



26 April 2018

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## ***Evaluation of U-pgrade™ Process to Langer Heinrich continues***

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### **KEY POINTS**

- **Testwork and Study to continue on Langer Heinrich (“LHM”).**
- **Ongoing work to determine significantly improved economics of future operations at LHM, through extra efficiencies, cost reduction and increased production.**
- **Initial testing on low-grade ore indicated U-pgrade™ could reduce one tonne of mined ore to only 25 kilograms for presentation to the leach plant, whilst increasing the grade by approximately 35 times.**

Marenica Energy Limited (“Marenica or the Company”) notes that on 26 April 2018 Paladin Energy Limited (“Paladin”) (ASX “PDN”) made an ASX announcement that “provided an update regarding the potential future operating strategy for its Langer Heinrich Mine (LHM), including preparatory steps being taken for a potential care and maintenance decision”. Marenica and Paladin would like to confirm that evaluation of the potential of Marenica’s **U-pgrade™** process on beneficiating low-grade ore at Langer Heinrich is expected to continue even if Langer Heinrich is ultimately put into care and maintenance.

Paladin has previously confirmed “that it is evaluating the potential of Marenica’s **U-pgrade™** process on beneficiating low-grade ore at Langer Heinrich and that that work was being undertaken in conjunction with Marenica”.

On 8 February 2018, Marenica announced the results of testwork on Langer Heinrich ore, the results were very positive and indicated that the Langer Heinrich ore outperformed all other ores previously tested using **U-pgrade™**. The ore tested at that time was restricted to the low-grade ore, however, it is possible that the testwork will be expanded to include high and medium grade ore to determine extra efficiencies and cost reductions that are likely as a result of implementing **U-pgrade™** at Langer Heinrich.

“We expect ongoing work to result in significant savings to the current cost base through application of our patented **U-pgrade™** process to the Langer Heinrich operation. We look forward to the benefits of **U-pgrade™** to both Paladin and Marenica in assisting Paladin to reduce overall operating costs at Langer Heinrich”, said Murray Hill Managing Director.

The testwork results to date on low-grade ore indicated that the **U-pgrade™** process plant recovery is expected to exceed 85%, producing a concentrate for leaching of less than 2.5% of the mined mass. This means that for every one tonne of ore mined, only 25 kilograms of **U-pgrade™** processed ore would be sent to the leach plant. By comparison, currently 600 kilograms of ore is presented to the Langer Heinrich leach plant for every tonne mined.

The focus of the testwork, referred to above, was on detailed mineralogical ore characterisation and laboratory scale testing of critical unit operations in the **U-pgrade™** flowsheet. Marenica has tested many ores through this same procedure and has a thorough understanding of the critical characteristics to determine the expected performance of particular ore through the **U-pgrade™** process. The testwork on Langer Heinrich ore was completed on a single composite prepared from four individual samples taken from the Langer Heinrich low grade stockpiles.

Marenica is in various stages of discussions with a number of resource owners to enable Marenica to demonstrate the benefits of **U-pgrade™** to their projects. Marenica is also in the process of completing due diligence on a number of projects, either for acquisition or application of **U-pgrade™**.

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