

# PROVISIONAL PATENT LODGED WITH IP AUSTRALIA FOR SUREFIRE'S PROPRIETARY VANADIUM RECOVERY PROCESS

## **Key Points:**

- Provisional Patent lodged with IP Australia to protect Surefire's proprietary vanadium recovery process.
- This new metallurgical application alleviates the requirement for standard heat pretreatment processes currently used in the vanadium extraction industry.
- The new process also provides a significant improvement over existing vanadium recovery processes.
- The process is expected to have a significant positive impact on capital and operating cost benefits.
- The next testwork phase is in preparation to produce final products of Vanadium Pentoxide and Vanadium electrolyte from this leach process.

Surefire Resources NL ("**Surefire**" or "the **Company**") is pleased to announce it has filed, through its wholly owned subsidiary "**Suretec Solutions Pty Ltd**", an Australian provisional patent application with IP Australia to protect its proprietary vanadium recovery process.

Surefire appointed Perth based patent attorney WRAYS for a review of the new process including a search on the subject matter of the invention. Following this WRAYS have confirmed lodgement at IP Australia.

WRAYS is one of the largest independent IP specialist firms in Australia having the right combination of experts to protect, grow and defend intellectual property assets locally and globally.

IP Australia is an Australian Government agency, responsible for administering intellectual property law in Australia. The agency manages the registration of patents, trademarks, registered designs and rights in Australia. The agency sits under the Department of Industry, Science and Resources.

The new process is a significant improvement over existing vanadium recovery processes deriving further advantage to Surefire and its Victory Bore vanadium project. Test work has achieved high recoveries of vanadium and titanium along with high recoveries of base metals from titaniferous feedstocks.

This new application will underpin future international patent filings further securing Surefire's Intellectual Property.

## Background:

In May 2023 the Company appointed METS Engineering ("**METS**") to undertake an assessment of potential for recovery of a high purity vanadium oxide in liquid form, from which a clean high purity

08 9429 8846 info@surefireresources.com.au ASX: SRN ABN: 48 083 274 024

> 45 Ventnor Avenue West Perth WA 6005

vanadium electrolyte could be produced for use in the emerging vanadium battery sector in Australasia, (see ASX announcement 1 May 2023).

Surefire announced the results of the laboratory scale leach testwork earlier this year, achieving a remarkable extraction for vanadium of 91% and 88% Titanium after a 96-hour leach directly from Victory Bore magnetite concentrate, (see ASX announcement 24 January 2024). The leach process was applied to pre-treated concentrate allowing the leach process to scavenge effectively.

Further laboratory testwork improved the results achieving a 97% recovery of vanadium after only 24 hours (see ASX announcement 8 February 2024).

### **Next Steps:**

Surefire has commissioned METS to produce test work plans for the proprietary leach process to be applied to a much larger sample of between 250kg and 500kg weight. From this, final products of Vanadium Pentoxide and Vanadium electrolyte will be produced and will be assessed for grade and quality.

The subsequent production of vanadium pentoxide directly from a leach solution is a well-established scalable commercial process producing high purity products. The results from this next testwork phase are expected in the coming months.

The Company is assessing the expected benefits in using this new process which should have significant reductions in capital and operating costs as no heat treatment is required, unlike traditional vanadium recovery processes which require pre-heat treatment from a kiln at temperatures of 1100 C.

It is also assessing the potential to licence the process for use on other vanadium resources subject to testwork results.

### Authorised for release by Paul Burton, Managing Director

#### Enquiries: Paul Burton: 08 6331 6330

#### **Competent Person Statements:**

The information in this report that relates to metallurgical results has been reviewed, compiled, and fairly represented by Mr Damian Connelly, a Member of the Australian Institute of Mining and Metallurgy ('AusIMM') and the Australian Institute of Geoscience ('AIG') and a fulltime employee of METS engineers. Mr Connelly has sufficient experience in the activity he is undertaking 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, Minerals Resources and Ore Reserves. Mr Connelly consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

#### Forward Looking Statements:

This announcement contains 'forward-looking information' that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance, or achievements to be materially different from those expressed or implied by such forward-looking information.