

## VIKING SEES VANADIUM RECOVERIES UP TO 90.2% IN HISTORICAL TESTWORK AT CANEGRASS PROJECT

- **METS completes review of historical metallurgical studies.**
- **3 rounds of historical testwork identified and reviewed.**
- **Magnetic concentrates produced with grades up to 1.54% Vanadium Pentoxide ( $V_2O_5$ ).**
- **Vanadium recoveries up to 90.2% recorded.**
- **Significant upside potential to improve results due to previous metallurgical sampling strategies not optimised for vanadium recovery and focussed on producing iron concentrates.**
- **Future testwork to focus on optimum sample selection and metallurgical testwork strategy to target key Vanadiferous Titanomagnetite (VTM) horizons.**
- **Copper sulphides (chalcopyrite) confirmed in mineralogical studies reaffirms potential for additional metals to be produced from the Project.**

**Viking Mines Ltd (ASX: VKA) ("Viking" or "the Company")** is pleased to provide an update on a review of historical metallurgical testwork completed on the Canegrass Battery Minerals Project ("**Canegrass**" or "**the Project**").

Viking has identified three rounds of metallurgical testwork that has been conducted on samples collected from Canegrass. The objectives of the respective programmes have varied over time and not been focussed on producing a concentrate optimised for  $V_2O_5$  recovery.

This presents a unique opportunity for the Project as the true value of the vanadium has not been effectively assessed. Even with the lack of focus however, the results of the testwork completed demonstrate that high  $V_2O_5$  can be achieved into a magnetic concentrate.

### **Commenting on the historical metallurgical review of the Canegrass Project, Viking Mines Managing Director & CEO Julian Woodcock said:**

*"I am very pleased with the outcome of the historical metallurgical testwork review by METS, Viking's appointed metallurgical consultants.*

*"The review has proved extremely valuable by confirming that the VTM mineralisation responds as expected, with the vanadium reporting to a magnetic concentrate and reaching grades up to 1.54% vanadium pentoxide ( $V_2O_5$ ).*

*"Concentrate  $V_2O_5$  grades of this tenor are in line with industry peers advancing other VTM deposits in the region and bolster our confidence that, with a focussed metallurgical testwork programme, a process route can be determined to unlock the significant value of the 1.1 billion pounds  $V_2O_5$  contained in the Canegrass Mineral Resource.*

*"With the  $V_2O_5$  flake price continuing to climb and currently trading at US\$10.00/lb<sup>1</sup>, the opportunity continues to grow for Viking shareholders to yield significant returns through appreciation of our share price as we advance this substantial battery minerals project."*



## METALLURGICAL TESTWORK

The 3 stages of testwork completed are summarised in Table 1 below, with details of the specific testwork completed in the following sections:

Table 1: Summary of metallurgical testwork completed on samples from the Canegrass Battery Minerals Project.

Year	Company	Consultants	Testwork Objectives	Testwork Completed	Canegrass Project Sample Ranges	
					V <sub>2</sub> O <sub>5</sub> Recovery %	Concentrate Grade V <sub>2</sub> O <sub>5</sub> %
2008	Maximus Resources Ltd.	ProMet Engineers	Produce a magnetite concentrate as a direct shipping product (not optimised for Vanadium)	DTR	54.0% to 76.3%	1.44% to 1.54%
2011	Flinders Mines Ltd.	WorleyParsons	Produce a magnetite concentrate as a direct shipping product (not optimised for Vanadium)	DTR LIMS	81.8% to 86.3%	1.39% to 1.40%
2020	Flinders Mines Ltd.	NAGROM	Grind size and recovery relationships using low magnetic separation techniques and mineralogical studies	WHGMS INCA Mineralogy	87.6% to 90.2%	0.99% to 1.09%

### ProMet Testwork (2008)

#### Highlights

- Directly relevant to the Canegrass Project Fold Nose Inferred Mineral Resource are eight samples collected from two drillholes (Figure 1).
- Samples occur in the oxide profile of the Alpha Domain.
- Average of results (Table 2):
  - V<sub>2</sub>O<sub>5</sub> recovery 65.1%.
  - Head (feed) grade of 1.03% V<sub>2</sub>O<sub>5</sub>.
  - Concentrate grade of 1.48% V<sub>2</sub>O<sub>5</sub>.
- Reasonable recoveries were obtained considering the oxidised nature of the samples.
- Higher recoveries to be expected from fresh rock samples.
- Results are encouraging as they clearly demonstrate that the vanadium follows the magnetic iron minerals (magnetite), which is the primary processing method to produce a vanadium concentrate.
- Testwork not optimised or focussed on vanadium mineralisation and recovery with improvements to be expected with a targeted and focussed metallurgical programme.



Table 2: Average Davis Tube Recovery testwork results from samples taken from the Alpha Domain within the Fold Nose Mineral Resource.

Hole	From	To	Mass Yield %	V <sub>2</sub> O <sub>5</sub>			Fe			TiO <sub>2</sub>		
				Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %
MNRC0016	16	20	43.8	1.11	1.45	57.7	48.3	58.5	53.1	11.1	12.8	50.5
MNRC0017	24	28	45.6	0.95	1.50	72.4	41.1	58.9	65.4	8.4	11.6	62.9
<b>AVERAGE</b>			<b>44.7</b>	<b>1.03</b>	<b>1.48</b>	<b>65.1</b>	<b>44.7</b>	<b>58.7</b>	<b>59.2</b>	<b>9.8</b>	<b>12.2</b>	<b>56.7</b>

## Discussion

Maximus Resources Ltd ("Maximus") commissioned ProMet Engineers to review results from Davis Tube Recovery ("DTR") tests completed on 15 samples collected from five RC drillholes across the Project tenements. Of the 15 samples tested, eight are from the Alpha domain (Figure 1) of the Fold Nose JORC (2012) Inferred Mineral Resource (59Mt at 0.66% V<sub>2</sub>O<sub>5</sub><sup>2</sup>), with the remaining seven samples collected from drillholes located in different parts of the stratigraphy outside of the calculated Mineral Resource.

The objective of the testwork was to determine if a magnetite concentrate could be produced for the purpose of direct shipping. As such, the strategy adopted by Maximus appears to have been focussed on producing iron ore, and not vanadium, as the direct shipping of a magnetite concentrate to a blast furnace would likely not receive credits for the vanadium content.

Notwithstanding the focus of the testwork and sample selection being on the Iron content, the testwork has proved useful in the context of assessing vanadium recovery. The results presented above (Table 2) are focussed on those from the Alpha Domain of the Fold Nose Mineral Resource.

The eight samples that fall in the Alpha domain have demonstrated moderate to high vanadium recoveries, especially given that the samples selected are from the oxidised upper portion of the deposit. This oxide zone would be expected to see lower recoveries than samples collected from fresh rock found below the oxidation profile. This improvement in recovery is evident with the results from four samples in hole MNRC0017 reaching 76.3% vs. a maximum of 63.0% in hole MNRC0016.

Most encouraging of all is the grade of the concentrate reaching as high as 1.54% V<sub>2</sub>O<sub>5</sub>. This demonstrates that whilst the total recovery is lower in the oxide zone, a suitable concentrate grade can be achieved. A table of results for each of the respective samples is in Appendix 1.

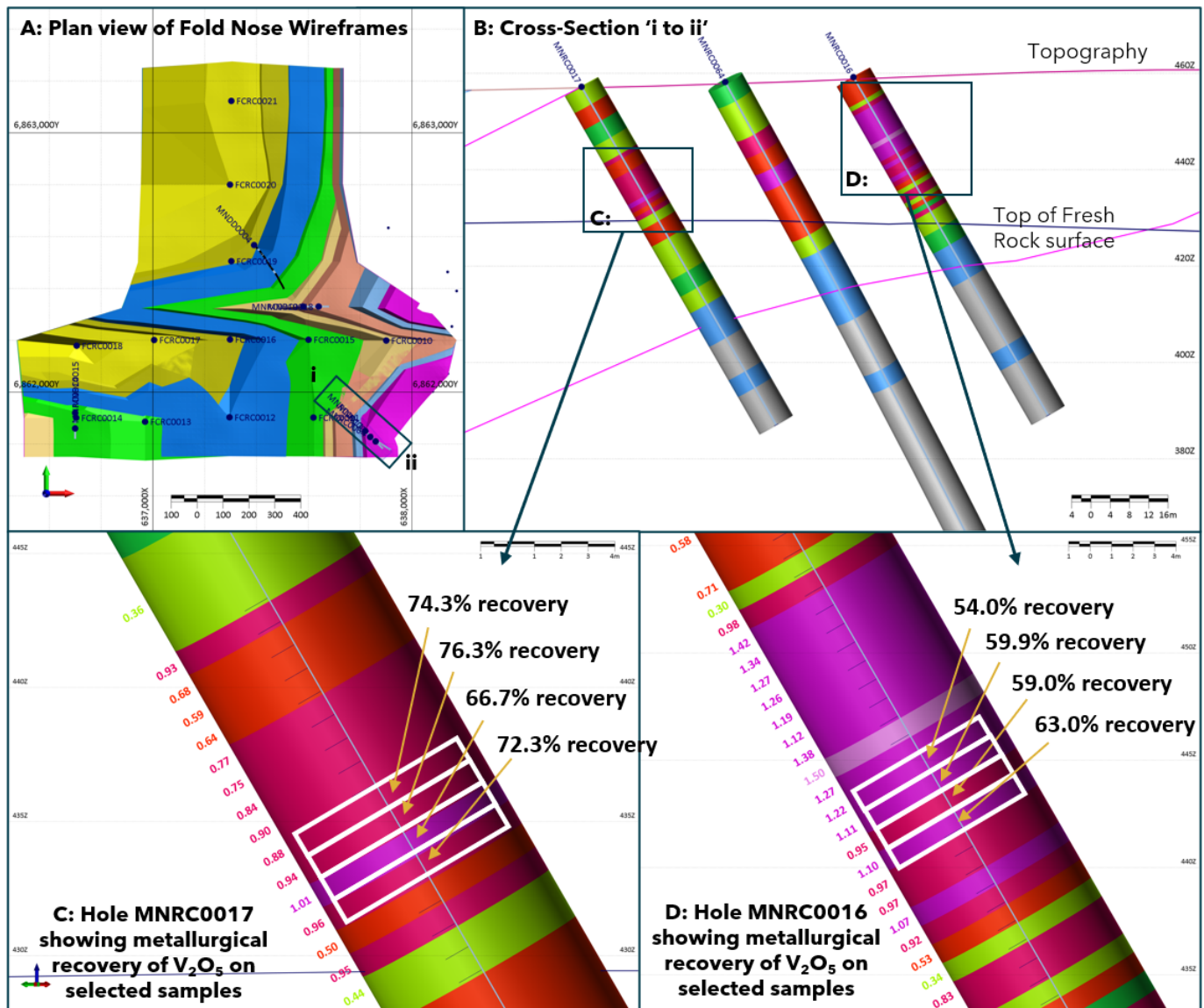


Figure 1: Plan and cross sections of the eight samples that were collected from the Alpha Domain of the Fold Nose Mineral Resource for metallurgical testwork completed by ProMet Engineers in 2008.

## WorleyParsons Testwork (2011)

### Highlights

- Of 25 samples collected, only two samples from one drillhole are directly relevant to the Canegrass Project Fold Nose Inferred Mineral Resource.
- These two samples occur in the transition to fresh rock profile of the Alpha Domain (Figure 2).
- Two stages of testwork - Davis Tube Recovery (DTR) and Low Intensity Magnetic Separation (LIMS), were completed.
- Average of DTR results (Table 3):
  - $V_2O_5$  recovery 86.3%.
  - Head (feed) grade of 0.43%  $V_2O_5$
  - Concentrate grade of 1.40%  $V_2O_5$



- Average of LIMS results (Table 3):
  - V<sub>2</sub>O<sub>5</sub> recovery 81.8%.
  - Head (feed) grade of 0.40% V<sub>2</sub>O<sub>5</sub>.
  - Concentrate grade of 1.39% V<sub>2</sub>O<sub>5</sub>.
- High recoveries were obtained, and a high concentrate grade achieved, even though poor sample selection resulted in low V<sub>2</sub>O<sub>5</sub> feed grade of 0.40% to 0.43%.
- Higher recoveries to be expected from higher grade samples representative of average grade of the Mineral Resource (0.66% V<sub>2</sub>O<sub>5</sub>).
- Results are encouraging as they clearly demonstrate that the vanadium follows the magnetic iron minerals (magnetite), which is the primary processing method to produce a vanadium concentrate.
- Higher iron recoveries would be expected from massive magnetite feed as opposed to the disseminated magnetite occurring within the feed samples selected, which in turn would yield higher vanadium recoveries.
- Testwork demonstrates that vanadium can be concentrated and with correct sample selection strategy to effectively test the prospective horizons, significant improvements could be expected.

*Table 3: Reported testwork results for the Alpha Domain within the Fold Nose Mineral Resource on sample composites. Note, recovery for the respective minerals has been back calculated from the reported head grades as the report did not detail the specific recoveries.*

Testwork Stage	Hole	From	To	Mass Yield %	V <sub>2</sub> O <sub>5</sub>			Fe			TiO <sub>2</sub>		
					Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %
1. DTR	MNRC0017	32	52	26.5	0.43	1.40	86.3	22.4	56.4	66.7	3.8	9.9	68.6
2. LIMS	MNRC0017	32	53	23.6	0.40	1.39	81.8	20.9	55.6	62.6	3.6	9.61	62.3

## Discussion

Flinders Mines Ltd ("Flinders") commissioned WorleyParsons to conduct a range of staged testwork on samples collected from nine RC drillholes from across the project tenure. Important to note is that only one of these drillholes sampled the Alpha Domain of the Fold Nose Mineral Resource as part of the Canegrass Project and is the focus of this discussion. The remainder of the samples are not representative of the mineralisation found at the Fold Nose Mineral Resource and provide regional context but not direct information on the metallurgy of the Project.

As with the ProMet testwork, the objective was to produce a magnetite concentrate as a direct shipping product and as such was not optimised for vanadium and unlikely to see any value if shipped to a blast furnace as iron ore. This is especially apparent in the low vanadium head-grades of the samples used from the Fold Nose Mineral Resource.

It is unclear why samples below the mineral resource cut-off grade were selected and can only be assumed that the focus was not on vanadium extraction due to the envisaged product being shipped to a blast furnace. The priority appears to be to determine the recovery of iron (as magnetite) and that the substantial value of the vanadium does not seem to have been considered in the selection of the samples.



However, even with the sub-optimal sample selection, positive results were received with vanadium recovery up to 86.3%. This has helped to provide insights into the metallurgical characteristics of the VTM mineralisation at the Canegrass Project.

The report details Stage 1 involved DTR tests on 25 composite samples, from which two subsequent composites were produced from the one drillhole within the Alpha Domain of the Fold Nose Mineral Resource. The results in the report have been reported by domain and not by individual samples so there remains some uncertainty around individual sample performance. The Stage 2 testwork involved the combination of the samples used for DTR testwork to produce larger samples for LIMS testwork.

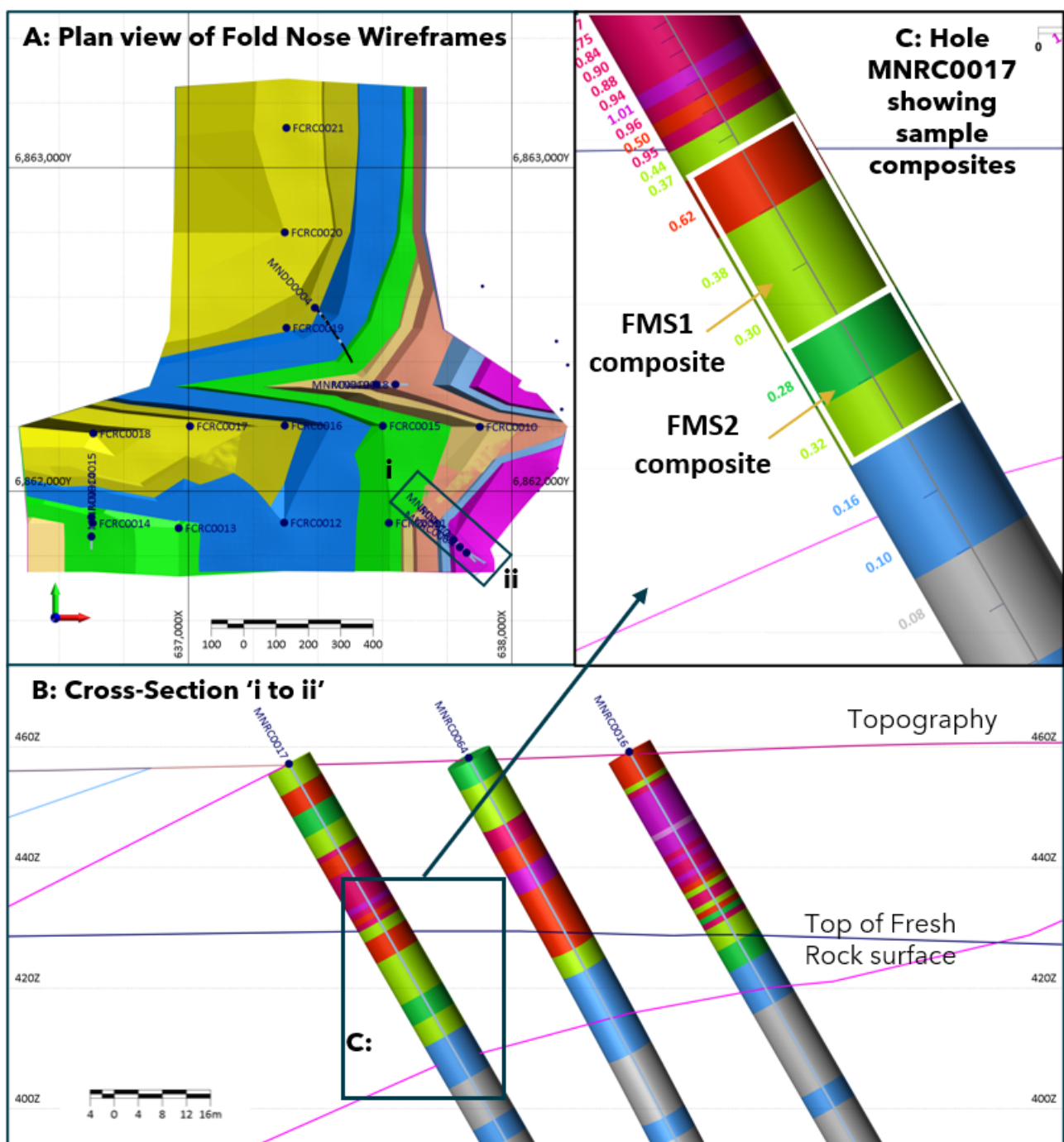


Figure 2: Plan and cross sections of the two composite samples that were collected from the Alpha Domain of the Fold Nose Mineral Resource for metallurgical testwork completed by WorleyParsons in 2011



## **NAGROM Testwork (2020)**

- Three samples from two drillholes are selected from north of the Canegrass Project Kinks Inferred Mineral Resource within the fresh rock profile.
- Wet High Gradient Magnetic Separation (WHGMS) testwork at various grind sizes was completed with follow up mineralogy of the concentrates using INCA Mineralogy tests.
- A grind size of P100 -1mm was initially used with a low magnetic field strength of 100 Gauss to produce a rougher concentrate.
- Average of WHGMS results:
  - $V_2O_5$  recovery 89.0%.
  - Head (feed) grade of 0.61%  $V_2O_5$
  - Concentrate grade of 1.03%  $V_2O_5$
- High recoveries were obtained at a very coarse grind size and low magnetic field strength.
- Progressive regrinds saw concentrate grade increase whilst recovery decreases.
- Chalcopyrite (copper sulphide mineral) was identified in the non-magnetic tail confirming presence of this battery mineral.

## **Discussion**

Flinders commissioned NAGROM laboratories to undertake a series of Wet High Gradient Magnetic Separation (WHGMS) testwork and mineralogical studies on the concentrates to better understand the metallurgical properties of the mineralisation.

As with the previous testwork, there appears to be limited thought applied to the appropriate selection of samples. Two drillholes (that are located 180m and 1,400m North of the Kinks Mineral Resource respectively) were used to provide chips for analysis, with no samples from within the current Inferred Mineral Resource areas. That said, the samples do appear to be located from extensions of the known mineralisation and can be considered useful in providing insight into potential vanadium recovery from the Project.

The testwork completed a series of WHGMS tests at various grind sizes with a low magnetic field strength to determine the various recoveries at different grind sizes (Appendix 1).

Importantly, and noted in the reports, the presence of chalcopyrite (copper sulphide mineral) was identified in the non-magnetic tail. This reaffirms the potential for copper credits at the Project and that further metallurgical testwork to produce a sulphide concentrate is required in future testwork programmes.

## **SUMMARY**

- The testwork has proved valuable in confirming that a magnetite concentrate can be produced from the VTM mineralisation at the Canegrass Project Mineral Resource.
- Favourable concentrate grades have been produced and are comparable with peer company projects found in WA.
- Vanadium recoveries are in line with what would be expected from the samples submitted and the style of mineralisation.



- The lack of focus of the three stages of historical testwork provides an opportunity for the Company to design a metallurgical testwork strategy to effectively assess the processing routes for the Canegrass Battery Minerals Project.
- The confirmation of the copper sulphide chalcopyrite in the non-magnetic tail of the 2020 testwork confirms future potential to recover this additional battery mineral at the Project.

## NEXT STEPS

With the historical metallurgical review completed and a positive outcome established, Viking are progressing towards drilling in the June Quarter to test exploration targets, grow the Resource with a focus on higher grade as evidenced in historical drilling and conduct a comprehensive metallurgical testwork programme. To achieve these objectives, the following activities are ongoing and advancing the Project forward:

- Complete ground magnetic survey to feed into structural geology model and exploration targeting.
- Completing JORC exploration target assessment with a focus on high-grade ( $>0.9\%$   $V_2O_5$ ) targets.
- Undertake heritage survey across the Project tenure in March 2023.
- Engaging with drill contractors to commence drilling in the June Quarter.

## END

This announcement has been authorised for release by the Board of Directors.

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

For further information, please contact:  
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1: ASX Announcement Viking Mines (ASX:VKA) 30 November 2022 - VIKING TO FARM IN TO SUBSTANTIAL BATTERY MINERAL RESOURCE  
2: Source, [www.vanadiumprice.com](http://www.vanadiumprice.com) 15 February 2023 - US\$10.00/lb  $V_2O_5$  Vanadium Pentoxide Flake 98%

### Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Viking Mines Limited's planned exploration programme and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may," "potential," "should," and similar expressions are forward-looking statements. Although Viking Mines Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

### 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 - Metallurgical Results

The information contained in this report, relating to metallurgical results, is based on, and fairly and accurately represent the information and supporting documentation prepared by Mr Damian Connelly. Mr Connelly is a full-time employee of METS Engineering who are a Contractor to Viking Mines Ltd, and a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Connelly 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, Exploration Targets, Mineral Resources and Ore Reserves. Mr Connelly consents to the inclusion in the report of the matters based on the results in the form and context in which they appear.





## 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 Mineral Resources. The Project benefits from a large undeveloped Inferred Vanadium Mineral 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>) Mineral Resources in the +10 years since the Mineral Resource was first calculated. Multiple drill ready targets are present which have the potential to significantly add to the already large Mineral Resource base, with high grade intercepts presenting an opportunity to substantially increase the average grade.

### JORC (2012) MINERAL RESOURCE

The Canegrass Mineral 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.

#### 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 market announcements. 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 2023.

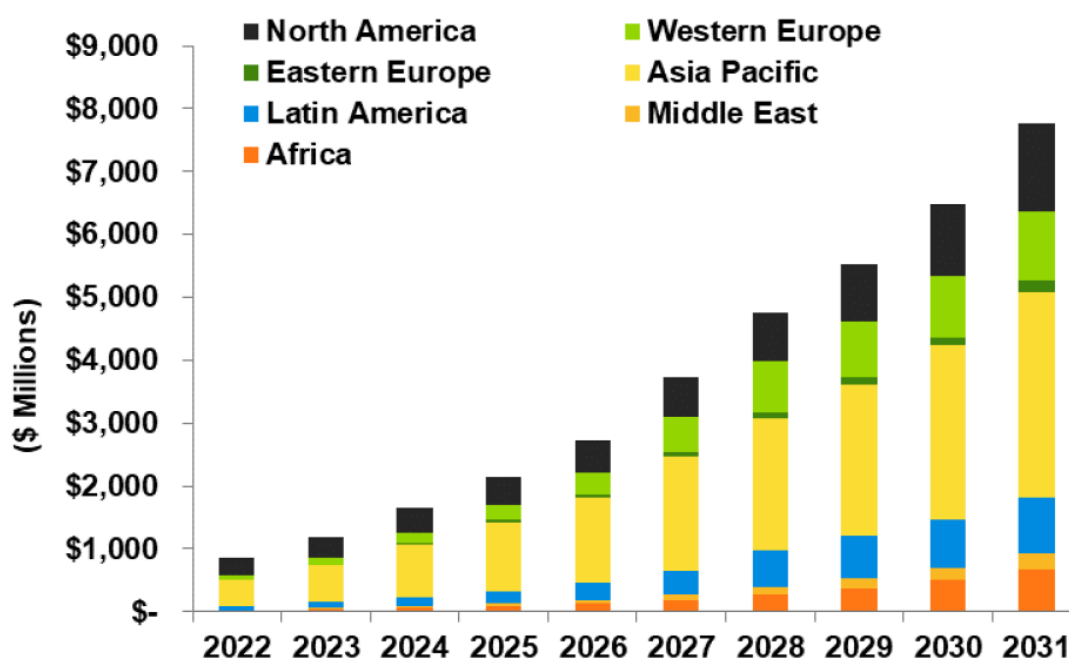


## VANADIUM REDOX FLOW BATTERIES - GREEN ENERGY FUTURE

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 7).

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



(Source: Guidehouse Insights)

Figure 3: Forecast growth of the VRFB Sector through to 2031 (source – Guidehouse Insights<sup>2</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)



## APPENDIX 1 - DETAILED METALLURGICAL RESULTS TABLES

2008 PROMET DTR TESTWORK RESULTS BY SAMPLE FROM THE FOLD NOSE MINERAL RESOURCE																					
Hole	From	To	Mass Yield %	V <sub>2</sub> O <sub>5</sub>			Fe			TiO <sub>2</sub>			SiO <sub>2</sub>			Al <sub>2</sub> O <sub>3</sub>			P		
				Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %
MNRC0016	16	17	44	1.19	1.46	54	48.8	58.3	52.6	11.7	12.9	48.5	7.4	0.9	5.1	5.2	1.8	15.3	0.003	0.002	29.3
MNRC0016	17	18	43.9	1.16	1.45	54.9	48.8	58.4	52.5	11.8	13	48.5	7.2	0.7	4.4	5.7	2	15.2	0.003	0.003	43.9
MNRC0016	18	19	38.9	0.95	1.44	59	46.5	58.5	48.9	9.8	12.7	50.7	9.5	0.9	3.6	7.1	2.3	12.4	0.003	0.002	25.9
MNRC0016	19	20	48.3	1.12	1.46	63	48.9	58.9	58.2	11.2	12.5	54.2	7.2	0.6	4.2	5.2	2	18.9	0.003	0.002	32.2
MNRC0017	24	25	43.8	0.87	1.47	74.3	39.9	59.4	65.1	7.8	11.5	64.8	17.1	0.9	2.3	7.7	2.7	15.1	0.004	0.002	21.9
MNRC0017	25	26	48.8	0.96	1.5	76.3	41.7	59.4	69.5	8.4	11.5	66.6	14.1	0.9	2.9	9.1	2.6	14	0.004	0.002	24.4
MNRC0017	26	27	44.6	1.03	1.54	66.7	42.9	58.9	61.3	9.0	11.7	57.6	12.2	0.9	3.1	9.5	2.7	12.9	0.004	0.003	33.5
MNRC0017	27	28	45.2	0.94	1.5	72.3	39.8	58	65.8	8.4	11.6	62.6	14.7	0.9	2.7	10.4	3	13.2	0.004	0.003	33.9

2011 WORLEY PARSONS TESTWORK RESULTS BY SAMPLE																				
Testwork Type	Domain	Hole	From	To	Mass Yield %	V <sub>2</sub> O <sub>5</sub>			Fe			TiO <sub>2</sub>			SiO <sub>2</sub>			Al <sub>2</sub> O <sub>3</sub>		
						Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %
DTR	Alpha	MNRC0017	32	52	26.5	0.43	1.4	86.3	22.4	56.4	66.7	3.8	9.9	68.6	29.8	3.3	2.9	18.4	3.2	5.6
LIMS	Alpha	MNRC0017	32	53	23.6	0.40	1.39	81.8	20.9	55.6	62.6	3.6	9.61	62.3	32.3	3.8	2.8	16.1	3.37	4.9



### 2020 NAGROM TESTWORK RESULTS BY SAMPLE

Testwork Type	Sample ID	Hole	From	To	Mass Yield %	V <sub>2</sub> O <sub>5</sub>			Fe			TiO <sub>2</sub>			SiO <sub>2</sub>			Al <sub>2</sub> O <sub>3</sub>		
						Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %	Feed Grade %	Conc. Grade %	Rec %
WHGMS	CNG0493	RC_282_03	108	111	51.0	0.58	0.99	87.6	32.9	50.7	78.7	5.7	9.4	84.8	23.7	8.8	18.8	4.9	2.5	26.1
WHGMS	CNG0494	RC_282_03	111	114	56.9	0.64	1.02	90.2%	34.6	50.5	82.9%	6.3	9.8	89.0%	20.7	8.2	22.5%	5.1	2.7	30.5%
WHGMS	CNG0529	RC_236_01	54	57	50.5	0.62	1.09	89.2%	32.2	50.1	78.6%	7.6	12.2	81.3%	23.3	7.4	16.0%	9.3	4.2	22.9%
<b>AVERAGE</b>					<b>52.8</b>	<b>0.61</b>	<b>1.03</b>	<b>89.0%</b>	<b>33.2</b>	<b>50.4</b>	<b>80.1%</b>	<b>6.5</b>	<b>10.5</b>	<b>85.0%</b>	<b>22.6</b>	<b>8.1</b>	<b>19.1%</b>	<b>6.5</b>	<b>3.2</b>	<b>26.5%</b>

## APPENDIX 2 - DRILLHOLE COLLAR INFORMATION FOR SAMPLES SELECTED FOR METALLURGICAL TESTWORK

Hole ID	Hole Type	East (m) MGA94	North (m) MGA94	RL	End of Hole (m)	Azi (°)	Dip (°)	Depth From (m)	Length (m)	Cut Off V <sub>2</sub> O <sub>5</sub> %	V <sub>2</sub> O <sub>5</sub> %	Fe %	TiO <sub>2</sub> %	SiO <sub>2</sub> %	P %	Ni ppm	Cu ppm	Co ppm
RC282_01	RC	641371	6866442	455	101	270	-60	9	45	0.5	0.71	32.4	7.1	n/a	0.016	697	1133	152
RC282_03	RC	641997	6867698	455	150	120	-65	108	9	0.5	0.58	25.3	5.5	24.2	0.003	397	684	135
MNRC0016	RC	637860	6861810	459	81	127	-60	0	32	0.5	0.92	36.0	8.7	17.7	0.007	n/a	n/a	n/a
MNRC0017	RC	637820	6861850	457	81	135	-60	16	20	0.5	0.73	32.1	6.4	22.4	0.007	n/a	n/a	n/a



## APPENDIX 3 – JORC CODE, 2012 EDITION – TABLE 1

### JORC Table 1, Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	All the historical reports state that samples for metallurgical testwork were selected from RC drillholes which had previously been analysed for element composition and logged geologically.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<p><b>2008 ProMet Testwork:</b> Samples were selected from specific domains and lithological horizons for metallurgical testwork across the project area. As noted in the body of this report, it is not believed that optimum sample selection occurred for the purpose of assessing the vanadium content of the project as insufficient samples were selected across the varying oxidation horizons within the Alpha domain of the Fold Nose Resource.</p> <p><b>2011 Worley Parsons Testwork:</b> Sample selection for the purpose of assessing the metallurgical characteristics of the main domain of interest at the Fold Nose Resource was sub-optimal. This is due to lower grade samples beneath the high grade mineralization was sampled, whilst the high grade portions of the domain (which could be expected to perform better in the testwork) were not selected.</p> <p><b>2020 NAGROM Testwork:</b> Samples were not directly selected from the estimated resource areas as noted in the body of the report and as such cannot be considered directly representative of the Fold Nose Resource.</p>
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information</i>	<p>All samples for testwork were obtained by industry standard methods using RC drilling. Samples were composited to various lengths based on the generation of drilling.</p> <p><b>2008 ProMet Testwork:</b> 1m samples were collected by drilling and analysed for element content before being selected for metallurgical testwork.</p> <p><b>2011 Worley Parsons Testwork:</b> 4m samples were collected by drilling and analysed for element content before being selected for metallurgical testwork.</p> <p><b>2020 NAGROM Testwork:</b> 4m samples were collected by drilling and analysed for element content before being selected for metallurgical testwork.</p>
Drilling techniques	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i>	Reverse Circulation (RC) drilling was used to collect all sample types. Details of drilling have not been identified in the historical data.





Criteria	JORC Code explanation	Commentary
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	No records have been identified in the reports detailing recovery of RC drilling.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	No information is available in the historical reports which detail measures taken to maximise sample recovery and ensure representative nature of the samples.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship between reported grade and drilling recovery has been identified or determined.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	All historical drilling has been geologically logged. Digital logs from drilling completed by Maximus Resources and Flinders Mines has been completed and incorporated into the database.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging of samples is qualitative in nature. No historical photographs have been identified.
	The total length and percentage of the relevant intersections logged.	Logging exists for all drillholes. The entire of the hole was logged by appropriate methods with the relevant information recorded. Digital logs are available for the Maximus Resources and Flinders Mines drilling.
Subsampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable as drilling method is RC.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	There is no information available in the historical reports and drilling records on sample splitting method for the percussion drilling or whether sampled wet or dry.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<b>Holes MNRC0016 &amp; MNRC0017:</b> There is no information available on the nature, quality and appropriateness of the sample preparation technique in the historical reports to determine its suitability. <b>Holes RC 282 01 &amp; RC 282 03:</b> The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that RC samples were cone split and composited into bags at 3m intervals and then sent to ALS Perth for analysis. Samples were riffle split to 250g and then pulverised. Analysis was by inductively couple plasma-atomic emission spectroscopy (ICP-AES) and couple plasma-mass spectroscopy (ICP-MS) (48 element – MEMS61 method). Fire assay was used for Au, Pt and Pd, with ICP-AES finish. The Competent Person considers that the sub sampling techniques and sample preparation for Exploration Results are appropriate for reporting Exploration results.
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	<b>Holes MNRC0016 &amp; MNRC0017:</b> No information has been identified in the historical reports reviewed on the quality control measures adopted for all subsampling stages to maximise representivity. <b>Holes RC 282 01 &amp; RC 282 03:</b> The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report collected subsequent to 2017 state that there were no fails for any of the elements indicating a reasonable to good control over the laboratory



Criteria	JORC Code explanation	Commentary
		cleaning methods used whilst processing the samples and sampling practices.
	<i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i>	<p><b>Holes MNRC0016 &amp; MNRC0017:</b> No blanks, CRM's or standards have been identified as being submitted in the reports reviewed associated with the historical data and the Competent Person can not verify if the results are representative of the in-situ material collected.</p> <p><b>Holes RC 282 01 &amp; RC 282 03:</b> Routine sampling QC has been inserted in to the sampling stream at reported levels of 1 blank per 20 samples and 1 duplicate per 20 samples. No fails have been noted in the reports received by Viking Mines from Flinders Mines and the JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that analysis of the QC data indicates reasonable to good control of the laboratory cleaning methods used whilst processing the samples and the sampling practices and the CP considers that the sub-sampling techniques and sample preparation was appropriate for reporting Exploration Results.</p>
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	<p>The Competent Person considers the current methods and processes described as appropriate for this style of mineralisation.</p> <p>The nature and style of the mineralisation is relatively homogenous and as such the sample sizes collected are appropriate to the grain size of the material being sampled.</p>
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<p><b>Holes MNRC0016 &amp; MNRC0017:</b> The historical reports indicate that samples were sent to Ultratrace in Canning Vale or Spectrolabs in Geraldton and both labs utilised the Iron Ore analysis suite using XRF.</p> <p><b>Holes RC 282 01 &amp; RC 282 03:</b> The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that samples were sent to Wangarra Perth for preparation and analysis. Samples were riffle split to 250g then pulverised to a nominal 85% passing 75 microns. Depending on target commodity, the following analysis methods were employed:</p> <p>The Vanadium and Gold samples both underwent analysis by ME-GRAS (H2O LOI) and MEX-XRF21u (iron ore by XRF fusion).</p> <p>The gold samples were also analysed by ICP-AES and Ultratrace Aqua Regia ICP-MS (61 elements) ME-MS41 method.</p> <p>The analysis methods chosen are considered appropriate for the style of mineralisation.</p>
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	No data has been reported of this type.
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	<b>Holes MNRC0016 &amp; MNRC0017:</b> No sample QAQC has been identified in the historical reports for this data or any information on the



Criteria	JORC Code explanation	Commentary											
		<p>laboratory performance. WMC did maintain a reputation for high quality exploration activities and on this basis the CP has a moderate degree of confidence in the data reported but is unable to verify the results through analysis of QAQC data.</p> <p><u>Summary of Flinders Mines RC Exploration Drilling and Sampling</u></p> <p>The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that a protocol of QC to industry standards was routinely used, including the insertion of standard Certified Reference Materials (CRM's), blanks and duplicates as part of the exploration programmes.</p> <p>The Competent Person for Viking Mines has not identified any significant failures in the reports reviewed that are of concern regarding the quality of the analysis results provided by Flinders Mines.</p>											
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	No historical verifications have been identified and no subsequent verifications been completed by Viking Mines.											
	<i>The use of twinned holes.</i>	No twin drilling has been identified in the database											
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Not recorded in the Database and unable to be assessed by the CP.											
	<i>Discuss any adjustment to assay data.</i>	<p>No adjustment is made to the assay data if results are reported from the laboratory as oxides. If they are not, % V2O5, % TiO2 and % SiO2 are all calculated from the laboratory analysis of V, Ti and Si respectively using the following formulas.</p> <table border="1"> <thead> <tr> <th>Element Analysis result ppm</th><th>Conversion to %</th><th>Multiply element % to attain</th></tr> </thead> <tbody> <tr> <td>V</td><td>V ppm / 10,000</td><td>V% X 1.7852 = V2O5%</td></tr> <tr> <td>Ti</td><td>Ti ppm / 10,000</td><td>Ti% X 1.6681 = TiO2%</td></tr> <tr> <td>Si</td><td>Si ppm / 10,000</td><td>Si% X 2.1392 = SiO2%</td></tr> </tbody> </table>	Element Analysis result ppm	Conversion to %	Multiply element % to attain	V	V ppm / 10,000	V% X 1.7852 = V2O5%	Ti	Ti ppm / 10,000	Ti% X 1.6681 = TiO2%	Si	Si ppm / 10,000
Element Analysis result ppm	Conversion to %	Multiply element % to attain											
V	V ppm / 10,000	V% X 1.7852 = V2O5%											
Ti	Ti ppm / 10,000	Ti% X 1.6681 = TiO2%											
Si	Si ppm / 10,000	Si% X 2.1392 = SiO2%											
Location of data points	<i>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	The database records collar locations as being determined using a GPS instrument with downhole surveys conducted to determine the trace of the drillhole.											
	<i>Specification of the grid system used.</i>	The adopted grid system is MGA94_50 and all data are reported in these coordinates.											
	<i>Quality and adequacy of topographic control.</i>	Not applicable.											
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	As noted in the report, the location of samples selected for metallurgical testwork is applicable to the resources referred to unless otherwise stated. The drill spacing is not considered relevant or a material risk by the Competent Person for the reporting of Exploration Results.											



Criteria	JORC Code explanation	Commentary
	<i>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	Not applicable to the reporting of the metallurgical results. The JORC Table 1 reported in Flinders mines ASX releases relating to data referred to in this report state that the Competent Person believes the mineralised domains have sufficient geological and grade continuity to support the classification applied to the Mineral Resource given the current drill pattern.
	<i>Whether sample compositing has been applied.</i>	Some of the historical drilling has been initially conducted with larger sampling intervals up to 4m in width. Where high grade values have been intersected, follow up 1m sampling has taken place. Flinders Mines have conducted variable sample compositing whilst drilling from 1m, 2m and 3m composites in the field. Sample compositing occurred with samples for metallurgical testwork as outlined in the body of the report.
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The orientation of the drilling data has been designed to intersect the mineralised horizons perpendicular to strike and at a high angle to mitigate any bias. No comments were identified in the historical data to indicate any bias was of concern. Given the deposit type and orientation and to the extent which this is known, the drill angles are considered appropriate based on what has been reviewed by the Competent Person.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	The historical data sourced from WAMEX does not reference any evident sample bias. Given the nature and style of mineralisation, a sampling bias would not have been expected.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	The Competent Person is unaware of what measures were undertaken to ensure sample security during past exploration activity and no information was identified in the historical reports sourced from WAMEX.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No external audit of sampling techniques and data could be sourced from the documents sourced off WAMEX by Viking Mines.



## JORC 2012 Table 1, Section 2 – Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary																												
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	<u>Tenements and location</u> The Canegrass Battery Minerals Project tenements are located approximately 60 km east-southwest of the town of Mount Magnet, Western Australia. The tenements are situated in both the Mount Magnet and Sandstone Shires and cover parts of the Challa, Meeline and Windimurra pastoral leases. Details of the tenements are presented in the table below: <table><tr><th>Tenement</th><th>Status</th><th>Holder</th><th>Area (Blocks)</th></tr><tr><td>E58/232-I</td><td>LIVE</td><td>Flinders Canegrass Pty Ltd</td><td>5</td></tr><tr><td>E58/236-I</td><td>LIVE</td><td>Flinders Canegrass Pty Ltd</td><td>4</td></tr><tr><td>E58/282-I</td><td>LIVE</td><td>Flinders Canegrass Pty Ltd</td><td>8</td></tr><tr><td>E58/520</td><td>LIVE</td><td>Flinders Canegrass Pty Ltd</td><td>1</td></tr><tr><td>E58/521</td><td>LIVE</td><td>Flinders Canegrass Pty Ltd</td><td>5</td></tr><tr><td>E58/522</td><td>LIVE</td><td>Flinders Canegrass Pty Ltd</td><td>8</td></tr></table> The Fold Nose Mineral Resource is located on tenement E58/232-I and the Kinks Mineral Resource is located on tenement E58/282-I <u>Third Party Interests</u> Viking Mines Ltd subsidiary Viking Critical Minerals Pty. Ltd. has signed a binding term sheet to earn up to a 99% interest in the project tenements. Maximus Resources Ltd (ASX:MXR) retains a 2% NSR on all minerals recovered from tenements E58/232-I, E58/236-I & E58/282-I. <u>Native Title, Historical sites and Wilderness</u> There is no registered native title claim over the Project tenements. There are no registered sites recorded on the WA government Department of Planning, Lands and Heritage (DPLH) Aboriginal Heritage Enquiry System (AHIS) on the tenements. There are 3 other heritage places recorded on AHIS, with 1 deemed not a site and 2 lodged waiting assessment. None of the other heritage places significantly impact or impede access to the tenements.	Tenement	Status	Holder	Area (Blocks)	E58/232-I	LIVE	Flinders Canegrass Pty Ltd	5	E58/236-I	LIVE	Flinders Canegrass Pty Ltd	4	E58/282-I	LIVE	Flinders Canegrass Pty Ltd	8	E58/520	LIVE	Flinders Canegrass Pty Ltd	1	E58/521	LIVE	Flinders Canegrass Pty Ltd	5	E58/522	LIVE	Flinders Canegrass Pty Ltd	8
	Tenement	Status	Holder	Area (Blocks)																										
E58/232-I	LIVE	Flinders Canegrass Pty Ltd	5																											
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E58/282-I	LIVE	Flinders Canegrass Pty Ltd	8																											
E58/520	LIVE	Flinders Canegrass Pty Ltd	1																											
E58/521	LIVE	Flinders Canegrass Pty Ltd	5																											
E58/522	LIVE	Flinders Canegrass Pty Ltd	8																											
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements are held in good standing by Flinders Canegrass Pty. Ltd., a wholly owned subsidiary of Flinders Mines Ltd. There are no fatal flaws or impediments preventing the operation of the exploration licences.																												
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Based on historical data searches completed to date by Viking, the Canegrass Battery Minerals Project exploration history for vanadium magnetite deposits dates back primarily to 1977 when WMC commenced exploration in the area. Exploration was completed through to 1984 and over this time they undertook mapping, rock chip sampling, soil sampling, geophysics (magnetics and induced polarisation) surveys, percussion drilling and diamond drilling. No resources were defined, but high-grade Vanadium mineralisation was discovered as part of the exploration programme. Viking have not completed searches for exploration data for the period 1984 to 2011 when Flinders Mines acquired the project and this work is ongoing.  Previous JORC table reports compiled by Flinders state the following: The previous exploration across the Canegrass Project conducted by Flinders, and previous companies previously associated with the tenements such as Apex Minerals, Falconbridge Limited and Maximus Resources is significant, dating back to at least 2003. Activities primarily concentrated on four key commodity groupings:																												





Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Nickel-Cobalt-Copper massive sulphide in marginal facies of the Windimurra Igneous Complex (WIC) proper, or in cross-cutting later intrusive bodies that postdate and penetrate across the WIC;</li> <li>PGE bearing internal layers within the WIC;</li> <li>Fe-Ti-V bearing internal layers within the WIC;</li> <li>Au hosted in later fault structures that crosscut the WIC and offset the WIC internal geology.</li> </ul> <p>Flinders Mines have also provided detailed exploration history since 2017 in their most recent announcement dated 10 June 2022 – Canegrass Project Exploration Update. Further information can be obtained by reading this release.</p>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation</i>	<p><u>Regional Geology</u> The geology is dominated by the Windimurra Igneous Complex (WIC). The WIC is a large differentiate layered ultramafic to mafic intrusion emplaced within the Yilgarn craton of Western Australia. It outcrops over an area of approximately 2,500km<sup>2</sup> and has an age of approximately 2,800Ma. The complex is dominantly comprised of rocks that can broadly be classified as gabbroic in composition. It is dissected by large scale, strike slip shear zones.</p> <p><u>Deposit Geology Kinks &amp; Fold Nose (30 January 2018 Canegrass Vanadium Mineral Resource Estimate &amp; Exploration Update Release by Flinders Mines)</u> The deposit represents part of a large, layered intrusion. Mineralisation which comprises magnetite-titanium-vanadium horizons, with distinct vanadiferous titanomagnetite (VTM) mineralisation occurring within the Windimurra Complex – a large differentiated layered ultramafic to mafic intrusion within the Murchison Province of the Yilgarn Craton.</p> <p>Given the mode of formation, mineralisation displays excellent geological and grade continuity.</p>
<b>Drill hole Information</b>	<p>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</p> <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> <p>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</p>	<p>A summary of the relevant drillhole information has been included in the body of the report with a table of DH collars and significant intersections reported in Appendix 2 with all drill hole details.</p>
<b>Data aggregation methods</b>	<p>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</p> <p>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</p>	<p>All reported composited intersections are calculated using weighted averages by length of the samples in the intersection and no high grade top-cuts were applied to the reported exploration results.</p> <p><u>V2O5 Reported Results</u></p> <ul style="list-style-type: none"> <li>Exploration drilling results contained in this release have been reported at a nominal 0.5% V2O5 cut-off with a maximum of 6m internal waste (below 0.5% cut-off) and a minimum length of 8m and are presented in Appendix 2. Selected included intersections at a higher grade reported above a 0.9% V2O5 cut-off with a maximum of 2m internal waste (below 0.9% cut-off) and a minimum length of 6m.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalents have been reported.
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	All reported intercepts are downhole lengths and the true width of mineralisation is not known. However, given the interpreted shallow dipping nature of mineralisation observed at the Fold Nose and Kinks deposits and many drillholes being vertical in nature, the downhole length is interpreted to be close to true thickness due to the high intersection angles between the drillhole and the mineralisation.
<b>Diagrams</b>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views</i>	All appropriate maps and plans and sections are included in the body of the report. A significant discovery is not being reported, however drillholes referred to in this report are highlighted on the maps with collar locations.
<b>Balanced reporting</b>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	References to previous releases used to provide the information in this report have been made and those respective releases provide the disclosure of the drilling results. All appropriate information is included in the report. References to previous releases used to provide the information in this report have been made and those respective releases provide the disclosure of the drilling results. Data table of results for drillholes being reported are included in this report in Appendix 2 if not made publicly available previously.
<b>Other substantive exploration data</b>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances</i>	A technical review of the historical metallurgical reports has been completed as best as possible using the information available. Interpretation has been made as to the intent of the testwork where it has not been clearly stated in the historical reports. The metallurgical testwork completed and reviewed in this release is preliminary in nature and as noted in the report not been focussed on vanadium extraction. All historical data is either publicly available through WAMEX, has been released previously by previous owners of the Project and referenced to the appropriate releases or is disclosed in the body of this report. Silica and alumina content has been noted in the results in Appendix 1 as these elements can have deleterious effects in the recovery of vanadium if a pyrometallurgical process is followed. No testwork has been completed on the suitability of the magnetic concentrates for further refinement and processing to produce a vanadium pentoxide product via pyrometallurgical or hydrometallurgical processes.
<b>Further work</b>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	The metallurgical testwork results identified in the reports give confidence in the potential for vanadium extraction and recovery into a magnetic concentrate and have formed the basis for the company to continue to explore the project with the intention of undertaking more comprehensive and focused metallurgical testwork programme in the future. Future testwork will involve a comprehensive sample selection programme from future drilling to produce a magnetic concentrate from new samples, assessing the quality of the concentrate and undertaking roasting testwork to determine if a vanadium pentoxide product can be produced.