



## Trial Mining Programme Phase 2 has commenced at the Gravelotte Project

- Mining Commences at Gravelotte under Trial Mining Phase 2.
- Processing plant to be commissioned this week.

Critical steps in the evaluation of the Gravelotte Emerald project and the determination of the optimum mining, processing and sorting techniques.

In 2018 Magnum completed the first stage of this evaluation programme by the trial processing of around 500 tonnes of rock from the existing waste and low grade dumps at Gravelotte. This first stage programme provided valuable information on the crushing characteristics of Gravelotte rocks and determined that XRF technology was the most efficient and accurate sorting method to liberate the emeralds.

**The second and final stage of the evaluation programme is the trial mining, processing and sorting of around 8,000 tonnes of rock from the historic Cobra North and Discovery pits at Gravelotte.**

The mining stage of this programme has now commenced and is anticipated to take around 20-25 days to complete. Mining is through drill and blast and excavation into short haul trucks to the stockpile area adjacent to the processing circuit.



Photo 1: Blast at the Discovery Pit

The processing circuit has been constructed locally to Magnum design and specifications and will commence processing the mined material in late March after a short commissioning period using material from the low grade and waste dumps. A flow diagram of the processing circuit is included as figure 1.

### ASX Release

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### Magnum Mining and Exploration Limited

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### ASX Code

MGU

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Photo 2: Cobra North Pit blast material being loaded



Photo 3: Drill and Blast Rig on-site

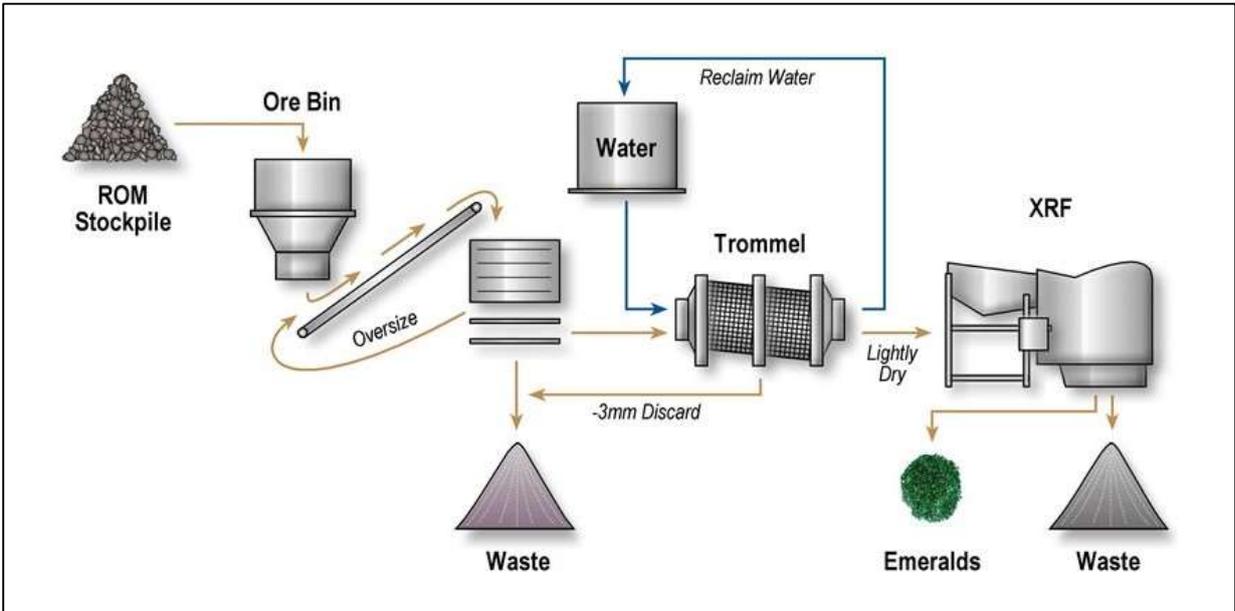


Figure 1: Flow Diagram of the processing circuit

The first stage trial processing programme indicated that XRF is a more efficient and accurate sorting method to that of optical or hand sorting. As a result, an XRF unit is scheduled to be commissioned on site during the first week of April 2019.

Based on the historic average mining grade of 6g/t (30 carats per tonne) this second stage trial mining programme is targeted to achieve in excess of 250,000 carat of emeralds.



Photo 4: Dewatering screen and conveyor



**Photo 5: Plant crusher with oversize return conveyor and trommel**



**Photo 6: Plant dewatering screen with trommel and screen feed conveyor**

The trial processing and mining operations at Gravelotte have been greatly assisted by all necessary infrastructure being already established on site. This infrastructure includes mess, accommodation and mine administration buildings, water and power and large work sheds for plant and equipment.

### Gravelotte Project, South Africa

Magnum's 74%-owned Gravelotte Project is located in the Limpopo Province of South Africa. Emeralds were discovered in the province in 1927 and, since then, several companies have explored for and mined within the broader region for emeralds.

From 1929 to 1982 the total recorded emerald production from the Gravelotte Project, as well as the area surrounding the nearby Gravelotte township, was nearly 113 million carats.

It is reported that during the 1960's the Gravelotte Project itself was the largest emerald mine of its type in the world, employing over 400 sorters.

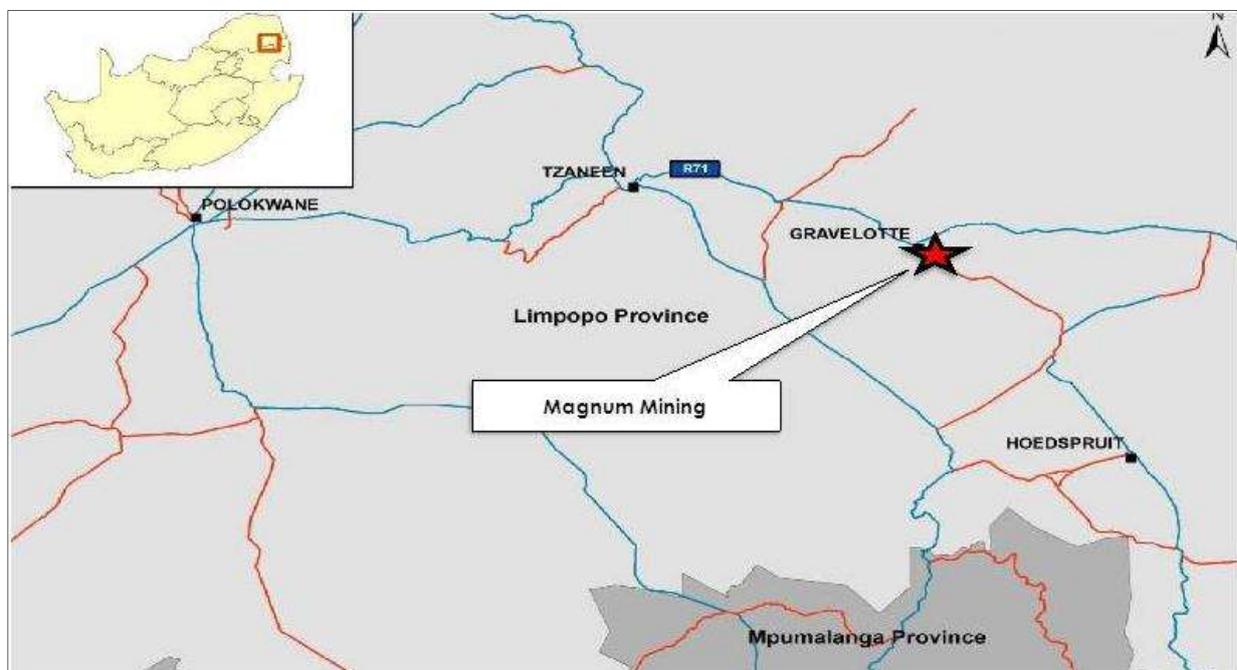


Figure 2: Gravelotte Location Map

### Why is MGU at Gravelotte?

The Gravelotte project provides Magnum with a medium term production opportunity in a niche commodity such as emeralds where demand is growing.

The project offers established infrastructure, existing and accessible open cuts together with extensive low grade dumps, a large (albeit incomplete) historic data base, a nearby and available work force, local on-site technical expertise and a nearby township that can serve as a supply centre.



**Photo 7: Aerial view of the Gravelotte Mine Site showing key infrastructure with Cobra and Discovery Pits in background.**



**Photo 8: Discovery Pit**

During the past three years, Magnum has worked to re-establish the historical database and develop a strong understanding of the geology, structure and controls of mineralisation within the project area.

The Company has maintained and refurbished much of the extensive mine site infrastructure at Gravelotte including offices, laboratory, workshops, garages, management accommodation complex and a mine hostel to accommodate mine workers.

The mine site is well situated with utilities and logistics being serviced by ESKOM grid power, has a sealed road to the mine gate and has a working airstrip.

A handwritten signature in black ink that reads "G. Button". The signature is written in a cursive style.

**GRANT BUTTON**  
**Chief Executive Officer/Joint Company Secretary**

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*The information in this announcement that relates to Exploration Results and Mineral Resources complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled and assessed under the supervision of Mr Howard Dawson, Non-Executive Director of Magnum Mining and Exploration Limited. Mr Dawson is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Dawson consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.*