

VKA ACHIEVES 1.43% V₂O₅ & 59% FE IN HIGH QUALITY CONCENTRATE

- Viking Mines has received excellent results for Low Intensity Magnetic Separation ("LIMS") testwork conducted on bulk concentrate produced as part of the Stage 2 Metallurgical Testwork.
- LIMS separation uses laboratory scale techniques using the same technical methods which would be employed at an operating mine and is used as an indication of what can be achieved.
- The LIMS process delivered a high-quality concentrate grading 1.43% V₂O₅, 59% Fe & 11.7% TiO₂.
- Maintaining Fe above 58% is a key achievement, as it demonstrates that the significant value of contained iron in the Canegrass Project has the potential to be realised as a saleable magnetite concentrate.
- Total recovery of V₂O₅ is excellent at 93.0% from ore feed and Fe is high at 83.7%.
- A high mass recovery of 53.2% was achieved, meaning for every 1kg of sample, 0.532kg of concentrate is produced. This has real world impacts for limiting the size (and capital cost) of the milling operation required to produce the concentrate.
- Silica and Alumina combined are 3.8%, which is comfortably below the threshold target of 4% for roasting (which is the next step required to produce V₂O₅ flake).
- Nickel, Copper & Cobalt report to the tail (non-magnetic fraction) with grades of 0.089%, 0.115% and 0.027% respectively. Further testwork is planned to determine if a sulphide concentrate of these commodities can be produced from this material.
- Sighter roasting testwork has commenced which will determine the key parameters (temperature and duration) and reagents to be used ahead of producing V₂O₅ flake.

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

Further results have been received for the ongoing Stage 2 metallurgical testwork on samples collected from the Fold Nose deposit within the Canegrass Project.¹

A high-quality magnetite concentrate has been produced via LIMS methodology grading 1.43% V₂O₅, 59% Fe and 11.7% TiO₂. Recoveries from the ore are high at 93.0%, 83.7% and 79.5% respectively, with an overall mass pull of 53.2%.

Importantly, SiO₂ and Al₂O₃ has a combined total of 3.8%, which is below the threshold of 4% required for roasting of the concentrate to liberate the V₂O₅.

Sighter roasting testwork on the concentrate has commenced to determine the final roasting parameters to be used to produce V₂O₅ flake.

¹ Viking Mines (ASX:VKA) ASX Announcement 15 December 2023 – Stage 2 Met Testwork Update



Commenting on the progress of the Stage 2 metallurgical testwork, Viking Mines Managing Director & CEO Julian Woodcock said:

"I'm extremely pleased with the performance of the samples and the progress made with the metallurgical testwork.

"The quality of the concentrate delivers on our expectations with high recoveries of the primary commodities, high mass pull and low silica and alumina required to proceed with roasting.

"We have maintained the high vanadium recoveries seen in the sighter Davis Tube Recovery ("DTR") testwork with 93.0% and significantly reduced the silica and alumina content which is critical for the project to proceed on a conventional processing pathway.

"The next key step will be to produce V_2O_5 flake from the concentrate and then we will have demonstrated a pathway to unlocking the significant value of this substantial Resource.

"We will also continue to investigate options to further enhance the value of the Project such as producing a sulphide concentrate from the tail to realise value of the significant Cu, Ni & Co credits, separating the Fe and Ti to produce a premium magnetite concentrate and ilmenite (titanium) concentrate and finally targeting a high purity $>99\%$ V_2O_5 flake product which attracts a premium for use in the electrolyte, aerospace, and defence industries.

"Viking are rapidly advancing this high-value Project, and when this testwork is complete we will be able to assess the true value which can be realised for the benefit of our shareholders. I look forward to sharing the progress and results with the market as we achieve key milestones."

Stage 2 Metallurgical Testwork Programme

Testwork commenced in December 2023 on samples collected from the Fold Nose deposit at the Project. Samples are composited ahead of producing a magnetic concentrate before further processing to produce high purity V_2O_5 flake along with other marketable products including $>58\%$ Fe Magnetite Concentrate and Cu, Ni, Co sulphide concentrates.

To date, the wet magnetic separation steps have been optimised and completed to produce a high-quality magnetic concentrate suitable for proceeding with roasting testwork.

The laboratory has provided an update on the timing for completion of the testwork. There have been delays of approximately 4 weeks, and the revised completion date for all steps is now forecasted for April 2024. The Company will continue to provide updates on progress throughout this period as results are received.

Wet Magnetic Separation

A multi-step process using Low Intensity Magnetic Separation ("**LIMS**") was followed to produce a high-quality magnetic concentrate suitable for advancing to the next step of roasting testwork.

Initially a bulk concentrate was produced using Bulk Rougher LIMS process at a grind size of P80 145 micron. A very high mass recovery of 64.2% was achieved at this stage of the process. The concentrate graded 1.18% V_2O_5 , 50% Fe, 10.7% TiO_2 and yielded a combined Silica and Alumina of 11.3%.

18kg of the rougher concentrate was subsequently ground to P80 45 micron and processed using a 3 stage Bulk Cleaner LIMS process to achieve target concentrate quality suitable for roasting. 14.9kg of magnetic concentrate was produced through this process, representing a final mass recovery of 53.2% from the original sample. Results and quality of concentrate for each of the stages are provided in Table 1 and Table 2, and photos of the LIMS process in Figure 1.



The concentrate has the following key characteristics:

- A high-quality magnetic concentrate has been produced from Canegrass ore using LIMS methodology and meeting key quality parameters.
- High mass recovery achieved of **52.8%**.
- Concentrate grades are high with **V₂O₅ 1.43%, Fe 59% & TiO₂ 11.7%**.
- Metal recoveries to concentrate are high with **93.0%V₂O₅, 83.7% Fe and 79.5% TiO₂**.
- Combined silica and alumina levels are low at 3.8% and critically, meeting the requirement for roasting of <4%.
- Ni, Cu and Co report to the tail in the concentrate process, with recoveries of 69.7%, 72.8% and 64.3% respectively. This presents the opportunity for further testwork to recover these valuable commodities by performing a standard sulphide floatation process on the tail which will be investigated further.

Table 1; Magnetic concentrate results showing mass recoveries and grades at each step of the LIMS process. Cleaner 3 mags is the final concentrate produced.

Sample	Cumulative Mass (Kg)	Overall Mass Recovery (%)	Grades (%)								
			V ₂ O ₅	Fe	TiO ₂	SiO ₂	Al ₂ O ₃	Si+Al	Ni*	Cu	Co
Cleaner 3 Mags	14.9	53.2%	1.43	58.8	11.7	1.3	2.5	3.8	0.072	0.026	0.012
Cleaner 2 Mags	15.3	54.4%	1.41	57.9	11.6	1.9	2.8	4.7	0.075	0.029	0.013
Cleaner 1 Mags	15.7	56.0%	1.37	56.8	11.5	2.7	3.0	5.7	0.077	0.033	0.014
Rougher Mags	18.0	64.2%	1.18	50.5	10.7	6.7	4.6	11.3	0.070	0.056	0.018
Tail	13.1	46.8%	0.18	15.9	5.9	31.7	13.9	45.6	0.089	0.115	0.027

*Ni grades of magnetic concentrates elevated due to contamination caused by the grinding media used increasing the grade of Ni in the magnetic fraction. This contamination affects the recoveries stated to the magnetics, but does not impact the tail due to the non-magnetic nature of the Nickel sulphides.

Table 2; Metal recoveries for each of the magnetic concentrates and tail for each of the LIMS stages.

Sample	Recoveries (%)							
	V ₂ O ₅	Fe	TiO ₂	SiO ₂	Al ₂ O ₃	Ni*	Cu**	Co**
Cleaner 3 Mags	93.0%	83.7%	79.5%	3.9%	16.2%	-	-	-
Cleaner 2 Mags	93.3%	84.3%	80.8%	5.9%	17.9%	-	-	-
Cleaner 1 Mags	93.7%	85.0%	82.2%	8.5%	20.4%	-	-	-
Rougher Mags	95.4%	88.3%	87.8%	23.7%	34.3%	-	-	-
Tail	7.0%	16.3%	20.5%	96.1%	83.8%	69.7%	72.8%	64.3%

*Ni recovery to tail has been calculated using tail assays due to contamination caused by the grinding media used increasing the grade of Ni in the magnetic fraction.

**Cu & Co recoveries have been calculated by determining the metal balance of these commodities to



Figure 1; Photos showing A) Samples being prepared for filtration after DTR testwork completed, B) Eirez Davis Tube tester setup for sighter DTR testing and C) Magnetic concentrate produced after filtration.

NEXT STEPS

Based on the results received, the Company's metallurgical consultants have determined the next stage of the testwork as follows. This work has commenced, and the Company will continue to provide updates as further results are received.

- Complete 16 sighter roasting tests using various combinations of roasting time, temperature and reagents to determine optimum roasting conditions for Canegrass Ore.
- Leach sighter roasting products using water to dissolve liberated vanadium into solution and assay.
- Once optimum roasting conditions determined, undertake bulk roasting testwork on a larger sample to produce sufficient product for purification testwork.
- Complete purification process to produce minimum of 98% V_2O_5 flake product.
- Investigate options for further refining purification process to produce high purity >99% V_2O_5 flake product.
- Investigate options to improve concentrate Fe grade to 62%.
- Investigate options to separate the TiO_2 into a separate concentrate for options a separate product.



- Develop test plans for floatation testwork on tail residues from magnetic concentrate process to determine if Ni, Cu and Co can be recovered into sulphide concentrates.

END

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

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 - Metallurgical Results

The information contained in this report, relating to metallurgical results, is based on, and fairly and accurately represent the information and supporting documentation prepared by Mr Damian Connelly. Mr Connelly is a full-time employee of METS Engineering who are a Contractor to Viking Mines Ltd, and a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Connelly has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves. Mr Connelly consents to the inclusion in the report of the matters based on the results in the form and context in which they appear.

Competent Persons Statement - Exploration Results

Information in this release that relates to Exploration Results is based on information compiled by Mr Julian Woodcock, who is a Member and of the Australian Institute of Mining and Metallurgy (MAusIMM(CP) - 305446). Mr Woodcock is a full-time employee of Viking Mines Ltd. Mr Woodcock has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Woodcock consents to the disclosure of the information in this report in the form and context in which it appears.

Competent Persons Statement - Mineral Resources

The information in this announcement that relates to the Mineral Resource estimate 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). The Company confirms that the form and context in which the results are presented and all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed from the original announcement and that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcement on 20 November 2023.



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 ~95km² of exploration tenements, with a 7,500m resource drilling programme proving to be highly successful upgrading the JORC (2012) Inferred Mineral Resource Estimate (MRE) to 146Mt at 0.70% V₂O₅, 31.8% Fe & 6.6% TiO₂ (**>0.5% V₂O₅ cut-off**)⁶. Importantly, a high-grade subset of the MRE has been calculated, totalling 27.5Mt at 0.87% V₂O₅, 37.3% Fe & 8.0% TiO₂ (**>0.8% V₂O₅ cut-off**)⁶, which the Company believes to be sufficient to commence a Scoping Study.

JORC (2012) MINERAL RESOURCE

The Canegrass Mineral Resource has been calculated across three separate areas called the Fold Nose, Kinks and Kinks South deposits. The Resource has subsequently been reported above a cut-off grade of 0.5% V₂O₅ and above the 210 RL (equivalent to a maximum depth of ~250m)(refer to ASX Announcement on 20 November 2023).

Canegrass Project Vanadium Mineral Resource estimate, 0.5% V₂O₅ cut-off grade, >210m RL. (due to the effects of rounding, the total may not represent the sum of all components).

MRE	JORC (2012) Classification	Cut-Off V ₂ O ₅ %	Tonnage (Mt)	Target Commodities						Deleterious Elements			LOI %
				V ₂ O ₅ %	Fe %	TiO ₂ %	Cu %	Ni %	Co %	Al ₂ O 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 (FIA) 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. As of August 2023, Viking has acquired 25% of the Project through the FIA.

If Viking complete the Farm-In to 99% equity interest, Red Hawk 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.

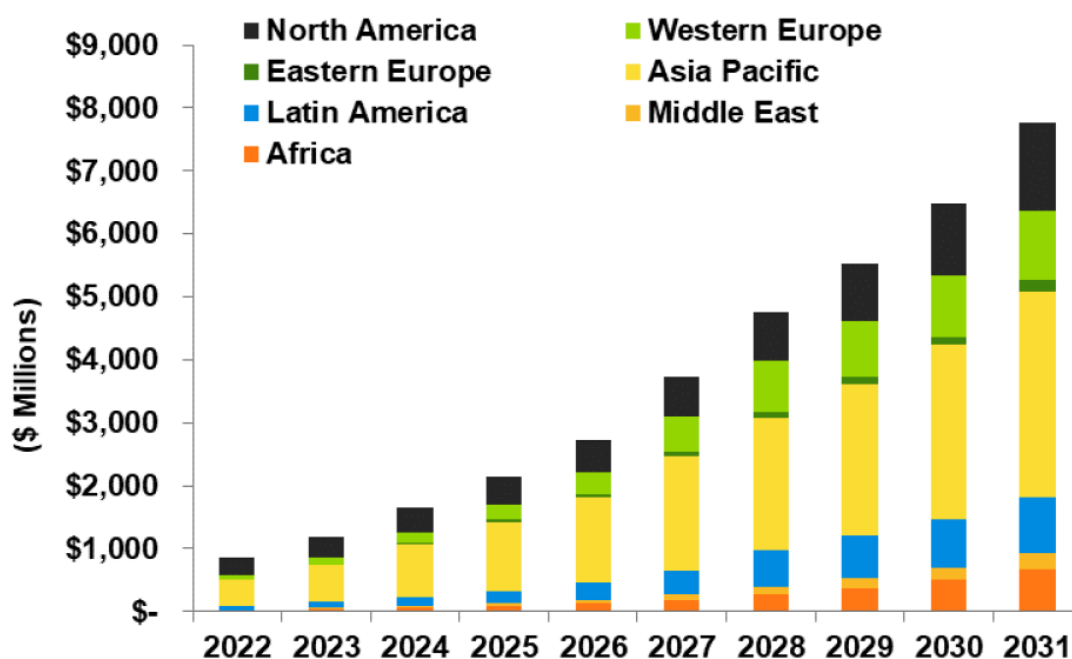


VANADIUM REDOX FLOW BATTERIES - GREEN ENERGY FUTURE

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 Paperⁱ published in 2Q 2022 forecasts the VRFB sector to grow >900% by 2031 through the installation of large, fixed storage facilities (Figure 24).

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



(Source: Guidehouse Insights)

Figure 2; Forecast growth of the VRFB Sector through to 2031 (source – Guidehouse Insightsⁱ)

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 2 – JORC CODE, 2012 EDITION – TABLE 1

JORC Table 1, Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	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.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Cone splitter subsamples the interval drilled and ensures that the sample collected is representative of the interval drilled.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information</i>	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 were dispatched to ALS laboratories in Perth for analysis by a XRF fused bead analysis.
Drilling techniques	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i>	Reverse circulation drilling using a 5 ½ inch bit and a face sampling hammer.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	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.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	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.
	<i>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.</i>	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	<i>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.</i>	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.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	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.



Criteria	JORC Code explanation	Commentary
Subsampling techniques and sample preparation	<i>The total length and percentage of the relevant intersections logged.</i>	All metres drilled have been geologically logged.
	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Not applicable.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	Samples were collected from the cyclone using a cone splitter for each metre drilled in to 2 calico bags. When composite samples were collected, a scoop is used to collect equal amounts from each metre interval used to make the composite sample. Dry samples are collected.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	For drill samples, 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. For metallurgical samples, calico bags from each of the 1m samples under investigation were collected from the field and submitted to Bureau Veritas. A master composite has been created using 1.5kg of sample from each of the samples provided. 5x 150g splits of this sample have undergone grind size and residence time testwork to determine appropriate grind size for next stages of testwork. A further portion of bulk master composite sample underwent a series of magnetic separation steps to produce a clean magnetic concentrate. Both head and tail samples at each of the stages were analysed to determine their composition. Analysis results of the composite compare closely to that of the mathematically composited interval from the drilling analysis results, supporting the appropriateness of the techniques used to produce the composite sample. The competent person has determined that the sample preparation technique is appropriate for the sample types.
	<i>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</i>	For drill samples, standard, blank and duplicate samples are inserted in the sampling sequence at a rate of 1 per 20 samples (standard or blank). This is in addition to the laboratory QAQC procedures adopted. The quality control procedures to ensure and maximise sample representivity are deemed appropriate. For metallurgical testwork, Laboratory standards were used in the analysis of the composite sample and DTR testwork samples. No issues have been reported by the laboratory.
	<i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i>	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 V ₂ O ₅ being measured in %, the samples collected are deemed representative. To monitor this, duplicate samples are collected from



Criteria	JORC Code explanation	Commentary
		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. No duplicate samples have been prepared as part of the metallurgical testwork programme.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The Competent Person considers the current methods and processes described as appropriate for this style of mineralisation. Grind size establishment testwork for the metallurgical testwork programme showed variable grind sizes but with no apparent influence on recovery or grade. 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	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	For drill samples , Samples were sent to ALS laboratories in Perth for preparation and analysis. Samples were riffle split to 250g then pulverised to a nominal 85% passing 75 microns. The Vanadium samples underwent analysis by ME-GRA5 (H2O LOI) and MEX-XRF21u (iron ore by XRF fusion). For metallurgical samples , samples were analysed by Bureau Veritas in Perth. XRF-202 method and laser ablation techniques were used by Bureau Veritas to analyse the samples. The analysis methods chosen are considered appropriate for the style of mineralisation and considered total.
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	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 No calibration factors are applied to the data. The duration for the measurement sequence is 7 seconds.
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	As part of the drilling programme, 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



Criteria	JORC Code explanation	Commentary											
		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.											
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	MEC Mining completed an independent audit of the Viking Mines Database and as such have verified the significant intersections previously reported by the Company.											
	<i>The use of twinned holes.</i>	No twinned holes have been drilled.											
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Data is collected in the field into digital devices and loaded into the Company database by the Company's database manager. All records are collected and stored on the Company's server and cloud based storage systems (SharePoint). Data as part of the metallurgical testwork programme is provided by Bureau Veritas in emails with accompanying spreadsheets.											
	<i>Discuss any adjustment to assay data.</i>	For drill samples, 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 border="1"> <thead> <tr> <th>Element Analysis result ppm</th><th>Conversion to %</th><th>Multiply element % to attain</th></tr> </thead> <tbody> <tr> <td>V</td><td>V ppm / 10,000</td><td>V% X 1.7852 = V₂O₅%</td></tr> <tr> <td>Ti</td><td>Ti ppm / 10,000</td><td>Ti% X 1.6681 = TiO₂%</td></tr> <tr> <td>Si</td><td>Si ppm / 10,000</td><td>Si% X 2.1392 = SiO₂%</td></tr> </tbody> </table> For metallurgical samples, a head assay was obtained and a calculated head assay determined from the assays of the magnetic and non-magnetic concentrates. All results are reported in the body of the report.	Element Analysis result ppm	Conversion to %	Multiply element % to attain	V	V ppm / 10,000	V% X 1.7852 = V ₂ O ₅ %	Ti	Ti ppm / 10,000	Ti% X 1.6681 = TiO ₂ %	Si	Si ppm / 10,000
Element Analysis result ppm	Conversion to %	Multiply element % to attain											
V	V ppm / 10,000	V% X 1.7852 = V ₂ O ₅ %											
Ti	Ti ppm / 10,000	Ti% X 1.6681 = TiO ₂ %											
Si	Si ppm / 10,000	Si% X 2.1392 = SiO ₂ %											
Location of data points	<i>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	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											



Criteria	JORC Code explanation	Commentary
		are completed using a north seeking gyro instrument. Accuracy of the instruments used is determined acceptable for future use in mineral resource estimation.
	<i>Specification of the grid system used.</i>	The adopted grid system is MGA94_50 and all data are reported in these coordinates.
	<i>Quality and adequacy of topographic control.</i>	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.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	The drill spacing is not considered relevant or a material risk by the Competent Person for the reporting of Exploration Results. <u>Viking Mines 2023 Drilling</u> 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.
	<i>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	The Competent Person believes the mineralised domains have sufficient geological and grade continuity to support the classification applied to the Mineral Resource given the current drill pattern.
	<i>Whether sample compositing has been applied.</i>	For drill samples , 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 V ₂ O ₅ 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. For metallurgical testwork , 29 samples have been collected and composited in to one master sample for metallurgical testwork. 1.5kg of sample was collected from each of the 29 sample bags and combined to produce the master composite. This master composite is the source material for all of the testwork being undertaken referred to in this report.
Orientation of data in relation	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	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, but is expected to be close to true thickness.



Criteria	JORC Code explanation	Commentary
to geological structure	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	Given the nature and style of mineralisation, a sampling bias is not expected.
Sample security	<i>The measures taken to ensure sample security.</i>	<u>For drill samples</u> , 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. <u>For metallurgical testwork</u> , samples were collected from the field by Viking geologists and returned to the Perth office. Samples were then selected, weighed, and packaged in to tied polyweave bags and delivered to Bureau Veritas by Viking geologists.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	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.



JORC 2012 Table 1, Section 2 - Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary																																																		
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	<u>Tenements and location</u> The Canegrass Battery Minerals Project tenements are located approximately 60 km east-southwest of the town of Mount Magnet, Western Australia. The tenements are situated in both the Mount Magnet and Sandstone Shires and cover parts of the Challa, Meeline and Windimurra pastoral leases. Details of the tenements are presented in the table below: <table><tr><th>Tenement</th><th>Status</th><th>Holder1</th><th>Holder 2</th><th>Area (Blocks)</th></tr><tr><td>E58/232-I</td><td>LIVE</td><td>Flinders Canegrass Pty Ltd</td><td>Viking Critical Minerals</td><td>5</td></tr><tr><td>E58/236-I</td><td>LIVE</td><td>Flinders Canegrass Pty Ltd</td><td>Viking Critical Minerals</td><td>4</td></tr><tr><td>E58/282-I</td><td>LIVE</td><td>Flinders Canegrass Pty Ltd</td><td>Viking Critical Minerals</td><td>8</td></tr><tr><td>E58/520</td><td>LIVE</td><td>Flinders Canegrass Pty Ltd</td><td>Viking Critical Minerals</td><td>1</td></tr><tr><td>E58/521</td><td>LIVE</td><td>Flinders Canegrass Pty Ltd</td><td>Viking Critical Minerals</td><td>5</td></tr><tr><td>E58/522</td><td>LIVE</td><td>Flinders Canegrass Pty Ltd</td><td>Viking Critical Minerals</td><td>8</td></tr><tr><td>P58/1942</td><td>LIVE</td><td>Viking Critical Minerals</td><td>n/a</td><td>0.24 Ha</td></tr><tr><td>P58/1943</td><td>LIVE</td><td>Viking Critical Minerals</td><td>n/a</td><td>0.3 Ha</td></tr><tr><td>E58/604</td><td>LIVE</td><td>Viking Critical Minerals</td><td>n/a</td><td>1</td></tr></table> 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 <u>Third Party Interests</u> Viking Mines Ltd subsidiary Viking Critical Minerals Pty. Ltd. has signed a binding term sheet to earn up to a 99% interest in the project tenements. 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. <u>Native Title, Historical sites and Wilderness</u> There is no registered native title claim over the Project tenements. There are no registered sites recorded on the WA government Department of Planning, Lands and Heritage (DPLH) Aboriginal Heritage Enquiry System (AHIS) on the tenements. There are 3 other heritage places recorded on AHIS, with 1 deemed not a site and 2 lodged waiting assessment. None of the other heritage places significantly impact or impede access to the tenements. 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
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	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.																																																		



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		Previous JORC table reports compiled by Red Hawk state the following: <i>The previous exploration across the Canegrass Project conducted by Red Hawk, 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:</i> • <i>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;</i> • <i>PGE bearing internal layers within the WIC;</i> • <i>Fe-Ti-V bearing internal layers within the WIC;</i> • <i>Au hosted in later fault structures that cross cut the WIC and offset the WIC internal geology.</i> Red hawk Mining have also provided detailed exploration history since 2017 in their announcement dated 10 June 2022 – Canegrass Project Exploration Update. Further information can be obtained by reading this release.
Geology	<i>Deposit type, geological setting and style of mineralisation</i>	<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 Flinders Mines)</u> The deposit represents part of a large layered intrusion. Mineralisation which comprises magnetite-titanium-vanadium horizons, with distinct vanadiferous titanomagnetite (VTM) mineralisation occurring within the Windimurra Complex – a large differentiated layered ultramafic to mafic intrusion within the Murchison Province of the Yilgarn Craton. Given the mode of formation, mineralisation displays excellent geological and grade continuity.
Drill hole Information	<i>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:</i> • <i>easting and northing of the drill hole collar</i> • <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> • <i>dip and azimuth of the hole</i> • <i>down hole length and interception depth</i> • <i>hole length.</i> <i>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.</i>	No new drillholes are being reported in this release. Any drillhole intercepts referred to are referenced to the original release which contains this information.



Criteria	JORC Code explanation	Commentary
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.	For drillhole results, 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. For metallurgical samples, average recovery and grade intersections are calculated using a weight based average ((weight of sample x value)/total weight) using either the mags or non-mags weights recorded for the respective stage of the testwork, unless assay results are referenced and reported. No metal equivalents have been used.
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 and are interpreted to be true thickness. However further data is required to confirm this and as such downhole length, true width not known.
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 metallurgical testwork assay results related to this released are reported in Appendix 1 and all appropriate information is included in the report. References to previous releases used to provide the information in this report have been made and those respective releases provide the disclosure of the drilling or metallurgical testwork results.
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	The metallurgical testwork completed and reviewed in this release is focussed on producing a magnetic concentrate which contains the primary commodity of interest, Vanadium. Silica and alumina content has been noted in the results in Appendix 1 as these elements can have deleterious effects in the recovery of vanadium if a pyrometallurgical process is followed. No testwork has yet been completed on the suitability of the magnetic concentrates for further refinement and processing to produce a vanadium pentoxide product via pyrometallurgical or hydrometallurgical processes. This testwork is ongoing.
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.	Further metallurgical testwork is ongoing and is referred to in the body of the release. At this time no further drilling is planned and will be assessed pending the results of the metallurgical testwork. The company has commenced with a pit optimisation assessment of the Project, the results of which will determine the next stages of activity on the Project, including progressing to a scoping study. It is expected that the pit optimisation study results will be reported in the March quarter 2024.