

## VIKING COMPLETES GROWTH FOCUSED 7KM DRILLING PROGRAMME AT CANEGRASS VANADIUM PROJECT

- Viking Mines has completed a ~7,000m drilling programme at the Canegrass Battery Minerals Project, with initial assays anticipated by end of July.
- Drilling focussed on targeting extension, growth and discovery of new high-grade Mineral Resources outside of the Mineral Resource Estimate (MRE) of 79Mt at 0.64% Vanadium Pentoxide ( $V_2O_5$ )<sup>1</sup>
- Five exploration targets tested outside of the current MRE to assess the potential of the >8km VTM horizon identified.
- Drilling followed up on previous high-grade hits, including hole VCRC0006 drilled in March at Kinks South which intersected 17m at 0.98%  $V_2O_5$ , including 12m at 1.06%  $V_2O_5$ .<sup>2</sup>

Viking Mines Limited (ASX: VKA) ("Viking" or "the Company") is pleased to provide an update on exploration activities at the Company's flagship Canegrass Battery Minerals Project ("the Project" or "Canegrass"), located in the Murchison Region of Western Australia.

The Company has successfully completed a major growth focussed drilling campaign at the Canegrass Project. Initial assay results are anticipated to be received in late July.

### Viking Mines Managing Director & CEO Julian Woodcock said:

*"This is the first substantial drill campaign to be completed at the Project in more than a decade, comprised of ~44 drill holes totalling ~7,000m.*

*"The focus of this drilling programme is to extend and grow the current Mineral Resource, while also assessing the potential of the >8km strike length of VTM mineralisation, specifically targeting a high-grade component >30Mt >0.9%  $V_2O_5$ .*

*"We have already received positive indications ahead of assay results, specifically at the Kinks South target area with multiple thick zones of magnetite intersected."<sup>3</sup>*

*"I look forward to updating the market with initial results later this month."*

### 7,000M DRILLING PROGRAMME COMPLETED

The Company has completed a major drill programme at the Canegrass Battery Minerals Project, comprised of ~44 Reverse Circulation (RC) drillholes, totalling ~7,000m.

The drill programme had two main objectives.

1. To improve the confidence in the current Mineral Resource Estimate (MRE) by drill testing within the existing Inferred (JORC 2012) MRE limits of **79Mt at 0.64%  $V_2O_5$** <sup>1</sup> to validate and improve the existing geological interpretation.
2. To grow the Mineral Resource base through discovery of new Vanadiferous Titanomagnetite (VTM) mineralisation by drill testing targets outside of the limits of the current MRE.

<sup>1</sup> VKA Announcement - 30 November 2022 - Viking to Farm into Substantial Battery Mineral Resources

<sup>2</sup> VKA Announcement - 18 April 2023 - Viking Drilling Hits 12m of High-Grade Vanadium at 1.06%  $V_2O_5$

<sup>3</sup> VKA Announcement - 29 June 2023 - Viking Hits Multiple Thick Zones of Magnetite at Kinks South



Figure 1: Drill Rig at the Canegrass Battery Minerals Project

## NEXT STEPS

The Company continues to make rapid advancements at the Project with the completion of drilling being another significant milestone. Upcoming activities and priorities include:

- Complete logging of drill chips and assess the target areas tested.
- Assess results from preliminary sighter metallurgical testwork programme once received (expected late July)
- Update the geological model once all analysis results have been received (results expected within 5-6 weeks of completion of drilling based on laboratory indicated turnaround times).

## END

This announcement has been authorised for release by the Managing Director/CEO of the Company.

Julian Woodcock  
Managing Director and CEO  
**Viking Mines Limited**

For further information, please contact:  
**Viking Mines Limited**  
Sarah Wilson - Company Secretary  
+61 8 6245 0870



### **Competent Persons Statement - Exploration Results**

Information in this release that relates to Exploration Results is based on information compiled by Mr Julian Woodcock, who is a Member and of the Australian Institute of Mining and Metallurgy (MAusIMM(CP) - 305446). Mr Woodcock is a full-time employee of Viking Mines Ltd. Mr Woodcock has sufficient experience which 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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Woodcock consents to the disclosure of the information in this report in the form and context in which it appears.

### **Competent Persons Statement - Mineral Resources**

The information in this report that relates to Mineral Resources is based on, and fairly reflects, information compiled by Mr Aaron Meakin, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Meakin is a consultant to Flinders Mines Ltd and Viking Mines Ltd, employed by CSA Global Pty Ltd, independent mining industry consultants. Mr Meakin has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). The Company is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. 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 announcement on 30 November 2022.





## CANEGRASS BATTERY MINERALS PROJECT

The Canegrass Battery Minerals Project is located in the Murchison region, 620km north-east of Perth, Western Australia. It is accessed via sealed roads from the nearby township of Mt Magnet to within 22km of the existing Resources. The Project benefits from a large undeveloped Inferred Vanadium Resource hosted in vanadiferous titanomagnetite (VTM) Mineralisation as part of the Windimurra Layered Igneous Complex.

The Project benefits from ~95km<sup>2</sup> of exploration tenements with very limited follow up exploration targeting the growth potential of the vanadium pentoxide (V<sub>2</sub>O<sub>5</sub>) Resources in the +10 years since the Resource was first calculated. Multiple drill ready targets are present which have the potential to significantly add to the already large Resource base, with high grade intercepts presenting an opportunity to substantially increase the average grade.

### JORC (2012) MINERAL RESOURCE

The Canegrass Battery Minerals Resource has been calculated across two separate areas called the Fold Nose and Kinks deposits, each with eight and four separate mineralised domains modelled respectively. The Mineral Resource has subsequently been reported above a cut-off grade of 0.5% V<sub>2</sub>O<sub>5</sub> and above the 210 RL (equivalent to a maximum depth of ~250m) (refer to ASX Announcement on 30 November 2022).

*Canegrass Project Vanadium Mineral Resource estimate, 0.5% V<sub>2</sub>O<sub>5</sub> cut-off grade, >210m RL (due to the effects of rounding, the total may not represent the sum of all components).*

Deposit	JORC Classification	Tonnage (Mt)	V <sub>2</sub> O <sub>5</sub> %	Fe %	TiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	SiO <sub>2</sub> %	LOI %
Fold Nose	Inferred	59	0.66	30.5	6.5	11.9	0.006	22.9	2.9
Kinks	Inferred	20	0.57	27.4	5.5	13.0	0.009	25.9	3.1
<b>TOTAL</b>		<b>79</b>	<b>0.64</b>	<b>29.7</b>	<b>6.0</b>	<b>12.2</b>	<b>0.007</b>	<b>23.6</b>	<b>3.0</b>

### VIKING MINES FARM-IN AGREEMENT

Viking, via its wholly owned subsidiary, Viking Critical Minerals Pty Ltd, commenced with a Farm-In arrangement with Flinders Mines Ltd (ASX:FMS) on 28 November 2022 to acquire an equity interest in the Canegrass Battery Minerals Project. Through the terms of the Farm-In, Viking can acquire up to 99% of the Project through completion of 4 stages via a combination of exploration expenditure of \$4M and staged payments totalling \$1.25M over a maximum period of 54 months. If Viking complete the Farm-In to 99% equity interest, Flinders may offer to sell to Viking the remaining 1% of the Project for future production and milestone related payments totalling \$850,000. If Flinders do not offer to sell within a prescribed timeframe their right lapses, they must offer Viking the right (but not the obligation) to buy the remaining 1% for the same terms. The Project has a legacy 2% Net Smelter Royalty over the project from when Flinders Mines acquired it from Maximus Resources in 2009.



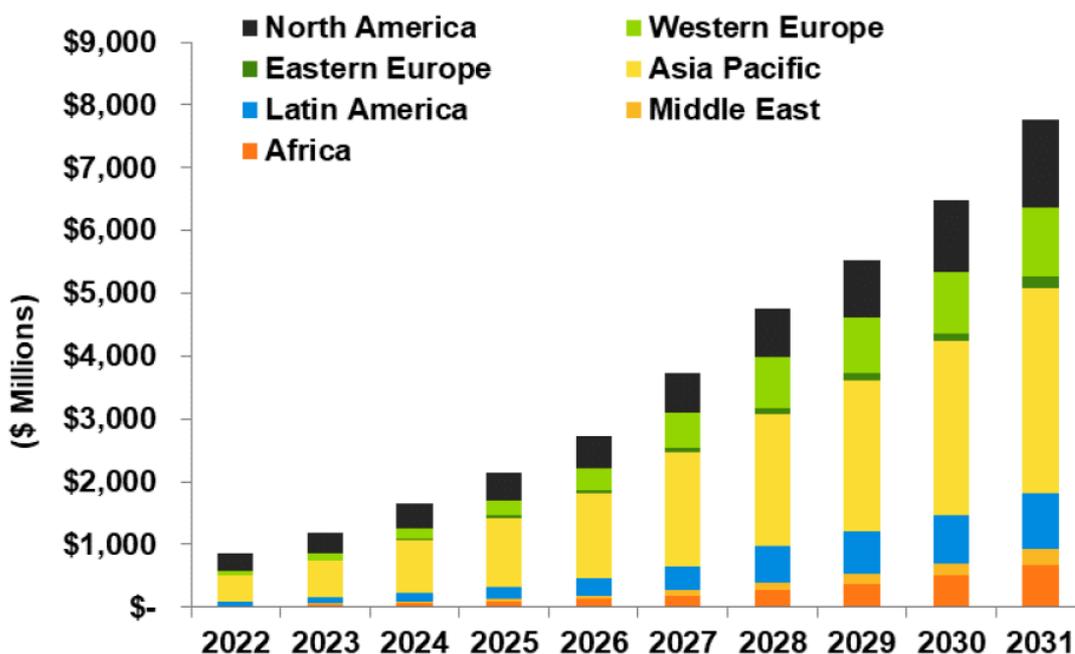


## VANADIUM REDOX FLOW BATTERIES - GREEN ENERGY FUTURE

Viking Mines recognise the significant importance of Vanadium in decarbonisation through the growth of the Vanadium Redox Flow Battery (“VRFB’s”) sector.

VRFB’s are a developing market as an alternate solution to lithium-ion (“Li-ion”) in specific large energy storage applications. Guidehouse Insights Market Intelligence White Paper<sup>i</sup> published in 2Q 2022 forecasts the VRFB sector to grow >900% by 2031 through the installation of large, fixed storage facilities (Figure 2).

### **Annual Installed VRFB Utility-Scale and Commercial and Industrial Deployment Revenue by Region, All Application Segments, World Markets: 2022-2031**



(Source: Guidehouse Insights)

Figure 2; Forecast growth of the VRFB Sector through to 2031 (source – Guidehouse Insights<sup>i</sup>)

The reason for this forecast growth is that VRFB’s have unique qualities and advantages over Li-ion in the large energy storage sector to complement renewable energy sources to store the energy produced. They are durable, maintain a long lifespan with near unlimited charge/discharge cycles, have low operating costs, safe operation (no fire risk) and have a low environmental impact in both manufacturing and recycling. The Vanadium electrolyte used in these batteries is fully recyclable at the end of the battery’s life.

Importantly, and unlike Li-ion, the battery storage capacity is only limited by the size of the electrolyte storage tanks. This means that with a VRFB installation, increasing energy storage capacity is only a matter of adding in additional electrolyte (via the installation of additional electrolyte storage tanks) without needing to expand the core system components. Increasing the energy storage directly reduces the levelized cost per kWh over the installation’s lifetime. This is not an option with Li-ion batteries.

It is for these reasons that VRFB’s are an ideal fit for many storage applications requiring longer duration discharge and more than 20 years of operation with minimal maintenance.

i) Guidehouse Insights White Paper Vanadium redox Flow Batteries Identifying Market Opportunities and Enablers Published 2Q 2022 [https://vanitec.org/images/uploads/Guidehouse\\_Insights-Vanadium\\_Redox\\_Flow\\_Batteries.pdf](https://vanitec.org/images/uploads/Guidehouse_Insights-Vanadium_Redox_Flow_Batteries.pdf)

