 80 km north of Perth in the infrastructure-rich North Perth Basin in Western Australia, in response to substantially higher realised heavy mineral (HM) ore grades and associated actual heavy mineral concentrate (HMC) production across the first three months of production.

The objective of the Programme is to appropriately delineate an apparent high-grade sub-set or core section ("Core") of the eastern strand of the Boonanarring deposit. The Programme will include a ground magnetic survey and a close-spaced (2-3 m) drilling campaign designed to delineate the high-grade HM and zircon-rich content of the Core and to determine the continuity of the Core along strike.

# **Evidence of High-Grade Core**

A high-grade Core was identified by the drilling used to develop the current Mineral Resource model and Ore Reserve estimate. Sectional interpretation indicates that within the eastern strand of mineralisation (which is ~100 m wide) the Core may be less than 20 m in cross-sectional width. As the nominal spacing of the resource definition drill holes is typically 15-20 m, the current drilling may have been too widely spaced to adequately intercept and define the mineralisation within the high-grade Core.

The drill holes that are interpreted to have intercepted the Core have substantially higher total HM (of up to ~50%) and higher zircon content (of up to 52% of the HM) than typical assays from the eastern strand. See Figure 1 for a grade-thickness contour map of the Boonanarring deposit eastern and western strands highlighting the high-grade Core in the eastern strand.

#### **Operational Indicators**

The first information indicating that the eastern strand Core (and therefore potentially the Mineral Resource and Ore Reserve) may have been underestimated is based on January 2019 production statistics. The average actual HM ore grade for January 2019 resulted in a positive variance of 110% (i.e. more than double) when compared to the Ore Reserve estimate (12.6% HM actual versus 6.0% HM estimate). In addition, the average actual zircon grade of the ore was 33.5% (as a percentage of the HM content) compared to the Ore Reserve estimate of 22.9%, for a positive variance of 46%.

Importantly, in reviewing the January 2019 Boonanarring operational data it was determined that, even though the overall ratio of ore mined and processed during January from the eastern strand and western strand was roughly 50:50, the eastern strand material included a

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10000mE 12000mE **Block A** 34000mN **Block B Eastern Strand Western Strand** 32000mN **Current mining area Block C** 30000mN HM(%) x Thickness(m) < 20 20 to 30 28000mN 30 to 40 40 to 50 50 to 60 **Block D** 60 to 70 70 to 80 80 to 150 >= 150 (High-grade Core) **BOONANARRING DEPOSIT GRADE THICKNESS** ☐ Pit outline HM(%) x THICKNESS(m)

Figure 1. Grade-thickness contour map of the Boonanarring deposit

26000mN

section of the high-grade Core that may have contributed to the higher average ore grade. A review of December 2018 and February 2019 operational data indicates limited amounts of ore from the Core of the eastern strand were mined and processed and reconciliations of actual and estimated HM grades indicated positive variances of +20% and +30% respectively. Again, the overall ratio of ore processed from the eastern and western strands in December 2018 and February 2019 was approximately 50:50, suggesting the Core may have contributed to the positive variance.

The latest indicator of potential underestimation of the HM grade of the Core of the eastern strand was experienced in early March 2019 when, as in January 2019, a section of the Core was mined and processed. Preliminary HM ore grades, based on daily physical HMC production, were reported as being substantially higher than estimated, averaging 19% HM across a six-day period (4-9 March 2019) compared to an estimated HM grade of 8%. This latest information suggests the high positive variance of HM ore grade in January 2019 may not be limited to just the section of the deposit mined in January 2019 and therefore Image will implement a reassessment of the eastern strand Mineral Resource and Ore Reserve estimates.

On an overall basis, as shown in Figure 2, the average variance in HM ore grade for December 2018 through February 2019 (for mining and processing of ore from both the eastern and western strands) is a positive 50% and results in early March 2019 continue to show a significant positive variance.

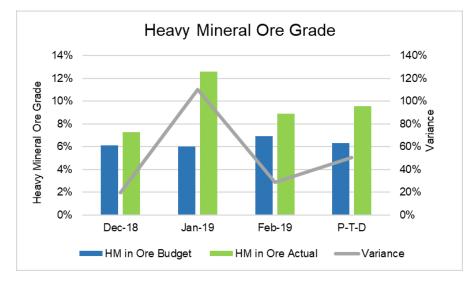


Figure 2. Boonanarring – estimated and actual heavy mineral ore grades

Note: Budgeted ore grade is based on Mineral Resource and Ore Reserve model estimates and mining has been reasonably aligned with the budgeted mine plan

While more production data is required for greater certainty, preliminary ore grade reconciliations for the western strand of actual HM ore grades compared to estimated ore grades indicate a reasonable alignment between the Mineral Resource model and the actual HM grades, whereas preliminary reconciliation for the eastern strand indicates positive variations of up to 95% (i.e. nearly double) between the estimated and actual grades.

Following presentation of the above information and discussions with Image's Mineral Resource consultant (Optiro) a close-spaced drilling programme (with holes spaced at 2-3 m on 50 m spaced lines) was designed to appropriately delineate the high-grade Core of the eastern strand and to determine the variability of HM ore grades and zircon content within the Core. Prior to the drilling programme, Image will undertake detailed caesium vapour ground magnetics using 0.5 m station spacing and 25 m line spacing to delineate the horizontal extent of the Core.

The ground magnetic survey and drilling programme, along with associated analytical work, an updated Mineral Resource estimate by Optiro and mine modelling/planning and Ore Reserve estimation, will be implemented as a matter of priority to aid operations personnel with improved predictive HM ore grades for blending purposes, and to appropriately update the Ore Reserve to better account for the high variability of the Core of the eastern strand mineralisation.

# **February 2019 HMC Production**

HMC production during February 2019 was significantly higher than budgeted at 19,020 tonnes, or a positive variance of 51% when compared to a budget of 12,600 tonnes (see Figure 3). The additional HMC production is a result of the higher than expected HM ore grade, but also higher operating availability and higher HM recovery, albeit at slightly lower overall ore processing rate. HMC production for the first three months of production at Boonanarring has averaged more than 20,000 tonnes per month, which is the long-term average expected HMC production level for full-scale production.

Managing Director Patrick Mutz commented, "Results from Boonanarring continue to impress with the level of HMC production for February again significantly higher than budget. The additional production during the first three months of production could create an opportunity for the sale of HMC outside of the current off-take agreements. Also, while the actual heavy mineral ore grade has been substantially higher than expected and will require additional drilling and study work to update the Ore Reserve, this is clearly a good problem to have."

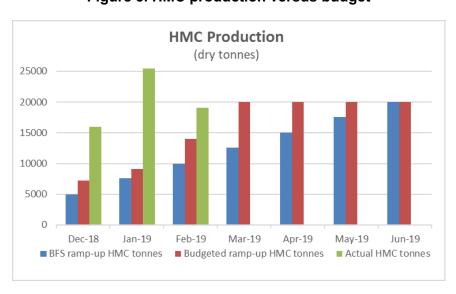


Figure 3. HMC production versus budget

# Third Shipment of HMC

The early successes of higher than expected production of HMC allowed Image to complete its first shipment of ~10,000 tonnes of HMC and receive its first revenue in January 2019. In addition, the second shipment of HMC was secured with a letter of credit and was shipped on 16 February 2019 and was for a full complement of ~20,000 tonnes, which is the long-term average quantity to be shipped per month during full-scale production.

A third HMC shipment is currently being planned for departure before the end of March 2019 and will also be for a full complement of ~20,000 tonnes. The Company remains on-track to achieve its next key milestone of positive project cash flow for Q1 2019.

## **Boonanarring Deposit**

The Boonanarring deposit consists of two parallel strands of mineralised sands (ancient beaches), with each strand of mineralisation being approximately 80-100 m wide and with the strands intermittently separated by 0-50 m of low to zero HM grade sands. Both strands are typically 10-15 m thick and extend over a strike length of 13.6 km from south-southeast to north-northwest. See Figure 4 for a depiction of relative locations of the eastern and western mineralised strands.

The physical dimensions and separation of the eastern and western mineralised strands vary along the strike length of the deposit. Based on Mineral Resource modelling, the eastern strand is higher in HM grade and the HM has a higher zircon content.

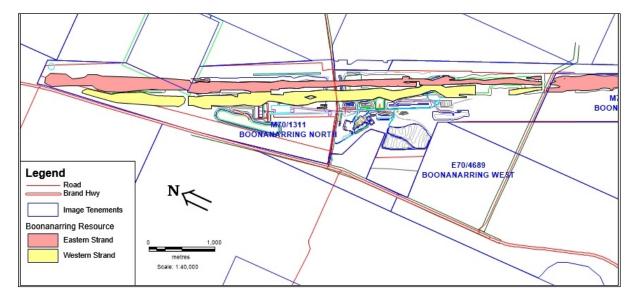


Figure 4. Boonanarring mineralised strands - relative locations

### **Boonanarring Project Background Information**

The Boonanarring Project is arguably one of the highest heavy mineral grade, zircon-rich, mineral sands projects in Australia. Project funding was finalised and construction commenced in April-May 2018. Following a six-month construction period, completed on-time and on-budget, the project was successfully commissioned in October-November 2018 and the planned six-month production ramp-up period commenced on 1 December 2018.

HMC production ramp-up was more rapid than planned and in the second month of the ramp-up period (January 2019) HMC production exceeded the long-term average HMC production for full-scale production. With the receipt of revenue in January and February 2019, and the expectation of revenue for a third shipment of HMC before the end of March, the Company remains on track to achieve positive cashflow for 1<sup>st</sup> QTR 2019.

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# COMPETENT PERSON'S STATEMENT – EXPLORATION RESULTS, MINERAL RESOURCES AND ORE RESERVES

The information in this report is based on information compiled by George Sakalidis BSc (Hons), who is a member of the Australasian Institute of Mining and Metallurgy. George is a Director of Image Resources NL. Mr Sakalidis 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 for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. George Sakalidis consents to the inclusion of this information in the form and context in which it appears in this report.