



18 December 2013

Kalgoorlie Nickel Project Update – Exclusive Partnership with Simulus

Heron Resources Limited (ASX:HRR) is pleased to announce that it has entered into a binding term-sheet for a strategic partnership with the Simulus Group (**Simulus**) to co-fund the development of the Carbon Friendly Nickel Production process (**CFNP**) through staged investments.

Heron Resources Limited

ASX:HRR

Issued Shares 253M

Share Price \$0.145

Market Cap \$36.7M

Cash (Sep 2013) \$38.6M

- **Simulus and Heron have entered into an exclusive arrangement to co-fund the development of Simulus' reagent recovery technology.**
- **The venture is based upon the successful testwork results announced to the market on 2 December 2013 demonstrating the potential of the technology for the Kalgoorlie Nickel Project (KNP), and will allow the technology to be progressed with a strong focus on meeting KNP requirements.**
- **Heron will earn equity in the CFNP entity through staged investments. The staged investments are subject to Heron Board approval which will consider the outcomes of previous stages, currently including the announced Scoping Study and optimisation testwork for the Siberia limonite ore.**

Kalgoorlie Nickel Project Testwork

Heron has a multi-disciplinary strategy to match various extractive technologies to specific ore types within the Kalgoorlie Nickel Project with the ultimate aim of enhancing and crystallising value from the KNP through innovative technology. Heron's work with the Simulus Group is a part of this strategy.

Simulus is a Perth-based metallurgical engineering firm specialising in developing innovative and cost effective solutions to complex metallurgical processes. Simulus is developing CFNP, an improved nickel production process that focuses on sulphuric acid recovery, regeneration and recycling measures to improve the operating costs and reduce the carbon emissions associated with nickel production.

On 2 December 2013 Heron announced excellent results from testwork on the KNP laterite ores, demonstrating nickel extraction of 94-97% through an atmospheric leach process, and acid recoveries of 50% for two of the three samples tested. The third sample is currently undergoing a follow up test, adjusting the standard CFNP leach conditions for the resources specific mineralogical requirements to increase extraction in line with the other samples tested. Through standard optimisation, overall acid recoveries are expected to rise to 65-70%.

The Atmospheric Leach process together with the acid recovery and recycling process has the potential to very significantly reduce the capital and operating costs associated with development of the KNP compared with the High Pressure Acid Leach (HPAL) process employed in the 2009 and 2010 KNP pre-feasibility studies, and hence holds promise for a positive step change in the KNP economics.

Simulus has now commenced the next stage of work, being continued testwork based on the Siberia limonite ore, and the production of a Scoping Study to confirm the capital and operating costs for a commercial scale Nickel Laterite processing operation based on Atmospheric Leaching and incorporating the Simulus CFNP reagent recovery within a fairly standardised Mixed Hydroxide Product (**MHP**) flowsheet.

Strategic Partnership

Heron and Simulus are delighted to announce the commencement of an exclusive major strategic partnership between the companies, under which Heron and Simulus will contribute staged funds and resources to the continued development of the CFNP technology, with Heron earning equity in the entity holding the CFNP intellectual property.

Post completion of the current work, the continued development of the CFNP technology will initially comprise two stages:

- Stage 1, being a cost study for a demonstration plant for the technology (“**Demonstration Plant**”); and
- Stage 2, being the construction of the Demonstration Plant, to be capable of small scale processing of both KNP nickel laterite and higher grade feed stocks on a semi-commercial basis.

Commencement of Stage 1, and subsequently Stage 2, is subject to Heron’s Board approval, which will take into account the results of the work undertaken to that point, including the testwork and Scoping Study completed and currently under way.

Heron expects to contribute approximately \$100,000 under Stage 1. The KNP feedstock requirements for Stage 2 are already mined and at grass within suitably permitted KNP tenure.

The cost of Stage 2 will be determined during Stage 1, and Simulus’ and Heron’s contributions to Stage 2 will be agreed prior to the commencement of that stage. It is anticipated that Simulus and Heron may also consider the desirability of involving a third party under Stage 2. Under certain limited circumstances including where Heron elects not to contribute to a Stage 2 development, Simulus will have the option to acquire back Heron’s earned equity interest in CFNP.

Whilst the focus of the development of CFNP will be on the KNP, the technology has wider applicability to nickel processing and potentially other areas of mineral processing, and the partners will consider licencing the technology to third parties as opportunities arise.

Heron’s Managing Director, Ian Buchhorn, said “I am delighted that Heron and Simulus have agreed to pursue development of this promising technology with a particular focus on realising the considerable value which is locked up within the KNP. Our team aims to move quickly and relatively inexpensively to substantiate the potential savings in KNP capital and operating expenditure with the aim of facilitating an earlier development of the Kalgoorlie Nickel Project.”



Ian Buchhorn
Managing Director

The information in this report that relates to Exploration is based on information compiled by David von Perger who is a Member of the Australasian Institute of Mining and Metallurgy. David von Perger is a full time employee of Heron Resources Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the exploration activity that is being 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”. David von Perger has consented to the inclusion in this report of the matters based on his information in the form and context that it appears.