VIKING MINES

VIKING DELIVERS SUCCESSFUL PIT OPTIMISATION WITH 61MT AT 0.81% V_2O_5 & 35.9% FE OPEN PIT

Cautionary Statement: *The Pit Optimisation Study referred to in this announcement is based on low-level technical and economic assessments and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the POS will be realised. The POS is preliminary in nature and not intended as a Scoping or Feasibility Study.*

- **Viking successfully completes a Pit Optimisation Study ("POS") on the Canegrass Battery Minerals Project ("the Project") Mineral Resource Estimate ("MRE") with;**

  61Mt at 0.81% V_2O_5, 35.9% Fe, 7.6% TiO_2, 714ppm Cu, 687ppm Ni & 177ppm Co (0.7% V_2O_5 cut-off) Inferred (JORC 2012) Pit constrained MRE.

- **POS input pricing assumptions reflect current commodity pricing with A$8.96/lb (US$6/lb) V_2O_5 and A$150/t (US$101/t) Fe concentrate (58% fines) and current industry costs.**
- **Results deliver in excess of 2X Viking's stated strategic objective of defining >30Mt high-grade open pitable resource.**
- **Six pit optimisation scenarios completed, assessing various revenue streams for V_2O_5, Fe, Cu, Ni & Co & at different cut-offs to determine the highest value options.**
- **All six Pit Optimisations proved highly successful, delivering in pit Mineral Resources ranging from 31Mt to 92Mt, indicating the robust nature of the Project.**
- **The POS provides direct targets for follow up drilling to seek to improve the MRE confidence to Indicated+ (JORC 2012) ahead of commencing a Scoping Study.[1]**

Viking Mines Ltd (ASX: VKA) ("**Viking**" or "**the Company**") is pleased to provide an update on the outcomes of the highly anticipated Pit Optimisation Study ("**POS**") for the Canegrass Battery Minerals Project ("**the Project**" or "**Canegrass**"), located in the Murchison region of Western Australia.

The POS has proven highly successful with all scenarios producing pit shells (Figure 1) that demonstrate the potential for positive economic viability under the assumptions used. The Company has used current input cost parameters and commodity pricing and combined with recent metallurgical results, demonstrating a robust Project with outstanding potential.

Viking Mines' MD & CEO, Julian Woodcock, commenting on the results of the POS said:

"The results of the POS have exceeded my expectations and reaffirmed the Company's belief that there is substantial inherent value within this exceptional Vanadium/Magnetite Project.

"The Company took a conservative approach when considering the input assumptions to ensure that the results provided a robust outcome, warranting moving to the next stage of investment to carry the Project forward.

"The study has delivered and appears robust, even at our most conservative scenario where only revenue from Vanadium is assumed. Allowing for additional revenue from the Iron, Copper, Nickel and Cobalt further substantially reinforces the Project.

"We will now continue to advance the metallurgical studies on the Project and commence with evaluation of the pit shells to determine what drilling is required to increase the Mineral Resource confidence ahead of commencing a Scoping Study."

[1] Viking Mines (ASX:VKA) ASX Announcement 20 November 2023 – VKA Resource Update Delivers over 100% Growth at Canegrass

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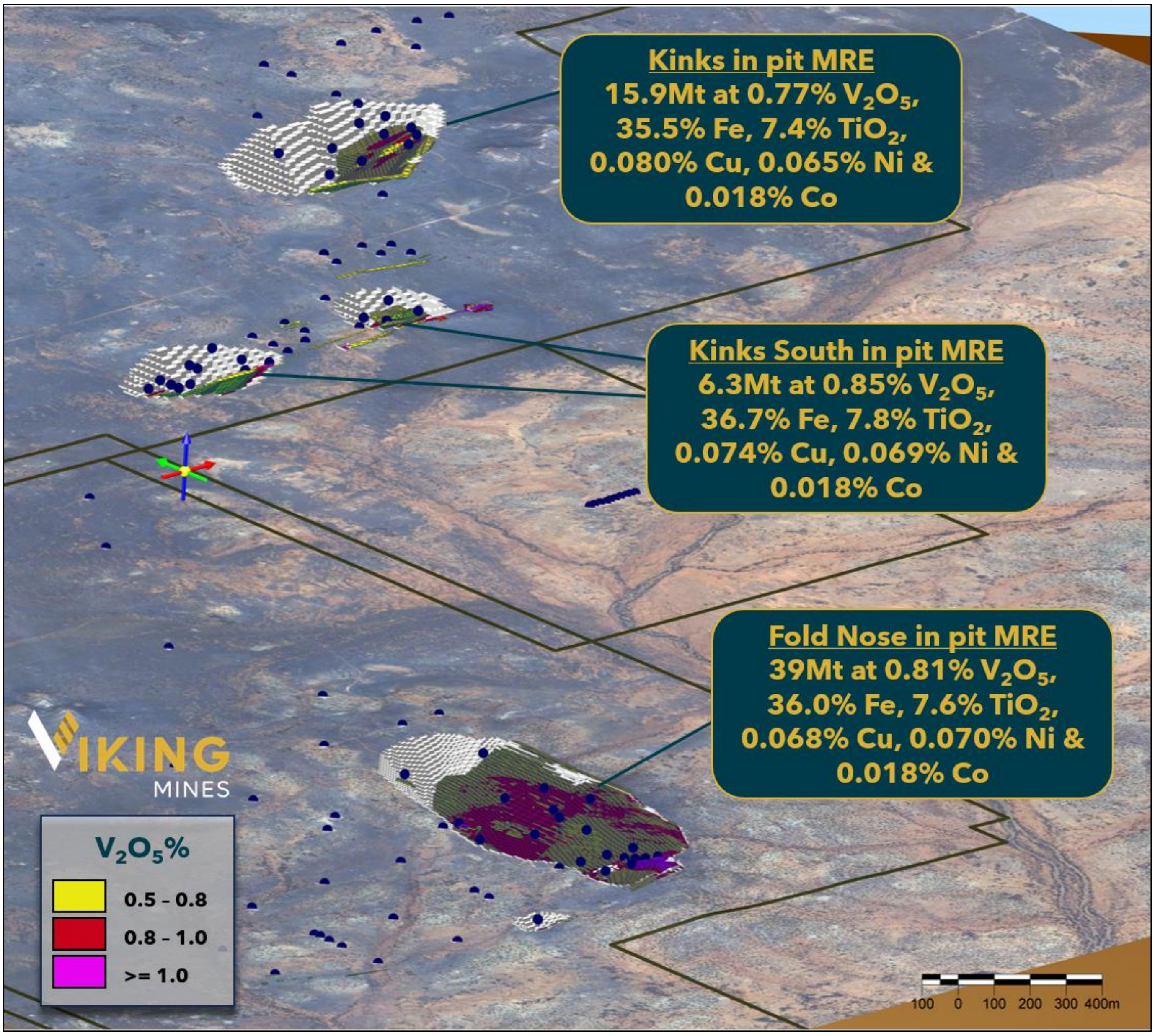

Figure 1; Isometric view to NE showing the pits generated at the Fold Nose, Kinks South, and Kinks Deposits with the pit constrained JORC (2012) MRE's noted respectively. Note all Mineral Resources are Inferred category reported above a 0.7% V_2O_5 cut-off.

CANEGRASS PROJECT PIT OPTIMISATION STUDY

Industry consultants, MEC Mining have completed the POS on the Canegrass Project's Global MRE completed in the December quarter 2023.[1] The POS is another major technical advancement achieved by the Company at Canegrass.

The POS has proven extremely successful, delivering multiple open pit scenarios for each of the three deposits that make up the Canegrass Project.

Importantly, all outcomes have delivered sufficient in-pit Mineral Resources to support continued progression toward Viking's stated strategic objectives of delivering an operation that meets a >15 years mine life at 1.5-2.0Mtpa (>30Mt total) and with an average in-situ grade of 0.81% V_2O_5.

A thorough industry standard process has been followed to assess the Canegrass Project's Global MRE to determine what portions of the Global MRE demonstrate the highest value, and warrant further follow up drilling to increase the MRE category and confidence. The Pit Optimisation Process section below discusses this in further detail.

Pit Optimisation Results – Base Case Scenario

The Company has selected the Base Case scenario at a 0.7% V_2O_5 processing cut-off for ongoing further evaluation of the Project. This delivers a substantial pit constrained high-grade, low strip-ratio Inferred category JORC (2012) MRE of:

61Mt at 0.81% V_2O_5, 35.9% Fe, 7.6% TiO_2, 714ppm Cu,

687ppm Ni & 177ppm Co

The optimisation generates pits on each of the three deposits (Figure 1) at Fold Nose (Figure 4), Kinks and Kinks South (Figure 3) with a breakdown provided on Table 1.

Table 1; Base Case Canegrass Project MRE broken out by deposit and reported within pit constrained mineral resources. Results are reported to JORC (2012) guidelines and are in-situ tonnage and grades.

Deposit	Cut-off % V_2O_5	JORC (2012) Classification	Tonnage (Mt)	V_2O_5 %	Fe %	Cu %	Ni %	Co %	TiO_2 %
Fold Nose	0.7	Inferred	39.0	0.81	36.0	0.068	0.070	0.018	7.6
Kinks	0.7	Inferred	15.9	0.77	35.5	0.080	0.065	0.018	7.4
Kinks South	0.7	Inferred	6.3	0.85	36.7	0.074	0.069	0.018	7.8
Total	**0.7**	**Inferred**	**61.2**	**0.81**	**35.9**	**0.071**	**0.069**	**0.018**	**7.6**

This scenario has been determined as the most suitable for further evaluation as it considers revenue from both the Vanadium and Iron from the Project, which is supported by the current level of metallurgical testwork completed[2] and the results achieved.

A 0.7% V_2O_5 cut off grade was chosen, as no additional tonnes are anticipated to be necessary at this stage of the Project assessment. The elevated cut off ensures a Mineral Resource of higher grade, thereby enhancing the value per tonne of mineralisation.

However, it is important to note that there remain substantial tonnages within the Mineral Resource that have demonstrated viability in the POS at lower cut-off grades and extend the pits deeper. In addition, >10Mt at 0.62% V_2O_5 occurs below the selected processing cut-off of 0.7% V_2O_5 within the Base Case pits (Figure 2). This material would be stockpiled for future treatment at the end of mine life, presenting further upside to the Project.

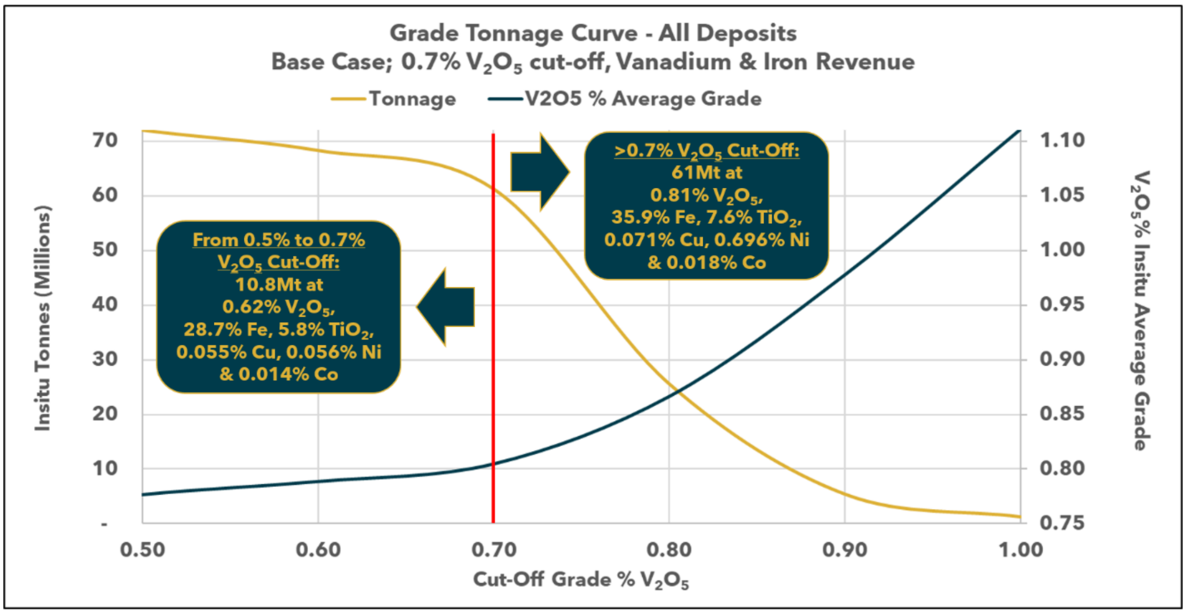

Figure 2; Grade Tonnage curve for Base Case scenario at 0.7% V2O5 cut-off. Note >10Mt at 0.62% V_2O_5 below the reporting cut-off.

[2] Viking Mines (ASX:VKA) ASX Announcement 6 March 2024 – VKA Achieves 1.43% V_2O_5 & 59% Fe in High Quality Concentrate
Viking Mines (ASX:VKA) ASX Announcement 11 March 2024 – Viking Achieves Roasting Success and 93.2% V_2O_5 Recovery

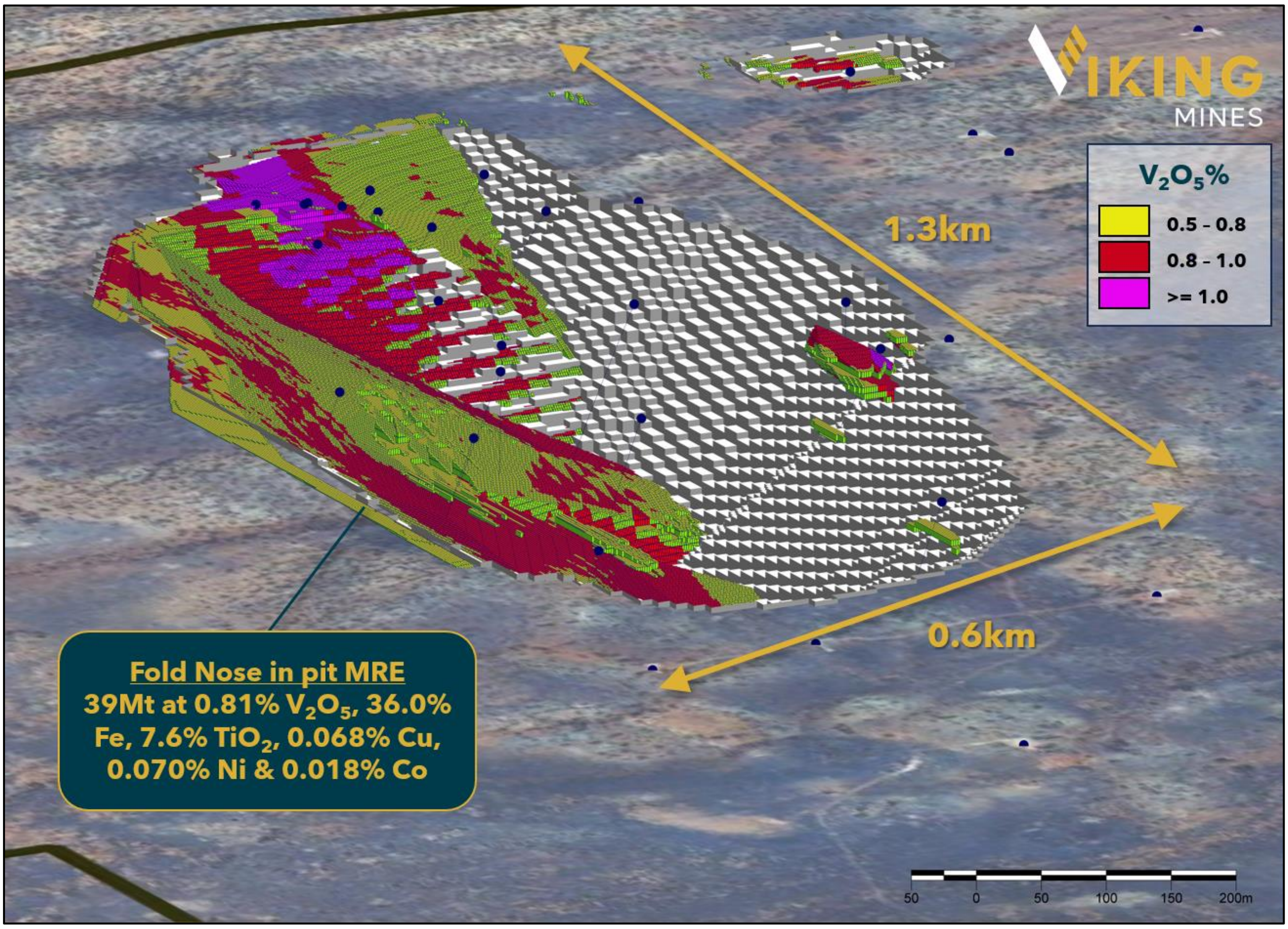

Figure 4; Isometric view to the SW of the Fold Nose Deposit and the Base Case scenario open pit. Shown within the pit is the MRE bock models, colour coded by V_2O_5 % grade and reported above 0.7% V_2O_5 % cut-off.

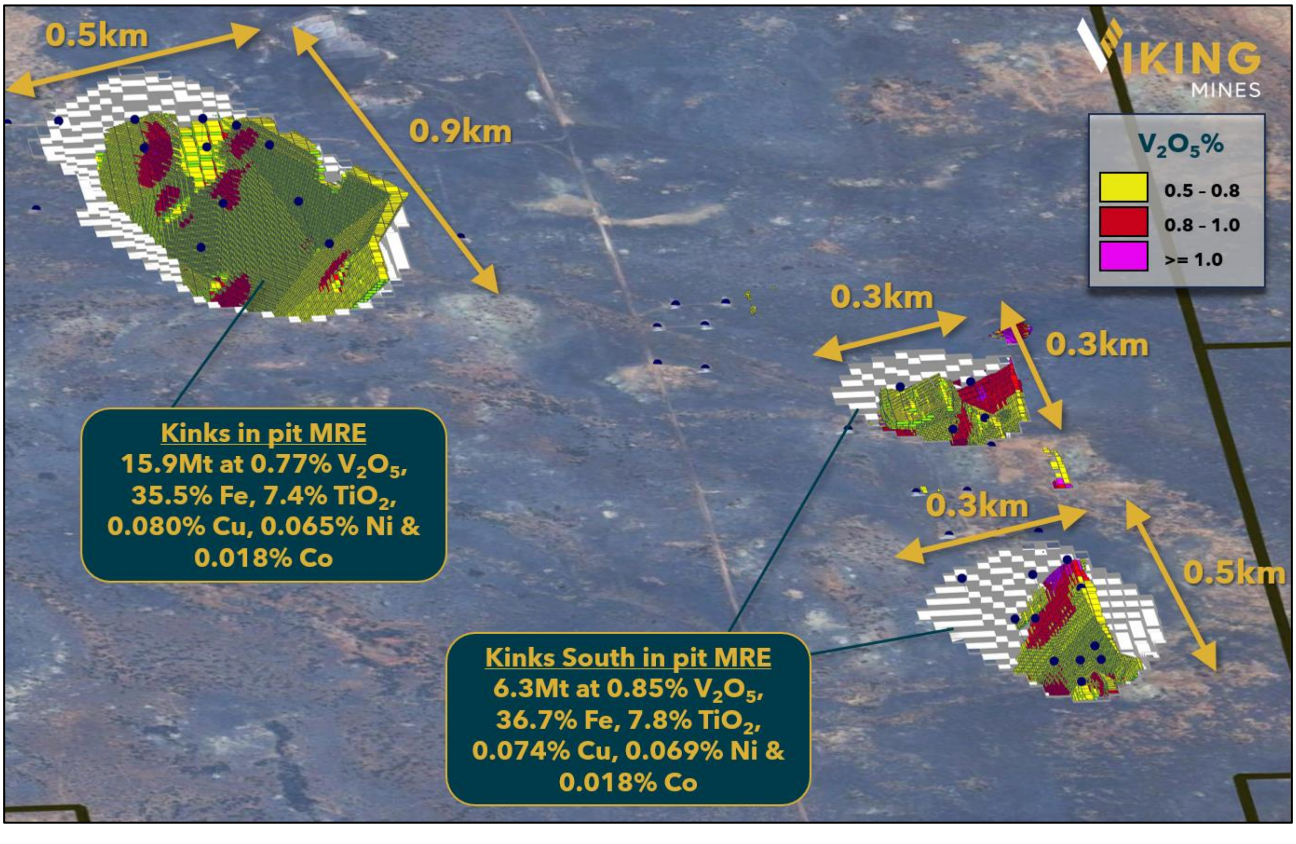

Figure 3; Isometric view to the East of the Kinks and Kinks South Deposits and the Base Case scenario open pits. Shown within the pits are the MRE block models, colour coded by V_2O_5 % grade and reported above 0.7% V_2O_5 % cut-off.

Pit Optimisation Study Process

The POS utilised the MRE Ore Block Model ("OBM"), costs, pricing, and other inputs, to determine the Ultimate pit shell at different processing cutoffs for each deposits MRE. The Ultimate pit shells do not consider mine schedule, pit designs, and the discounted cost of money, and are not the Optimal pit shells.

The Company selected three revenue stream scenarios to be assessed in the POS (Table 2). Each of these scenarios were further refined by adjusting the minimum cut-off grade for Vanadium (as V_2O_5) to allocate ore for processing. This resulted in six runs being completed on each of the three deposits (Fold Nose, Kinks and Kinks South).

The various commodity revenue streams and cut-off grades were selected to determine the sensitivity of the MRE to revenue. This methodology identifies the highest value portions of the MRE, in effect by minimising the revenue stream. Pits formed in all scenarios highlight areas for priority follow up as these areas produce the best potential returns.

Table 2; Matrix of pit optimisations completed, and respective commodities used and cut-offs evaluated.

Processing Cut-off	Commodities Used		
	Base Case	Best Case	Worst Case
0.6% V_2O_5	V_2O_5 & Fe	V_2O_5, Fe, Cu, Ni & Co	V_2O_5
0.7% V_2O_5			

Input Assumptions

To generate the open pits, a series of input assumptions are required and fall under four categories, with Table 3 below providing all the assumptions used:

1. Revenue pricing for commodities.
2. Operating costs.
3. Metallurgical recoveries.
4. Mining parameters for pit slopes, dilution and recovery.

The Company undertook an extensive process to source all the required information that reflects the current operating environment from a perspective of costs and revenue (items 1 and 2). This included obtaining quotes where appropriate/available and sourcing other information from publicly available data.

Metallurgical assumptions (item 3) were applied based on the Company's testwork results. It is important to note that further metallurgical testwork has been completed demonstrating that a higher recovery of Vanadium may be achievable at the roasting stage. This has increased the overall recovery of Vanadium within the resource from 74.4% used in the POS to an upper level of 86.6% determined in the metallurgical sighter roasting testwork.[2]

This 12.2% increase will have a significant positive effect on the optimisations, however due to the advanced nature of the optimisations when the additional metallurgical data became available, the Company elected not to repeat the optimisation work already completed.

Industry standard values were applied for the mining parameters (item 4), reflective of the geology and mineralisation being assessed.

All assumptions (Table 3) were reviewed and agreed with MEC Mining and subsequently input into the pit optimisation software. The software uses the values provided to calculate the optimum pits by calculating cashflow from the MRE blocks based on their respective grades and cost of extraction.

All three scenarios have proved successful and delivered optimised pit shells.

Table 3; Input assumptions used for the Pit Optimisation Study for each of the Base, Best and Worst case scenarios.

Category	Item	Parameter	Units	Base Case	Best Case	Worst Case	Notes
1. Revenue Pricing	Commodity	Commodities Used	n/a	V_2O_5 & Fe	V_2O_5, Fe, Cu, Ni & Co	V_2O_5	Revenue calculated from commodities listed for each optimisation scenario.
	Commodity Pricing for Revenue	Exchange Rate	US$/A$1	$0.67			
		V_2O_5 Flake	A$/t	$8.96			Based on US$6/lb 98% V2O5 flake at exchange rate of US$0.67/A$1.
		Iron Concentrate		$150.81	$150.81	n/a	Based on spot price of US$126.17/t 58% fines with 20% discount applied for Ti content.
		Copper Concentrate		n/a	$8,299	n/a	65% of commodity spot price for sale of sulphide concentrates.
		Nickel Concentrate		n/a	$16,301	n/a	
		Cobalt Concentrate		n/a	$28,294	n/a	
2. Operating Costs	Mining Costs	Mining Cost	A$/t	$5.32			Base mining cost to 90m depth $/t mined from the pits.
		MCAF	90-250m	$0.48			Increase cost $/t over base cost applied to each 20m bench with increasing depth.
	Processing Costs	Kinks & Kinks South	A$/t ore feed	$51.10	$52.69	$51.10	Total cost of ore haulage, grinding & roasting to produce V2O5 flake. Increased cost of $3/t concentrate for best case scenario to produce sulphide concentrate.
		Fold Nose		$51.32	$52.91	$51.32	
		G&A		$10.00			General & Administration cost to cover camp, accommodation, flights & mine management.
	Selling costs	V_2O_5 Flake	A$/t	$1,438.07			All costs associated with shipment of products from site via road to Geraldton Port and shipment overseas to smelters/customers plus royalties.
		Iron Concentrate		$84.82	$84.82	n/a	
		Copper Concentrate		n/a	$647.04	n/a	
		Nickel Concentrate		n/a	$1,199.16	n/a	
		Cobalt Concentrate		n/a	$2,026.73	n/a	
3. Metallurgical Recoveries	Oxide / Transition ore	Vanadium	% recovered from ore feed to mill	30.0%			Reduced recoveries in oxide/transition material assumed. No recovery of sulphides (Cu, Ni & Co) due to weathering preventing floatation.
		Iron		57.6%	57.6%	n/a	
		Copper		n/a	0.0%	n/a	
		Nickel		n/a	0.0%	n/a	
		Cobalt		n/a	0.0%	n/a	
	Fresh ore	Vanadium		74.4%			Vanadium recovered in all scenarios. Iron in base and best case. Cu, Ni & Co only recovered in best case. **NOTE:** Since completing POS, further metallurgical testwork has determined an overall recovery from ore feed for V_2O_5 up to 86.6%. This presents significant upside opportunity for the Project with up to 12.2% additional potential cashflow for Vanadium over that assumed in the POS.
		Iron		83.3%	83.3%	n/a	
		Copper		n/a	80.0%	n/a	
		Nickel		n/a	80.0%	n/a	
		Cobalt		n/a	70.0%	n/a	
4. Mining Parameters	Rock Density	Ore	t/m^3	In OBM			Estimated in to the Ore Block Model using downhole density logging data.
		Waste		3.6			Assumed average density based on review of downhole logging data through waste zones.
	Pit Slopes	0 -20m	degrees	31°			Shallower slopes in weathered rock.
		<20m		44°			Steeper slopes in fresh rock.
	Mining Factors	Dilution	%	2.5%			Assumes 1m dilution over 40m thick zone.
		Recovery		95%			Ore recovered from the pits by mining due to losses occurring in mining process.

Pit Optimisation Results – Revenue Sensitivity

The results of the revenue sensitivity completed via incorporating different revenue streams from the various commodities is very encouraging. Table 4 below provides a summary of the MRE within each of the pits for each of the cases assessed and Figure 6 and Figure 5 show the various pit limits at each deposit for the respective scenarios.

Table 4; In-Pit MRE Inferred Category (JORC 2012) for each of the Pit Optimisation scenarios investigated. Note, where grades are reported as 'n/a' for Fe, Cu, Ni & Co in the Base and Worst case scenarios is due to the commodity not being used in the assessment, . These commodities are present but not reported by the software in these scenarios.

Scenario	Worst		Base		Best	
Cut-Off Grade (V_2O_5%)	0.7	0.6	**0.7**	0.6	0.7	0.6
Resource Tonnage (Mt)	32.1	45.2	**61.2**	81.8	60.4	94.1
V_2O_5 Grade (%)	0.81	0.78	**0.81**	0.77	0.81	0.76
Fe Grade (%)	n/a	n/a	**35.9**	34.7	36.2	34.3
Cu Grade (%)	n/a	n/a	**n/a**	n/a	0.071	0.067
Co Grade (%)	n/a	n/a	**n/a**	n/a	0.018	0.017
Ni Grade (%)	n/a	n/a	**n/a**	n/a	0.069	0.067
Waste Tonnes (Mt)	127	156	**272**	359	319	496
Strip Ratio	4.1	3.5	**4.8**	4.5	5.4	5.4

Whilst the Company has selected the Base Case (0.7% V_2O_5 cut-off) to focus on for further assessment, the results of the other scenarios demonstrate a sizeable and robust MRE for further investigation, with even with the worst-case scenario delivering 31.1Mt at 0.81% V_2O_5. This worst-case scenario still meets the Company's stated strategic objective of >30Mt, which would provide a >15-year operation at a throughput of 2Mtpa.

With the Best Case scenario at 0.6% V_2O_5 cut-off delivering a substantial 94.1Mt at 0.76% V_2O_5, there is significant scope and opportunity to investigate both lower-grade, higher tonnage operations vs higher-grade lower tonnage operations. The strip ratio in all scenarios is low and ranges from 4.1 to 5.4, providing options for a small size mining fleet.

The range of outcomes identified with these results provides significant optionality for the Company to pursue in the future.

FORWARD STRATEGY

With the successful completion of the POS and the identification of a substantial mineral resource showing potential economic viability under the assumptions used, the Company is encouraged to continue advancing towards undertaking a Scoping Study for the Project.

The Company plans to seek to increase the confidence in the Mineral Resource by increasing this to Indicated+ category (JORC 2012). The Company will initially focus on the Fold Nose Deposit as the in-pit MRE is of sufficient size (Figure 4; 39Mt at 0.81% V_2O_5) to assess the potential for a 15+ year mine life Project, with optionality remaining for further feed from Kinks and Kinks South.

In parallel, the Company will commence engaging external consultants to provide advice and input on other factors required for the Scoping Study, such as environmental, hydrology, and geotechnical with the objective of advancing these aspects in parallel.

Metallurgical testwork is ongoing and will continue, with further testwork planned to investigate options for producing a sulphide concentrate to potentially release the value of the Cu, Ni and Co within the Project. Work will also commence to determine if an ilmenite concentrate can be produced at the magnetic separation stage to separate the Titanium from the Iron and potentially produce a further revenue stream for the Project which has not yet been considered.

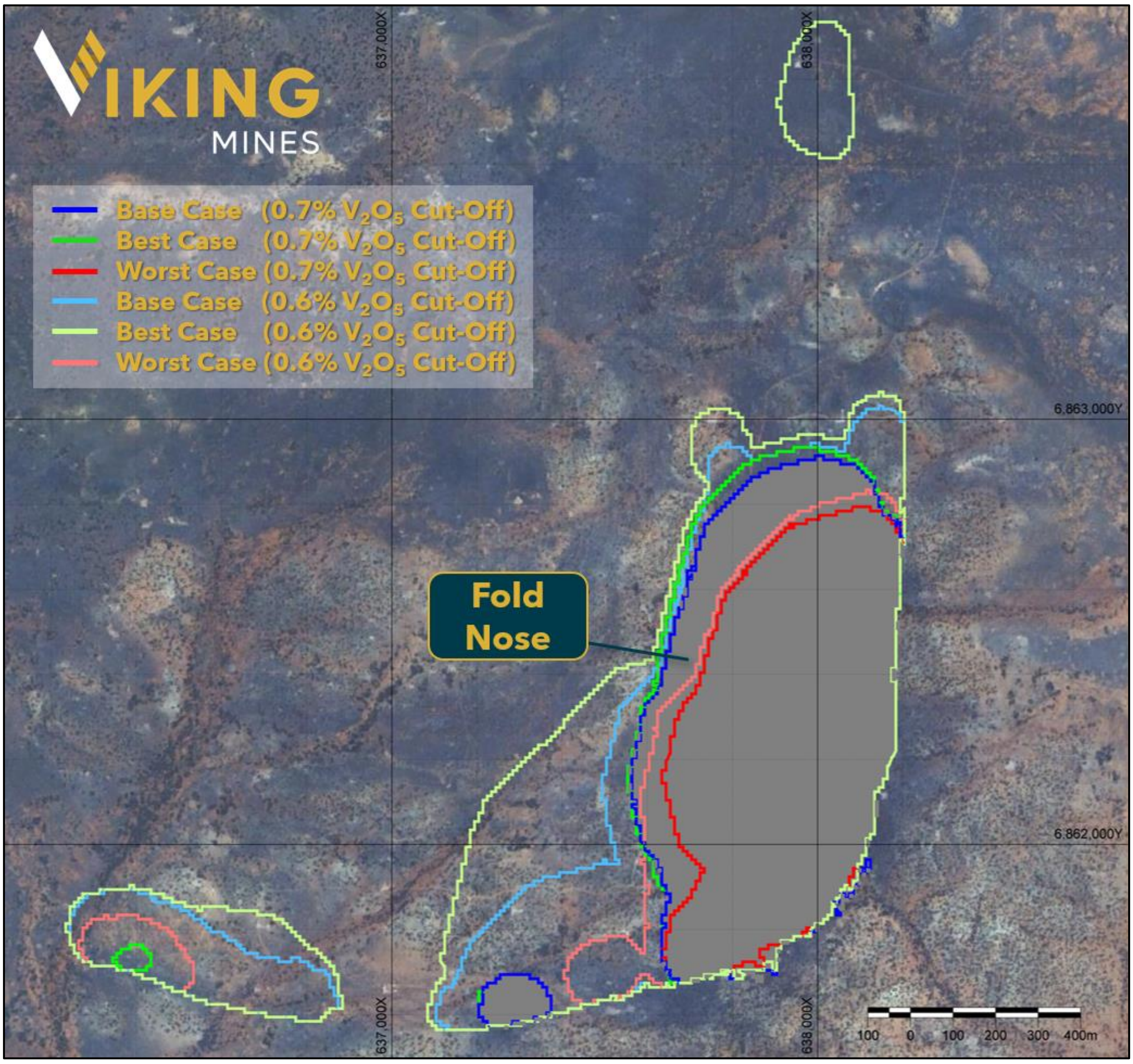

Figure 6; Plan view of the Fold Nose Deposit with each of the pit limits shown for the respective Pit Optimisation scenarios completed.

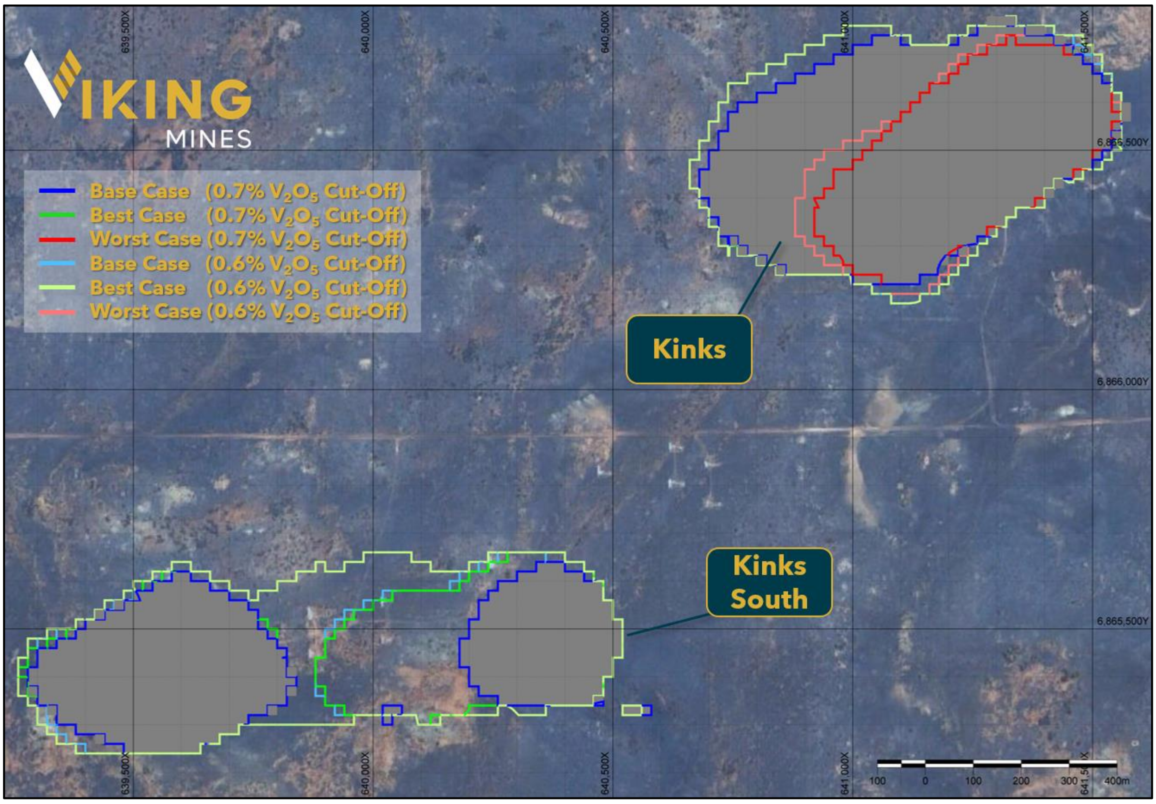

Figure 5; Plan view of the Kinks and Kinks South Deposits with the pit limits shown for each of the respective Pit Optimisation scenarios completed.

NEXT STEPS

With the completion of the POS and the definition of substantial mineral resources constrained within open pits, the Company has achieved yet another significant milestone for Canegrass. Work continues to advance the Project forward with the following key items underway:

- Second stage metallurgical testwork well advanced, with Vanadium extracted from the magnetite via conventional roasting methodology and progressing with bulk roast testing and purification to produce >98% V_2O_5 flake.
- Review of Pit Optimisation Study outputs and assessment of infill drilling requirements to increase the Mineral Resource confidence to Indicated+ (JORC 2012).
- Engaging external consultants to review requirements for further studies to advance the Project, including environmental, hydrology and geotechnical ahead of commencement of a Scoping Study.

END

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

Julian Woodcock
Managing Director and CEO
Viking Mines Limited

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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 and exploration target 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 & Pit Optimisation

The information in this announcement that relates to the Mineral Resource estimate and Pit Optimisation is derived from information compiled by Mr Dean O'Keefe, a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM, #112948), and Competent Person for this style of mineralisation. Mr O'Keefe is a consultant to Viking Mines Limited, and is employed by MEC Mining, an independent mining and exploration consultancy. Mr O'Keefe 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). Mr O'Keefe consents to the inclusion in the report of the matters based on the results in the form and context in which they appear.

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. 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 announcements.

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^2 of exploration tenements with very limited follow up exploration targeting the growth potential of the vanadium pentoxide (V_2O_5) 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 Mineral Resource has been calculated across three separate areas called the Fold Nose, Kinks and Kinks South deposits, each with. The Resource has subsequently been reported above a cut-off grade of 0.5% V_2O_5 and above the 210 RL (equivalent to a maximum depth of ~250m).

Canegrass Project Vanadium Mineral Resource estimate, 0.5% V_2O_5 cut-off grade, >210m RL (due to the effects of rounding, the total may not represent the sum of all components). **Error! Bookmark not defined.**

MRE	JORC (2012) Classification	Cut-Off V_2O_5%	Tonnage (Mt)	Target Commodities						Deleterious Elements			LOI %
				V_2O_5 %	Fe %	TiO_2 %	Cu %	Ni %	Co %	Al_2O_3 %	SiO_2 %	P %	
VKA 2023 Model	Inferred	>0.5	146	0.70	31.8	6.6	0.066	0.062	0.016	11.7	21.7	0.005	1.7

VIKING MINES FARM-IN AGREEMENT

Viking, via its wholly owned subsidiary, Viking Critical Minerals Pty Ltd, commenced with a Farm-In arrangement with Red Hawk Mining Ltd (formerly Flinders Mines Ltd) (ASX:RHK) 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, Red Hawk Mining may offer to sell to Viking the remaining 1% of the Project for future production and milestone related payments totalling $850,000. If Red Hawk Mining 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 Red Hawk Mining acquired it from Maximus Resources in 2009.

As of August 2023, Viking has completed the first stage of the Farm-In and acquired a 25% equity interest in the tenements hosting the Deposits.

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[i] published in 2Q 2022 forecasts the VRFB sector to grow >900% by 2031 through the installation of large, fixed storage facilities (Figure 7).

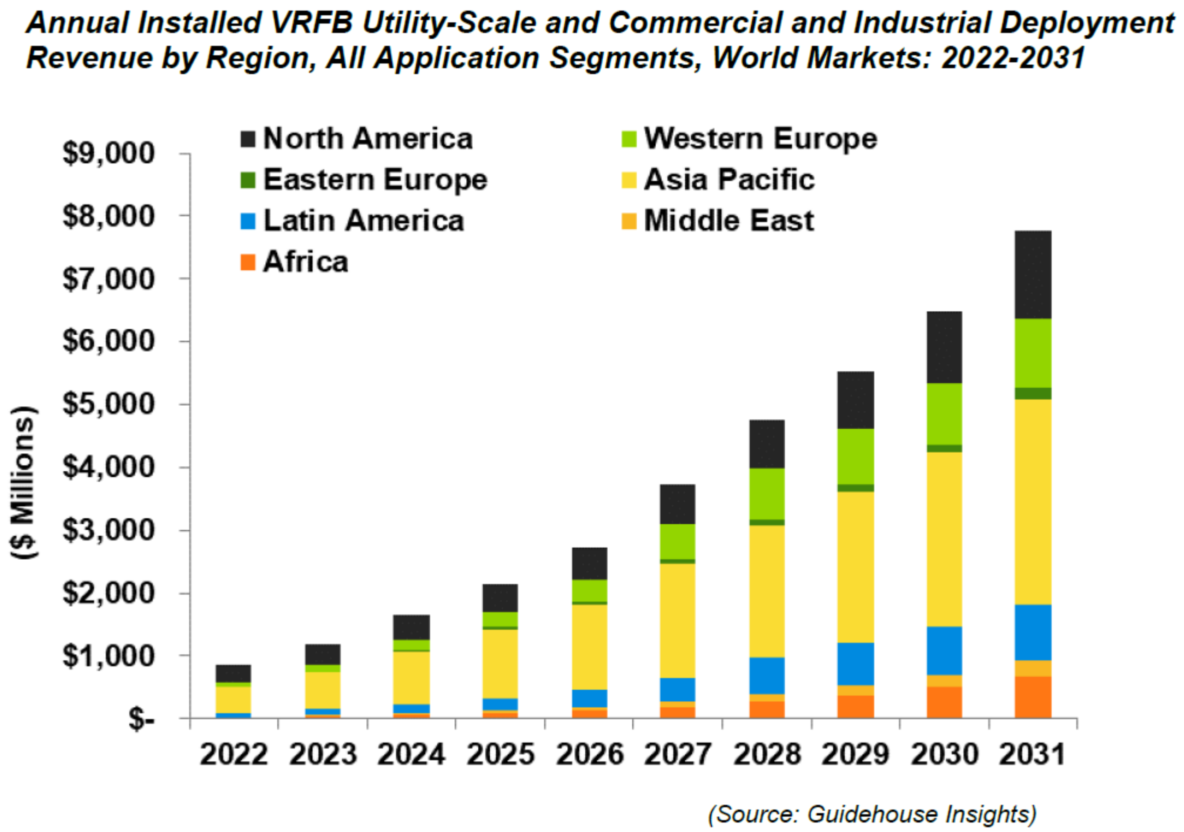

Figure 7; Forecast growth of the VRFB Sector through to 2031 (source – Guidehouse Insights[i])

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

APPENDIX 1 – JORC CODE, 2012 EDITION – TABLE 1

JORC Table 1, Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*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.*	Viking Mines 2023 Drilling In 2023, RC drilling collected samples during the drilling process using industry standard techniques including face sampling drill bit and cone splitter. Chip samples are collected from the drill cuttings and sieved and put into chip trays for geological logging. Historical Information WMC Rock chip samples were collected from outcrop identified during geological mapping. The historical reports do not detail how the samples were selected or taken. WMC and Maximus Resources Percussion and Reverse Circulation drilling samples were collected from drillholes. Samples are taken from the pulverised and broken rock material produced by the drilling process. No information in the historical reports details any specific methods were employed. WMC and Maximus Resources Diamond Drilling samples were collected from the drillcore by cutting the core to produce a whole rock sample. No information in the historical reports details any specific methods were employed other than those detailed in the sections below. Red Hawk Mining (formerly Flinders Mines) collected RC and diamond samples for analysis. All samples are safely sealed in labelled calico bags. There was no downhole geophysics assisting in the sampling. Rock chip samples collected by CSA Global for Red Hawk Mining were collected from outcrop identified during geological mapping. The historical reports do not detail how the samples were selected or taken.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Viking Mines 2023 Drilling Cone splitter is an industry standard sampling device which sup-splits the metre drilled into representative samples. QAQC measures including the use of duplicate samples checks the suitability of this method to retain representative samples. Based on a review of the sampling data, samples are representative of the interval drilled. Historical Information WMC Rock Chips - The nature of these samples is that they are random and not fully representative of the outcrop sampled. These samples are used in the exploration process to give indications to the Company on prospectively and to plan follow up exploration results. WMC Drilling - No information is available in WAMEX reports. Maximus Resources & Red Hawk Mining (formerly Flinders Mines) drilling -No measures were taken to ensure sample representivity. No calibration of any measurement tools were required.
	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	Viking Mines 2023 Drilling Reverse circulation drilling was used to obtain 1m samples which were collected from the cone splitter. Samples have been composited in some cases to either 2 or 4m composites by scooping from the calico bag collected from the cone splitter at the rig. Samples have been dispatched to ALS laboratories in Perth for analysis by XRF fused bead analysis. If sample weight exceeds 3kg they are crushed and split using a rotary splitter at the laboratory to produce a 3kg sample. The samples are then pulverized to 85% <75um to produce a sample for analysis XRF methods. Historical Sample Preparation WMC completed Percussion Drilling, Reverse Circulation (RC) drilling and Diamond drilling (DD). Sample lengths varied from 1-2m for percussion holes and sample length was adjusted in diamond holes based on lithology, up to 1m maximum lengths. It is unknown what weight of samples were collected in the field and how the laboratory prepared the samples for analysis. No information is available in the reports on the sample details for the rock chip sampling.

Criteria	JORC Code explanation	Commentary
	problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	Maximus Resources completed RC drilling and Diamond drilling. Maximus sample lengths for RC drilling varied from 2-4m in initial drilling with sub samples of 1m when results were received for areas of interest. Sample length was adjusted in diamond holes based on lithology, up to 1m maximum lengths. It is unknown what weight of samples were collected in the field and how the laboratory prepared the samples for analysis. Summary of Red Hawk Mining (formerly Flinders Mines) RC Exploration Drilling and Sampling Prior to 2017 before CSA Global commenced managing the exploration for Flinders Mines, RC drilling collected cone split 1m samples. RC samples weighed approximately 3-4kg. Samples were rifle split to 250g then pulverised by analysis. Subsequent to 2017, when CSA Global commenced managing the exploration for Flinders Mines, samples used in reporting the exploration results were obtained through reverse circulation percussion (RCP) and air core (AC) drilling methods. Samples were split through a cone splitter with a 12.5% chute attached to a calico bag. Vanadium samples were taken at various intervals (2m and 3m) and aircore samples at 2m intervals.
Drilling techniques	*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.).*	Viking Mines 2023 Drilling Reverse circulation drilling using a 5 ½ inch bit and a face sampling hammer. Historical Drilling The historical reports state that WMC completed open hole percussion drilling for holes PCG1-4 and then RC drilling for holes PCG5-14. Diamond drilling was completed for CDG1 and CGD2. Maximus resources completed RC drilling and diamond drilling (commencing with HQ and reducing to NQ) and core was drilled standard tube and not orientated. Summary of Red Hawk Mining (formerly Flinders Mines) RC Exploration Drilling Prior to 2017 before CSA Global commenced managing the exploration for Flinders Mines, drilling was completed by RC percussion with a face sampling bit. Subsequent to 2017, when CSA Global commenced managing the exploration for Flinders Mines, RCP and Air core drilling was completed.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Viking Mines 2023 Drilling Recovery of sample is recorded by the field assistant when sampling and noted as either Good, Fair or Poor. Of the samples collected from the drilling programme, very few samples reported fair or poor recovery and no issues were identified with sample recovery for any samples related to the mineralised horizons. Historical Information Historical diamond drilling has core recovery recorded on the paper logs for the WMC drilling and in the digital logs for Maximus Resources. No records have been identified in the reports detailing recovery of RC or Percussion drilling for the WMC or Maximus Resources drilling. Summary of Red Hawk Mining (formerly Flinders Mines) RC Exploration Drilling and Sampling Prior to 2017 before CSA Global commenced managing the exploration for Flinders Mines, RC sample recovery was not measured but visual estimates indicate it was very high. Subsequent to 2017, when CSA Global commenced managing the exploration for Flinders Mines, the measurement of the RCP chip recoveries was subjective in nature, described visually as poor, fair or good by the field geologist viewing the sample spoils on the ground. The recoveries were generally reported as good.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Viking Mines 2023 Drilling Drilling recovery is assessed by observing sample size. Samples are collected from the cyclone using a cone splitter and monitored for size to determine that they are representative. Historical Information No information is available in the historical reports which detail measures taken to maximise sample recovery and ensure representative nature of the samples. Summary of Red Hawk Mining (formerly Flinders Mines) RC Exploration Drilling and Sampling

Criteria	JORC Code explanation	Commentary
		Subsequent to 2017, when CSA Global commenced managing the exploration for Flinders Mines face sampling hammers and an external booster were used to maximise sample recovery.
	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 has been identified between sample recovery and grade. This is reflected by all samples collected having a good recovery. Further, due to the nature of the mineralisation under investigation and the relatively high values obtained, the impact of fines is not considered to be of significance.
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.*	Viking Mines 2023 Drilling All chip samples have been geologically logged to a sufficient level to support any future mineral resource estimation, mining studies and metallurgical studies. All chip samples are retained at the Company offices and are available for further inspection when undertaking this future work. Historical Information All historical drilling has been geologically logged. WMC data was logged on to paper and copies of the reports are available and have been digitised. Digital logs from drilling completed by Maximus Resource has been completed and incorporated in to the database. Summary of Red Hawk Mining (formerly Flinders Mines) RC Exploration Drilling and Sampling Drill chips and core were logged, including lithology, mineralisation and grainsize. Lithology codes were assigned to all intervals. No geotechnical logging has been completed. For some drill samples, magnetic susceptibility has been measured and collected. Viking Mines has completed a translation of logging codes in to a consistent standard set by assessing all historical codes used and aligning them with a common type. The Competent Person considers the logging methods appropriate for this style of mineralisation and suitable to support appropriate Mineral Resource estimation.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Viking Mines 2023 Drilling Logging of samples is qualitative in nature. Chip photos are taken of the chip trays. All the drill spoils at the drill site are photographed to retain a record of the colour variation within the hole. Historical Information Lithological logging is qualitative in nature. No core photographs have been identified. Summary of Red Hawk Mining (formerly Flinders Mines) RC Exploration Drilling and Sampling Logging is generally qualitative in nature and core has been photographed, both wet and dry. The Competent Person considers the logging methods appropriate for this style of mineralisation.
	The total length and percentage of the relevant intersections logged.	Viking Mines 2023 Drilling All metres drilled have been geologically logged. Historical Information Logging exists for all drillholes. The entire of the hole was logged by appropriate methods with the relevant information recorded. Graphic log sheets are available for the historical WMC drilling and digital logs are available for the Maximus Resources drilling. Summary of Red Hawk Mining (formerly Flinders Mines)RC Exploration Drilling and Sampling Logging exists for all drillholes. The entire of the hole was logged by appropriate methods with the relevant information recorded.
Subsampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Viking Mines 2023 Drilling Not applicable. Historical Information Historical core drilled by WMC is recorded as being cut but no details on if half or quarter core. Core drilled by Maximus resources was quarter core sampled.

Criteria	JORC Code explanation	Commentary
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Viking Mines 2023 Drilling Samples were collected from the cyclone using a cone splitter for each metre drilled in to 2 calico bags. When composite samples are collected, a scoop is used to collect equal amounts from each metre interval used to make the composite sample. Dry samples are collected. Historical Information There is no information available in the historical reports on sample splitting method for the percussion drilling or whether sampled wet or dry. This applies to all work completed prior to Red Hawk Mining (formerly Flinders Mines). Summary of Red Hawk Mining (formerly Flinders Mines)RC Exploration Drilling and Sampling RC samples were logged on 1m intervals and sampled using a cone splitter at 3m intervals. All samples were dry. Rock chip samples were crushed to 6mm and pulverised and riffle split to 250g, then pulverised to >75 micron with >85% passing.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Viking Mines 2023 Drilling The sample preparation of the RC samples follows industry best practice, involving oven drying, pulverising, to produce a homogenous sub sample for analysis. All samples were pulverised to a nominal 85% passing 75-micron sizing and sub sampled for assaying and LOI determination tests. The sample preparation techniques are of industry standard and are appropriate for the sample types and proposed assaying methods. Historical Information There is no information available on the nature, quality and appropriateness of the sample preparation technique in the historical reports to determine its suitability. Summary of Red Hawk Mining (formerly Flinders Mines)RC Exploration Drilling and Sampling 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 are appropriate for reporting of Exploration Results and for Mineral Resource Reporting
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	Viking Mines 2023 Drilling Other than field duplicate sampling, the laboratory conducts duplicate analysis on pulp samples to confirm repeatability of the pulverised material. A batch of umpire analysis are being selected and scheduled for analysis to provide an additional check on repeatability of results and determine appropriateness of the subsampling and homogenisation process. Historical Information No information has been identified in the historical reports reviewed on the quality control measures adopted for all subsampling stages to maximise representivity. Summary of Red Hawk Mining (formerly Flinders Mines)RC Exploration Drilling and Sampling No fails for any of the elements indicating a reasonable to good control over the laboratory cleaning methods used whilst processing the samples and sampling practices.
	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.	Viking Mines 2023 Drilling Drilling was conducted using a 5 ½ inch hammer to collect 1m samples. As the style of mineralisation is massive to disseminated with results for V2O5 being measured in %, the samples collected are deemed representative. To monitor this, duplicate samples are collected from the cyclone at a frequency rate of approximately 1 per 40 samples collected (~2.5%).Samples are selected from expected mineralised intervals to provide meaningful data to compare the original vs the duplicate. Duplicate samples show a good correlation against the original sample collected indicating that sampling is representative of the in-situ material collected. Historical Information

Criteria	JORC Code explanation	Commentary
		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 cannot verify if the results are representative of the in-situ material collected. Summary of Red Hawk Mining (formerly Flinders Mines)RC Exploration Drilling and Sampling Drilling prior to 2017 was primarily focussed on the Mineral Resource areas and for this drilling RC field duplicates were inserted in the sample stream as a check on sample precision at a rate of 3%. No CRM's were submitted to the laboratories. It is unknown whether any blanks were submitted. For areas outside of the resource drilling it is noted that no field duplicates were collected. No blanks, CRM or standards were submitted. Subsequent to 2017 when CSA Global have managed the exploration for Flinders Mines, 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 analysis of the QC data indicates reasonable to good control of the laboratory cleaning methods used whilst processing the samples and the sampling practices. The CP considers that the sub-sampling techniques and sample preparation was appropriate for reporting Exploration Results.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The Competent Person considers the current methods and processes described as appropriate for this style of mineralisation. 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.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Viking Mines 2023 Drilling Sample collected by Viking and submitted to ALS geochemistry for analysis were assayed for the full iron ore suite by XRF (24 elements) (lab code ME-XRF21n) and for total LOI by thermo-gravimetric technique (ME-GRA05). The method used is designed to measure the total amount of each element in the sample. A prepared sample (0.66g) is fused with a 12:22 lithium tetraborate – lithium metaborate flux which also includes an oxidizing agent (Lithium Nitrate), and then poured into a platinum mould. The resultant disk is in turn analysed by XRF spectrometry for major rock forming elements and selected trace element concentrations. The method is deemed suitable and appropriate for the style of mineralisation. Historical Information WMC data – Historical reports state that for the rock chip sampling, Fe and V were analysed by various methods and laboratories using peroxide fusion and atomic absorption or XRF. Titanium was analysed by AMDEL laboratories using fusion and atomic absorption. For percussion and diamond drilling, no information on the analytical method has yet been identified in the reports reviewed. Maximus Resources – 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. Summary of Red Hawk Mining (formerly Flinders Mines)RC Exploration Drilling and Sampling Data prior to 2017 - Samples were analysed by ICP-AES and ICP-MS (48 elements – ME-M61 Method). Fire assay was used for Au, Pt and Pd with an ICP-AES finish. The methods chosen are considered appropriate for the style of mineralisation under consideration. Data post 2017 –Samples were sent to Wangara 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: The Vanadium and Gold samples both underwent analysis by ME-GRA5 (H20 LOI) and MEX-XRF21u (iron ore by XRF fusion). The gold samples were also analysed by ICP-AES and Ultratrace Aqua Regia ICP-MS (61 elements) ME-MS41 method. The analysis methods chosen are considered appropriate for the style of mineralisation.
	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.	Field tools were used to assist in identification of the VTM horizon for sampling. A KT-10 magnetic susceptibility meter has been used which measures the magnetic susceptibility of the sample. Unit specifications are: • Circular coil design • Sensitivity: 10-6 SI units • Measurement range: 0.001 x 10-3 to 1999.99 x 10-3 SI units

Criteria	JORC Code explanation	Commentary
		No calibration factors are applied to the data. The duration for the measurement sequence is 7 seconds.
	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.	Viking Mines 2023 Drilling A comprehensive QAQC programme involving the insertion of standards (certified reference materials – CRM's), blanks and duplicates has been implemented. Viking inserts standards at a frequency of 1:25, blanks 1:40 and duplicates 1:40. 3 x CRM's have been used by the company which were sourced from GeoStats and are certified for 21 elements (including Vanadium) and LOI. Results from the laboratory for the CRM's are plotted against the CRM values for the mean and 1,2, and 3 standard deviations from the mean. 2 of the 3 standards all performed within expected levels with 1 standard demonstrating good precision and a minor positive bias for accuracy. Further check assaying on 10 standards has been completed and confirmed that the minor positive bias is repeatable, indicating that the standard is reporting positive and is inherent to the standard samples being analysed. The magnitude of the bias has been reviewed and is deemed insignificant with respect the values being reported (~0.02% V2O5 positive bias). QAQC results including CRMs, duplicate samples, repeat analysis and blanks for both Viking sample submissions and internal lab checks show no material issues for the recent assaying programmes. Historical Information WMC drilling and rock chip data – No sample QAQC has been identified in the historical reports for this data or any information on the 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. Summary of Red Hawk Mining (formerly Flinders Mines)RC Exploration Drilling and Sampling Prior to 2017, no independent QC samples were submitted. All sample QC was completed by ALS Perth as part of the sample analysis. CSA Global considered that a reasonable level of confidence can be placed in the accuracy and precision of the analytical data used in the preparation of the exploration results. Subsequent to 2017 and once CSA Global began managing the exploration activity for Flinders Mines and routinely included a protocol of QC to industry standards, including the insertion of standard Certified Reference Materials (CRM's), blanks and duplicates as part of the exploration programmes. 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. The absence of Vanadium CRM's in historical data requires some check assaying of historical pulp samples, which will include Vanadium CRM's at a future date to validate the historical datasets
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Viking Mines 2023 Drilling MEC Mining completed an independent audit of the Viking Mines Database and as such have verified the significant intersections previously reported by the Company. Historical Information WMC drilling and rock chip data - Due to the samples being sampled and collected over 35 years ago, independent verification is difficult and has not been undertaken. Data collected by Maximus Resource (pre-2011) - Due to the samples being sampled and collected over 15 years ago, independent verification is difficult and has not yet been undertaken. Viking Mines are in the process of attempting to source more details of the historical data including historical assay laboratory reports to validate and verify the results reported. However, given the limited extent of this drilling outside of the reported resource areas, it will be used to drive exploration targeting which will be followed up with further drilling, the CP considers the risk and impact to be low if any errors are present in the data. Summary of Red Hawk Mining (formerly Flinders Mines)RC Exploration Drilling and Sampling Prior to 2017, alternative Flinders Mines personnel have verified significant intersections over the projects history. CSA Global managed drilling programmes on behalf of Flinders Mines (since 2017) and verified the intersections reported.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>The Competent Person considers the process described in the reports produced by CSA Global and provided by Flinders Mines as appropriate.</td></tr>
<tr><td></td><td>The use of twinned holes.</td><td>No twinned holes have been completed.</td></tr>
<tr><td></td><td>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</td><td><u>Viking Mines 2023 Drilling</u>
Data is collected in the field into digital devices and loaded into the company database by the companies database manager. All records are collected and stored on the company’s server and cloud-based storage systems (SharePoint). Physical paper copies are also created as a part of the data collection process and are scanned and saved to SharePoint.
<u>Historical Information</u>
WMC data – All data were recorded on to paper logs and submitted in annual exploration reports. These paper reports have been used to review the results and subsequently digitised for assessment and evaluation. No further information on documentation of primary data, data entry procedures, data verification protocols is available.
Maximus Resources Data – All data were recorded into digital logs and submitted in annual exploration reports. These digital logs have been consolidated into a database held by Flinders Mines and provided to Viking Mines as part of the due diligence process in assessing the project. No documentation has been identified or reviewed detailing the documentation of the primary data, data entry protocols, or data verification. Data is stored in an Access database.
<u>Summary of </u>Red Hawk Mining (formerly Flinders Mines)<u>RC Exploration Drilling and Sampling</u>
CSA Global managed drilling programmes on behalf of Flinders Mines (since 2017) and verified the intersections reported. Logging was carried out using templates derived for the project. All primary data collected was verified and loaded into an Access database where it is stored securely on the CSA Global server. The drill database is free from any obvious validation errors.
The Competent Person considers that the verification of sampling and assaying was appropriate for reporting an Exploration Result.</td></tr>
<tr><td></td><td>Discuss any adjustment to assay data.</td><td>No adjustment is made to the assay data. % V2O5, % TiO2 and % SiO2 are all calculated from the laboratory analysis of V, Ti and Si respectively using the following formulas. Compositing has been undertaken for reporting of results and is discussed below.
<table>
<tr><th>Element Analysis result ppm</th><th>Conversion to %</th><th>Multiply element % to attain</th></tr>
<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>
</table></td></tr>
</table>

Criteria	JORC Code explanation	Commentary
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Viking Mines 2023 Drilling Drillholes locations are initially collected using a handheld GPS instrument to ~3m accuracy and subsequently surveyed by an external contractor using a Leica DGPS with mm accuracy. Downhole surveys are completed using a north seeking gyro instrument. Accuracy of the instruments used is determined acceptable for future use in mineral resource estimation. Historical Information For the historical drilling, survey grids were established, and sample and collar coordinates determined, and coordinates have been transcribed into the Flinders Mines database. These are expected to be of a suitable standard given the methods employed. For the historical rock chip sampling collected by WMC, no coordinates were available and were determined using a map containing sample locations. This map has been georeferenced in to GIS software using known infrastructure locations and the rock chip sample locations digitised. The accuracy of this methodology is considered to be within 50m of the expected sample locations. No downhole survey data for the historical drilling has been evaluated and it is unknown at this time if any were collected. As such planned drillhole azimuth and dip have been used where no other information is available. Summary of Red Hawk Mining (formerly Flinders Mines)RC Exploration Drilling and Sampling Collars have been surveyed using a handheld GPS instrument considered accurate within 5m. Downhole surveys have not been completed for any Air-Core drilling. For RC drilling, downhole surveys were completed on some RC drillholes depending on the depth of the hole, commonly at 30m spacing. Due to the magnetic intensity of some layers within the lithology, some localised but significant variation was encountered. Where this occurred near surface, a compass and GPS were used to confirm the orientation of the drillhole.
	Specification of the grid system used.	The adopted grid system is MGA94_50 and all data are reported in these coordinates unless otherwise specified.
	Quality and adequacy of topographic control.	Viking Mines 2023 Drilling Collar locations for the drilling results reported in this release are compared to the DTM for topography at the Canegrass Project. No significant variations have been noted, indicating that the topographic model being utilised correlates well with the surveyed drilling collar locations. Historical Drilling and Red Hawk Mining (formerly Flinders Mines)RC Exploration Drilling There has been no topographical control established. Given the terrain is relatively flat, the Competent Person does not consider this a material risk. The method used to create the topography file is unknown, however the topography file matches the drillhole collar coordinates, hence the Competent Person considers it likely to be relatively accurate.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	The drill spacing is not considered relevant or a material risk by the Competent Person for the reporting of Exploration Results. Viking Mines 2023 Drilling Drillhole spacing varies across the project from 80m x 80m to 150m x 300m. Assessment of the drilling as part of the MRE has determined that drillholes spacing is sufficient for the reporting or exploration results. Historical Information The historical drilling data is considered initial exploration drilling and consists predominantly of individual targeted drillholes. In the area south of the Kins resource, percussion and diamond drill spacing varies between 100m to 400m
	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.	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.

Criteria	JORC Code explanation	Commentary
	Whether sample compositing has been applied.	Viking Mines 2023 Drilling Sample compositing in the field has been used at the discretion of the field geologist. 4m, 2m and 1m composites have been selected during drilling for samples delivered to the laboratory for analysis. For reporting of exploration results, sample results have been composited to a minimum composite length of 6m at both 0.5% and 0.8% cut-offs for V2O5 and 600ppm for Cu. Compositing rules are set to permit values below the cut-off to be included within the composited interval with a maximum continuous length of 6m so as long as the resultant composite grade remains above the cut-off being reported to. Historical Information 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. Summary of Red Hawk Mining (formerly Flinders Mines)RC Exploration Drilling and Sampling Recent drilling occurring since 2017 is reported to have had no sample compositing applied.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Viking Mines 2023 Drilling Drillholes have been designed to intersect perpendicular to the VTM mineralisation at the target area and drilled at -70 dip to mitigate any sampling bias effects. At this time it is not known if the true thickness has been determined. Historical Information 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.
	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.	Viking Mines 2023 Drilling Given the nature and style of mineralisation, a sampling bias is not expected. Historical Information 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. Summary of Red Hawk Mining (formerly Flinders Mines)RC Exploration Drilling and Sampling The relationship between the drilling orientation and the orientation of key mineralised structures is not considered to have introduced a sampling bias.
Sample security	*The measures taken to ensure sample security.*	Viking Mines 2023 Drilling Samples were collected from the rig in tied calico bags and packaged in to tied polyweave bags and stored in bulka bags at the freight company's laydown yard prior to shipment to the laboratory in Perth. The yard is locked at night and sample security is determined to be effective. Historical Information 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. Summary of Red Hawk Mining (formerly Flinders Mines)RC Exploration Drilling and Sampling A geologist or field assistant is recorded as being present at the drill rig while samples were being drilled and collected. Additional measures taken to ensure sample security are unknown.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Viking Mines 2023 Drilling MEC Mining have completed a full audit of the Viking database and confirmed that the data is of a sufficient standard for the proposes of Mineral Resource Estimation. No significant issues were identified with the database. The audit applied to both new data collected by Viking Mines and the collated historical data collected by other parties. Historical Information No external audit of sampling techniques and data could be sourced from the documents sourced off WAMEX by Viking Mines.

Criteria	JORC Code explanation	Commentary
		Summary of Red Hawk Mining (formerly Flinders Mines)RC Exploration Drilling and Sampling No external audits or reviews have been reported as being undertaken on the sampling data in the reports provided by Flinders 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.*	Tenements and location 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: (see tenement table below) The Fold Nose Mineral Resource is located on tenement E58/232-I and the Kinks and Kinks South Mineral Resources are located on tenement E58/282-I Third Party Interests 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. At this time, Viking has completed stage-1 of the farm in agreement and has acquired a 25% equity interest in the 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. Native Title, Historical sites and Wilderness 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. Viking has completed an extensive heritage survey with the local Badimia People over the Canegrass Project area and no sites have been identified or recorded.

Tenement	Status	Holder1	Holder 2	Area (Blocks)
E58/232-I	LIVE	Flinders Canegrass Pty Ltd	Viking Critical Minerals	5
E58/236-I	LIVE	Flinders Canegrass Pty Ltd	Viking Critical Minerals	4
E58/282-I	LIVE	Flinders Canegrass Pty Ltd	Viking Critical Minerals	8
E58/520	LIVE	Flinders Canegrass Pty Ltd	Viking Critical Minerals	1
E58/521	LIVE	Flinders Canegrass Pty Ltd	Viking Critical Minerals	5
E58/522	LIVE	Flinders Canegrass Pty Ltd	Viking Critical Minerals	8
P58/1942	LIVE	Viking Critical Minerals	n/a	0.24 Ha
P58/1943	LIVE	Viking Critical Minerals	n/a	0.3 Ha
E58/604	LIVE	Viking Critical Minerals	n/a	1

Criteria	JORC Code explanation	Commentary
	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 Red Hawk Mining 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 Red Hawk Mining acquired the project, and this work is ongoing. Previous JORC table reports compiled by Red Hawk Mining state the following: *The previous exploration across the Canegrass Project conducted by Red Hawk Mining, 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:* • *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.* • *PGE bearing internal layers within the WIC.* • *Fe-Ti-V bearing internal layers within the WIC.* • *Au hosted in later fault structures that cross cut the WIC and offset the WIC internal geology.* Red Hawk Mining 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.
Geology	*Deposit type, geological setting and style of mineralisation*	<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 2,500km2 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. <u>Deposit Geology Kinks & Fold Nose (30 January 2018 Canegrass Vanadium Mineral Resource Estimate & Exploration Update Release by Red Hawk Mining)</u> The deposit represents part of a large, layered intrusion. Mineralisation which comprises magnetite-titanium-vanadium horizons, with distinct vanadiferous titanomagnetitie (VTM) mineralisation occurring within the Windimurra Complex – a large differentiated layered ultramafic to mafic intrusion within the Murchison Province of the Yilgarn Craton. Given the mode of formation, mineralisation displays excellent geological and grade continuity.

Criteria	JORC Code explanation	Commentary
Drill hole Information	*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:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.* *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.*	Drillholes referred to in this release are referenced with a footnote to the original release which contains all the required drillhole information. No new drillholes are being reported in this release.
Data aggregation methods	*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.* *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.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No new exploration results are being reported. For previously reported exploration results, sample results have been composited using a length weighted averaging method to a minimum composite length of 6m at 0.3%, 0.5% and 0.8% cut-offs for V2O5 and 600ppm for Cu. Compositing rules are set to permit values below the cut-off to be included within the composited interval with a maximum continuous length of 6m so as long as the resultant composite grade remains above the cut-off being reported to. See original referenced announcements for reporting of exploration results with further information.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	Drilling has been planned to intercept perpendicular to mineralisation however further data is required to confirm this and as such downhole length is reported and true width not know.
Diagrams	*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*	Drillhole location maps showing hole locations and an example cross-section are referred to in the original announcements referenced accordingly. Appropriate maps and sections related to the reporting of the mineral resource estimate can be found in the body of this report.
Balanced reporting	*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.*	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.
Other substantive exploration data	*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*	Identification of VTM mineralisation was determined in the field by visiting the location of mineralisation previously identified using GPS. Professional geologists assessed the geology of the outcrop to determine the rock types which are consistent with VTM mineralisation. A Magnetic Susceptibility meter and portable XRF analyser were used to provide further confidence that the VTM horizon had been correctly identified. The Magnetic Susceptibility of the rock is determined by type and amount of magnetic minerals contained within the rock. With magnetite being the primary target mineral in the VTM horizon this is an effective tool to confirm its presence. The portable XRF analyser

Criteria	JORC Code explanation	Commentary
		provided information on the presence of Vanadium in the rock and was used in conjunction with the Magnetic Susceptibility meter to identify the VTM horizon at the outcrop locations visited. 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.
Further work	*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.*	The ongoing activity and further work is described in the report with the next steps defined. The next phase of activity will involve undertaking further metallurgical testwork. Drill planning will commence with the objective of determining a drilling programme to infill portions of the resource to increase the resource confidence to indicated category. At this stage it is envisaged drilling will be focussed on the Fold Nose Deposit. In parallel consultants will be engaged to advance other aspects of the project including environmental, geotechnical and hydrological.

JORC 2012 Table 1 Section 3 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	Data was validated by checking grade against logging and photos of the Viking drilled samples, correlation was strong. Beyond this MEC has no knowledge of processes applied to mitigate entry errors.
	Data validation procedures used.	Data was validated using Micromine validation tools, to check that downhole survey did not exceed drillhole depth, that drillholes were present in the collar, downhole survey, and interval files. All errors were identified and remedied.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	A site visit was conducted on October 18 2023 by MEC Principal Advisor Mr Dean O'Keefe (Competent Person for this study) and Mr Julian Woodcock, Managing Director and CEO of Viking Mines limited. The site visit confirmed the presence of extensive vanadium and iron rich outcropping and subcrops. The CP also viewed the RC drill chips that remained at the Viking drilled holes for Kinks, Kinks South, and Fold Nose deposits. The CP confirmed the location of the drill collars using a hand held GPS, the correlation between the coordinates in the database and the GPS readings was good.
	If no site visits have been undertaken indicate why this is the case.	Not applicable.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	Extensive interpretation and wireframing confirmed good continuity of mineralisation and geometry of lodes. This is consistent with the understanding of the layered ultramafic source of mineralisation that formed as layers differentiated out of the melt that were folded post deposition.
	Nature of the data used and of any assumptions made.	All domains were defined using a combination of grade, primarily vanadium, titanium, and iron; magnetic susceptibility, density, and lithology. Domains were modelled on the basis that the deposits were formed from differentiation of layers in the magma chamber melt and were subsequently folded. An implicit model was used to guide the explicit modelling. All MRE were reported above an economic cut-off grade of 0.5% V_2O_5, no top cuts were applied as no extreme values that could bias the estimation were observed.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Alternative interpretations are unlikely to vary greatly from the implicit and explicit modelling interpretation.
	The use of geology in guiding and controlling Mineral Resource estimation. *The factors affecting continuity both of grade and geology.*	Geological units were rationalised, and the presence of massive magnetite was a strong signature for higher grade domains. All geological modelling was based upon the geological implicit model of the tightly folded units.

Criteria	JORC Code explanation	Commentary
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Fold Nose is folded and has overall dimensions of 3,700m x 50m x 300m Kinks South has dimensions of 1,300m x 100m x 300m. Kinks has two separate sections of lodes, 1. 1000m x 230m x 50m; and 2. 650m x 250m x 50m.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	All estimation was completed using Micromine software. The Ore Block Model parent blocks were 20m x 20m east/west and north/south and 5m in elevation, subcelled to 2m x 2m east/west and north/south and 1m in elevation. All blocks were restricted to the geological wireframes. Only those grades within the lodes were used to interpolate lode grades, using ordinary block kriging, with discretisation of 2 x 2 x 2 to partially address change of support issues. Negative kriging weights were reset to zero and subcells were estimated to obtain resolution of estimation as the narrow geometry of the lodes did not permit estimation to parent cells only. The Fold Nose MRE were estimated using flattening and extension to allow for the training of the search ellipse to include all relevant samples. Experimental semivariograms were modelled for Vanadium; and cobalt, copper and nickel were bundled under these variograms; semivariograms were modelled for Iron; and LOI, phosphorous, silica, and alumina were bundled under these variograms; and semivariograms were modelled for Titanium. Search ellipse distances were defined initially from the semivariogram range distances and were then increased to ensure all blocks were populated. Some lodes included assay results for commodities such as Vanadium but did not include LOI and other variables, as such the average interpolated grade was defaulted to blocks within the OBM that were not interpolated due to the absence of values, where there was no data to interpolate within a lode. This occurred for LOI in all three deposits and for SiO_2 in Kinks deposit. The Kinks South and Kinks MRE were not unfolded or flattened as they were linear. Semivariogram parameters are as follows -

Variogram Fold Nose east, V205

AZIUMTH	PLUNGE	NUGGET	PARTIAL SILL 1	PARTIAL SILL 2	PS1 RANGE m	PS2 RANGE m
180	0	0.015	0.01	0.095	171	430
90	0	0.015	0.01	0.095	56	124
0	90	0.015	0.01	0.095	9	25

Variogram Fold Nose east, Fe2O3

AZIUMTH	PLUNGE	NUGGET	PARTIAL SILL 1	PARTIAL SILL 2	PS1 RANGE m	PS2 RANGE m
180	0	15	103	114	130	475
90	0	15	103	114	155	275
0	90	15	103	114	3	15

Variogram Fold Nose south, V2O5

AZIUMTH	PLUNGE	NUGGET	PARTIAL SILL 1	PARTIAL SILL 2	PS1 RANGE m	PS2 RANGE m
90	0	0.009	0.035	0.055	130	333
180	0	0.009	0.035	0.055	184	378
0	90	0.009	0.035	0.055	7.5	28.5

Criteria	JORC Code explanation	Commentary
		(variogram tables and search ellipse text below)

Variogram Fold Nose south, Fe2O3

AZIUMTH	PLUNGE	NUGGET	PARTIAL SILL 1	PARTIAL SILL 2	PS1 RANGE m	PS2 RANGE m
90	0	24	47.4	173	198	378
180	0	24	47.4	173	125	286
0	90	24	47.4	173	2	14

Variogram Kinks South, V2O5

AZIUMTH	PLUNGE	NUGGET	PARTIAL SILL 1	PARTIAL SILL 2	PS1 RANGE m	PS2 RANGE m
90	0	0.01	0.05	0.03	235	535
0	45	0.01	0.05	0.03	165	250
180	45	0.01	0.05	0.03	16	33

Variogram Kinks South, Fe2O3

AZIUMTH	PLUNGE	NUGGET	PARTIAL SILL 1	PARTIAL SILL 2	PS1 RANGE m	PS2 RANGE m
90	0	25	105	135	140	517
0	45	25	105	135	122	192
180	45	25	105	135	21	47

Variogram Kinks, V2O5

AZIUMTH	PLUNGE	NUGGET	PARTIAL SILL 1	PARTIAL SILL 2	PS1 RANGE m	PS2 RANGE m
80	0	0.01	0.025	0.01	185	409
325	32	0.01	0.025	0.01	60	215
170	58	0.01	0.025	0.01	13	35

Variogram Kinks, Fe2O3

AZIUMTH	PLUNGE	NUGGET	PARTIAL SILL 1	PARTIAL SILL 2	PS1 RANGE m	PS2 RANGE m
80	0	30	80	38	113	450
325	34	30	80	38	62	175
170	56	30	80	38	8	25

Search ellipses were based on semivariogram modelled ranges and used a minimum of three drillholes for Run 1 to avoid isolated estimation of blocks. The search ellipse dimensions were increased for Run 2 to populate all remaining blocks.

Search ellipse dimensions for Fold Nose East flat

Criteria	JORC Code explanation	Commentary

RUN	MINIMUM HOLES	SECTORS	AZIMUTH 1	RADIUS m	AZIMUTH 2	RADIUS m	AZIMUTH/DIP	RADIUS m
1	3	1	180	500	90	200	0/-90	50
2	0	1	180	800	90	320	0/-90	80

Search ellipse dimensions for Fold Nose South flat

RUN	MINIMUM HOLES	SECTORS	AZIMUTH 1	RADIUS m	AZIMUTH 2	RADIUS m	AZIMUTH/DIP	RADIUS m
1	3	1	90	500	180	200	0/-90	50
2	0	1	90	2000	180	800	0/-90	200

Search ellipse dimensions for Kinks South

RUN	MINIMUM HOLES	SECTORS	AZIMUTH 1	RADIUS m	AZIMUTH/DIP	RADIUS m	AZIMUTH/DIP	RADIUS m
1	3	1	90	300	180/-45	150	0/-45	30
2	0	1	90	2000	180/-45	1600	0/-45	200

Search ellipse dimensions for Kinks

RUN	MINIMUM HOLES	SECTORS	AZIMUTH 1	RADIUS m	AZIMUTH/DIP	RADIUS m	AZIMUTH/DIP	RADIUS m
1	3	1	65	300	155/-30	240	335/-60	130
2	0	1	65	1000	155/-30	800	335/-60	300

The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.

Mineral Resources (the "**Historic Mineral resource**") were estimated by "Optiro Pty Ltd for Flinders Mines Limited, Canegrass Iron and Vanadium Project Mineral Resource Estimate in August of 2011". All Mineral Resources were classified as Inferred Mineral Resources.

2011 Optiro Mineral Resource estimate

Project	July 2011 Mineral Resource for V_2O_5 >= 0.5%							
	Mt	V_2O_5%	TiO_2%	Fe%	Al_2O_3%	P%	SiO_2%	LOI%
Fold Nose	87	0.63	5.91	29.34	12.56	0.005	24.14	2.67
Kinks	20	0.57	5.49	27.35	12.99	0.009	25.93	3.09
Global	**107**	**0.62**	**5.83**	**28.98**	**12.64**	**0.006**	**24.47**	**2.74**

A review of the Optiro Mineral Resource estimate was conducted by CSA Global in 2017. The CSA Global review stated MRE above 0.5 V_2O_5%, with all MRE reported above the 210 m RM level.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
2017 CSA Global MRE statement

<table>
<tr><th>Project</th><th>JORC classification</th><th>Tonnage (Mt)</th><th>V_2O_5 (%)</th><th>TiO_2 (%)</th><th>Fe (%)</th><th>Al_2O_3 (%)</th><th>P (%)</th><th>SiO_2 (%)</th><th>LOI (%)</th></tr>
<tr><td>Fold Nose</td><td>Inferred</td><td>59</td><td>0.66</td><td>6.5</td><td>30.5</td><td>11.9</td><td>0.006</td><td>22.9</td><td>2.9</td></tr>
<tr><td>Kinks</td><td>Inferred</td><td>20</td><td>0.57</td><td>5.5</td><td>27.4</td><td>13.0</td><td>0.009</td><td>25.9</td><td>3.1</td></tr>
<tr><td>Grand total</td><td></td><td>79</td><td>0.64</td><td>6.0</td><td>29.7</td><td>12.2</td><td>0.007</td><td>23.6</td><td>3.0</td></tr>
</table>

* The CSA MRE was reported at ≥V_2O_5. CSA reported the MRE above the 210m RL, which restricted Mineral Resources to within 250m of surface.
</td></tr>
<tr><td></td><td>The assumptions made regarding recovery of by-products.</td><td>Vanadium is considered the primary economic element of interest, in addition to Iron and titanium. Cobalt, copper, and nickel were estimated and may potentially become credit elements.</td></tr>
<tr><td></td><td>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</td><td>P, SiO2 and Al2O3 have been estimated. LOI was also estimated.</td></tr>
<tr><td></td><td>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</td><td>The Ore Block Model parent blocks were 20m x 20m east/west and north/south and 5m in elevation, subcelled to 2m x 2m east/west and north/south and 1m in elevation. The drillhole spacing is 75m x 75m in the most densely drilled sections. The block size was chosen to provide a local map and with regard to the 75m spacing.</td></tr>
<tr><td></td><td>Any assumptions behind modelling of selective mining units.</td><td>No assumptions were made regarding selective mining units.</td></tr>
<tr><td></td><td>Any assumptions about correlation between variables</td><td>No assumptions have been made regarding correlation between variables.</td></tr>
<tr><td></td><td>Description of how the geological interpretation was used to control the resource estimates.</td><td>All domains were defined using a combination of grade, primarily vanadium, titanium, and iron; magnetic susceptibility, density, and lithology. Domains were modelled on the basis that the deposits were formed from differentiation of layers in the magma chamber melt and were subsequently folded. An implicit model was used to guide the explicit modelling. All MRE were reported above an economic cut-off grade of 0.5% V_2O_5, no top cuts were applied as no extreme values that could bias the estimation were observed.</td></tr>
<tr><td></td><td>Discussion of basis for using or not using grade cutting or capping.</td><td>No grade cuts were applied due to the absence of extreme values.</td></tr>
<tr><td></td><td>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</td><td>
All ore block models were validated globally and locally, global validation compared the wireframe volume and grade with the ore block model volume and grade, at a zero cut-off grade. The global volume comparison between the wireframes and the subcelled ore block models was very close. The global grade comparisons of grade within the wireframes compared to the modelled grades is very close, small differences occur due to clustering of grades within the wireframes.

Global validation

<table>
<tr><th>DEPOSIT</th><th>WF VOLUME</th><th>OBM VOLUME</th><th>VOLUME DIFF m3</th><th>WF V2O5%</th><th>OBM V2O5%</th><th>% DIFF</th></tr>
<tr><td>FOLD NOSE</td><td>27,679,588</td><td>27,658,232</td><td>- 21,356</td><td>0.671</td><td>0.636</td><td>0.05</td></tr>
<tr><td>KINKS SOUTH</td><td>9,751,106</td><td>9,749,064</td><td>- 2,042</td><td>0.680</td><td>0.664</td><td>0.02</td></tr>
<tr><td>KINKS</td><td>12,120,368</td><td>12,118,424</td><td>- 1,944</td><td>0.654</td><td>0.662</td><td>-0.01</td></tr>
</table>
</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		Local validation was completed by comparing the composite grades used to estimate the block values against the estimated block values. Generally there was close correlation between composite assays and estimated block grades, with some small differences resulting from the smoothing effect of ordinary kriging. Min/max checks were used to ensure all blocks were populated. OBM validation functions were used to check for overlapping blocks, there were no incidence of overlapping blocks.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a dry basis. No moisture values were reviewed.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	A cut-off grade of 0.6% or 0.7% V2O5 has been applied when reporting the Mineral Resource within the open pits as stated within the body of this report. The Global MRE (unconstrained) is reported to a 0.5% V2O5 cut-off grade is within the range adopted for reporting Mineral Resources at other Australian Fe-V-Ti deposits for planned open cut operations.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	The 2023 Global MRE is reported above the 210 m RL, which is approximately 250m depth from surface, assuming future development will be by open pit mining. The Pit Optimisation Study has applied all the operating costs, metallurgical recoveries, revenue factors mining parameters as detailed within the body of the release. Mining method has assumed conventional open pit mining methods with drill and blast, load, haul dump and road train haulage of ore to a centralised processing facility.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	The metallurgical testwork completed to date demonstrates that a magnetic concentrate can be produced from the Project which indicates the potential to deliver a marketable product. Sighter roasting testwork has recovered Vanadium from the magnetite concentrate in to solution. Bulk roast testwork is underway which will provide vanadium in solution for purification testwork. Magnetite cocnetrate grades of 59% have been achieved and it is assumed that the residue from the roasting process will be a marketable product achieving a >58% grade. Furthe testwork is required to determine the marketability of this residue product. No sulphide floatation testwork has been completed to date and in the Best Case optimisation it has been assumed that this could be achievable.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	Environmental considerations have not yet been considered due to the early stage of this project. It is therefore assumed that waste could be disposed in accordance with a site-specific mine and rehabilitation plan.

Criteria	JORC Code explanation	Commentary
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Bulk density has been calculated for the deposit via estimation of data collected by downhole logging on Viking Mines drillholes. Measurements were collected on all Viking drillholes at 10cm intervals using a GeoVista downhole Formation Density Probe (FDSB): This combinable sonde is suitable for quantitative formation density measurements in uncased holes. It uses a bottom loading gamma ray source (Typically 100 mCi activity) and a set of two or optionally three detectors at different spacing to detect the gamma rays scattered by the formation. The amount of scattered gamma rays is a function of the electron density of the formation material and hence, a function of its bulk density. This relationship is used to calibrate the density sonde and then use it to log the bulk density of the formations crossed by the borehole. In order to optimise performance, the sonde is designed with three main features: 1. A side-walling calliper to ensure that the detector measures only the radiation scattered by the formation. 2. A detector mandrel diameter that is large enough to minimise the sonde and borehole curvature mismatch and improve sonde to formation contact to minimise the effect of the borehole fluid. 3. An efficient detector shield to prevent gamma rays from travelling up, inside the sonde body. The density measurements collected have been used to estimate density throughout the 3 deposits. The method is deemed appropriate and more effective than using a constant density value.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.	The methods adopted adequately account for void spaces.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Density measurements were interpolated using Inverse distance cubed within the lodes. Where there were no density measurements within a lode, the Vanadium grade was checked and the most proximate lodes with similar grade were queried to obtain a mean value which was then defaulted to that lode. The OBM density was applied to estimate tonnage for the MRE.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource has been classified as Inferred following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC 2012 Table 1.
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	Appropriate account has been taken of all relevant criteria including data integrity, data quantity, geological continuity, and grade continuity.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate reflects the Competent Person's views of the deposit.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	The 2017 CSA Global review of the 2011 Optiro MRE was in agreeance with the Optiro numbers with the exception of an application of a depth criteria of 210 m RL to address the RPEEE hurdle.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	The MRE is classified as Inferred MRE, which reflects the level of confidence and the need to complete infill drilling of the deposits, that is supported by QAQC data.

Criteria	JORC Code explanation	Commentary
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource statement relates to a global tonnage and grade estimate. Grade estimates have been made for each block in the block model.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No production has occurred.