

## Australian Securities Exchange Announcement

20<sup>th</sup> June 2017

King River Copper Limited (ASX: KRC) is pleased to provide this update on activities underway on the Vanadium-Titanium Project Concept Study.

## Vanadium Concept Study

The Vanadium Concept Study milestones (KRC ASX: 21 April 2017) are being progressively addressed. This study is examining the feasibility of producing vanadium in the form of vanadium pentoxide (V2O5) and also titanium dioxide (TiO2) from the high grade zone of the Central vanadium deposit at Speewah (Figure 1).

Key project milestones completed and underway include:

- CSA Global Pty Ltd has completed an updated resource estimate reporting in accordance with the JORC Code (2012). The updated Measured, Indicated and Inferred Mineral Resource, reported at a 0.23% V<sub>2</sub>O<sub>5</sub> cut-off grade from the Central, Buckman and Red Hill deposits (Figure 1), comprises 4,712 million tonnes at 0.3% V<sub>2</sub>O<sub>5</sub>, 2% Ti and 14.7% Fe (refer KRC ASX announcement 26 May 2017 for the full resource statement details).
- Metallurgical testwork:

A 28.42kg sample of reverse circulation drill assay pulps assaying 0.37%  $V_2O_5$ , 2% Ti and 14.8% Fe, has been selected for beneficiation and hydrometallurgical test work including:

- Magnetic separation to produce a new specification vanadiferous titano-magnetite concentrate, targeting >2% V2O5 and 12-16% TiO2.
- Preliminary hydrometallurgical testwork:
  - Leaching the magnetite concentrate to put vanadium and titanium into solution at favourable extraction recoveries. Several diagnostic microleaches will be trialed using different acid types, acid concentrations, and different times, temperatures, and pulp densities.
  - Precipitation of vanadium pentoxide  $(V_2O_5)$  from the leach solution trialing several methods.

The objective of these preliminary hydrometallurgical steps is to provide some baseline data for further testwork to produce a high purity  $V_2O_5$  precipitate.

This test work is already underway and results expected during the coming September 2017 quarter.

The major objective of the Concept Study is to identify whether new hydrometallurgical approaches can provide a lower cost, lower risk base framework for a new Scoping Study into the production and marketability of high purity vanadium and titanium products, including a vanadium electrolyte product that may in future be used for vanadium redox flow batteries.

An initial budget of \$40,000-50,000 has been allocated for this vanadium test work.





Figure 1: Central, Buckman and Red Hill Vanadium JORC 2012 resource outlines (green).



## **Competent Persons Statement**

The information in this report that relates to Exploration Results is based on information compiled by Ken Rogers and fairly represents this information. Mr. Rogers is the Chief Geologist and an employee of the Company and a member of the Australian Institute of Geoscientists. Mr. Rogers has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Rogers consents to the inclusion in this report of the matters based on information in the form and context in which it appears.



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