24 March 2022



COMPLETION OF BULK SAMPLING AND PILOT PLANT TEST WORK COMMENCEMENT

VANADIUM RESOURCES LTD (ASX:VR8) ("VR8" OR "THE COMPANY"), is developing its tier 1 Steelpoortdrift Vanadium project in Limpopo, South Africa. VR8 is currently conducting a Definitive Feasibility Study ("**DFS**") to undertake mining operations and to construct a concentrator and salt roast plant, potentially capable of initially producing 12,500tpa of V₂O₅ flake at an estimated capex of US\$200M¹. The Company is pleased **TO ANNOUNCE** an update on the Bulk Sampling and Pilot plant test campaign as part of the DFS.

HIGHLIGHTS

- Bulk sampling from trial mining has been completed and pilot plant test work commenced
- Magnetic testing of sample bags demonstrated ore to be highly magnetic, a positive indicator for the magnetic separation process
- Geotechnical drilling has been completed with no major concerns noted from initial observations, which would be positive for mine design
- The DFS progress remains on time and within budget

BULK SAMPLING AND PILOT PLANT TESTWORK UPDATE

VR8 is pleased to announce the progress of an Association for the Advancement of Cost Engineering Class 3 DFS for the Steelpoortsdrift Vanadium project located in Limpopo, South Africa. The DFS is a natural progression of the Pre-Feasibility Study ("**PFS**") recently completed¹ with the aim to produce a high purity (>98% V₂O₅) vanadium product from primary Run of Mine mineralised material. As part of the DFS, a trial mining and bulk sampling campaign was initiated, with the aim to extract fresh (unweathered) mineralised material for the purpose of pilot plant metallurgical test campaigns. As announced previously on the 7th March 2021, no blasting was required during the collection of the bulk sample due to fresh unweathered mineralised material being intersected 2-3m from surface, which is considerably shallower than originally anticipated.

¹ Refer to ASX Announcement 22 June 2021. The Company confirms that it is not aware of any information or data that materially affects the information included in the market announcement, and that all material assumptions and technical parameters underpinning the announcement continue to apply.



The trial mining was completed with a total of approximately 40 tons of mineralised material mined, of which approximately 15 tons was classified as fresh high-grade material from the LMZ (Lower Magnetite Zone) mineralised zone.

Bulk samples from this material was recovered and sent to Multotec Minerals Processing R&D facility located in Johannesburg South Africa, for concentrator pilot plant test campaigns (see photos 1 and 2 below). Multotec is a leading global equipment supply company with specific experience in magnetic and gravity separation processes. The Company has also agreed that all costs of the pilot plant test campaign will be credited against equipment potentially procured from Multotec during the construction phase. Multotec is headquartered in South Africa, with full-service registered companies and manufacturing facilities throughout Africa, Asia, Australia, North and South America.

The concentrator pilot plant campaign will:

- 1. Produce bulk concentrate material at >2% V_2O_5 for further Salt Roast and Leach pilot plant campaigns to be conducted by Mintek, South Africa.
- 2. Test process design optimisation initiatives to maximise concentrate grade and recoveries.
- 3. Establish detailed engineering design parameters for final equipment sizing and plant designs.



Photo 1 – Bulk samples at R&D facility





Photo 2 – Highly magnetic material contained in bulk samples

GEOTHECNICAL DRILLING PROGRESS

The Company's contractors have completed the geotechnical drilling on site for the purpose of establishing the mechanical strength and properties of subsurface material for mine designs. Subsamples of the material have been recovered and visually inspected with no major concerns noted on the structural integrity of the subsurface material, which in turn would be beneficial to final mine designs. These samples have been submitted for laboratory test work with the final results expected during April 2022.

The DFS continues to remain on time and within budget at present.

This announcement has been authorised for release by the Board of Vanadium Resources Limited.

For further information please contact: Eugene Nel Chief Executive Officer VANADIUM RESOURCES LIMITED contact@VR8.global



COMPETENT PERSONS STATEMENT

The information in this announcement that relates to Mineral Resources, including the Mineral Resources contained within the Production Target, 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, assessed and created by Mr Kerry Griffin BSc.(Geology), Dip Eng Geol., a Member of the Australian Institute of Geoscientists and a Principal Consultant at Mining Plus Pty Ltd, consultants to the Company. Mr Griffin 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 Griffin is the competent person for the resource estimation and has relied on provided information and data from the Company, including but not limited to the geological model and database.

The information in this announcement that relates to geotechnical studies, the mine design criteria and the mine design only, is aligned with the JORC Code and has been compiled and assessed under the supervision of Vaughn Duke, a Professional Engineer of the Engineering Council of South Africa and a Fellow of the South African Institute of Mining and Metallurgy. Mr Duke is a Principal Mining Engineer and Partner of Sound Mining Solution Pty Ltd. He 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 Duke consents to the inclusion in this announcement of the information related to the geotechnical and mining engineering components of the PFS in the form and context in which it appears.

The information in this announcement that relates to metallurgy has been compiled and assessed under the supervision of Mr Eugene Nel, a Professional Engineer of the Engineering Council of South Africa and a Member of the South African Institute of Mining and Metallurgy (both Recognised Professional Organisations as defined in the JORC Code). Mr Nel is the Chief Executive Officer (CEO) of VR8, 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 Nel consents to the inclusion in this announcement of matters based on his information in the form and context in which it appears.

As stated above at footnote 1, the Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.