## **ASX ANNOUNCEMENT**

30 November 2022



# VIKING TO FARM IN TO SUBSTANTIAL BATTERY MINERALS RESOURCE

- Viking signs binding agreement with Flinders Mines (ASX: FMS) to earn up to 99% of the Canegrass Battery Minerals Project through a Farm-In arrangement for \$1.25M cash and \$4M exploration spend over a 54 month period.
- Projects primary commodity is Vanadium (as Vanadium Pentoxide V₂O₅), with potential for Nickel, Copper, Cobalt, Platinum Group Elements (PGE's) and Gold.
- Substantial JORC (2012) Inferred Resource of <u>79Mt</u> (>0.5% V<sub>2</sub>O<sub>5</sub> cut-off) spread across two resource areas (named Fold Nose & Kinks) grading:
  - 0.64% Vanadium Pentoxide (V₂O₅) for 1.1 Billion Pounds
  - 29.7% Fe for 29.7Mt
  - 6.0% Titanium Dioxide (TiO<sub>2</sub>) for 4.9Mt
- Due diligence field visit has identified outcropping vanadiferous titanomagnetite (VTM) mineralisation extending >750m North from Fold Nose Resource, increasing strike length to >1300m and highlighting potential for substantial resource growth.
- Hole FCRC0030 located 770m SW of the Kinks Resource intersected 66m at 0.74%  $V_2O_5$  from 156m, including 16m at 1.02%  $V_2O_5$  & 6m at 1.15%  $V_2O_5$ , demonstrating additional high-grade mineralisation that warrants immediate follow-up.
- Historical data search identifies drilling from 1980's with wide shallow high-grade intersections in multiple holes <u>outside</u> of the existing reported Inferred Resource (JORC 2012) areas, such as CGD01, <u>28m at 0.90% V<sub>2</sub>O<sub>5</sub></u> from 36m.
- Historical rock chip sampling on outcropping VTM mineralisation outside of the existing resource footprints returns high values up to  $1.7\% \ V_2O_5$ , confirming the presence of extensive untested high-grade mineralisation at surface.
- Presence of Copper, Nickel and Cobalt within the resource drilling database provides significant upside potential for additional battery mineral resources to be defined which have not been previously estimated.
- Only 20% of the interpreted prospective VTM horizon has been effectively explored.
- Located in Western Australia the ~95km² of tenements are situated ~60km SE from the township of Mt Magnet and serviced by excellent infrastructure, with bitumen roads and gas pipeline within 22km of the Inferred Resources.
- Vanadium features in the Australian Government 2022 Critical Minerals Strategy and is recorded on lists of Critical Minerals published by the US, EU, Japan & India.
- Strong Australian Government support for development of critical minerals projects with the \$2B Critical Minerals Facility providing a source of funding opportunities.
- Demand for Vanadium Redox Flow Batteries (VFRB) is increasing as an alternate battery technology to Lithium-Ion for large scale fixed installations due to their unique ability to offer large capacity and long-life span.



**Viking Mines Ltd (ASX: VKA)** ("**Viking**" or "**the Company**") is pleased to announce that its wholly owned subsidiary, Viking Critical Minerals Pty Ltd, has entered into a Farm-In Agreement with Flinders Canegrass Pty Ltd, a wholly owned subsidiary of Flinders Mines Ltd. (ASX: FMS) ("**Flinders**") to acquire an equity stake in the Canegrass Battery Minerals Project ("**the Project**" or "**Canegrass**") (also known as the Canegrass Project). The Project contains a JORC (2012) Inferred Resource of **79Mt at 0.64% V<sub>2</sub>O<sub>5</sub>, 29.7% Fe and 6.0% TiO<sub>2</sub>**.

Under the terms of the Farm-In Agreement, Viking can earn up to 99% of the six Project tenements (Table 4) for all minerals via a Farm-In arrangement, by spending \$4M on exploration over 54 months and making staged cash payments for a total consideration of \$1.25M to Flinders (Table 2). Upon Viking earning a 99% interest in the Project, Flinders has a right to sell the remaining 1% of the Project to Viking in return for \$0.845M of staged production and milestone related payments due on production (Table 3). If Flinders does not exercise this right Flinders must offer to sell the remaining 1% interest to Viking on the same terms. A legacy 2% Net Smelter Royalty ("NSR") with Maximus Resources Ltd ("Maximus Resources") remains over three of the Project tenements (Table 4) under terms agreed when Flinders acquired it in 2009. Viking has conducted extensive due diligence on the Project and believes that the Project has major potential to add value to Viking shareholders through:

- Significantly growing the existing resource base via direct extension from outcropping mineralisation with targeted drilling programmes.
- Assessment of the previously unevaluated Nickel, Copper and Cobalt potential through estimation of current data, inclusion of new drilling data as collected and undertaking preliminary metallurgical testwork.
- Discovery of new resources by following up high grade surface rock chip samples up to 1.7% V<sub>2</sub>O<sub>5</sub> and high grade drillholes outside the existing resource base with results up to **16m at 1.02% V<sub>2</sub>O<sub>5</sub>** (FCRC0030) and **28m at 0.90% V<sub>2</sub>O<sub>5</sub>** (CGD01).
- Undertaking metallurgical testwork to confirm and advance on the preliminary testwork previously completed to produce a vanadium concentrate and  $V_2O_5$  flake.
- Gaining early mover exposure to the growing Vanadium Redox Flow Battery market through this strategic acquisition in a substantial Vanadium Resource in a stable Western jurisdiction.
- Benefitting from the growing position of Western economies that Vanadium supply is dominated by Russia and China which is driving a desire to reduce dependency on these high-risk sources of this critical mineral.

## Commenting on the transaction, Viking Mines Managing Director & CEO Julian Woodcock said:

"The Canegrass Battery Minerals Project Farm-In represents a value accretive transaction for Viking Mines and its shareholders to invest in what is already a substantial Vanadium Resource.

There is significant potential to add value through the discovery of both additional high-grade shallow Vanadium resources which may be amenable to open pit mining and assess the Project for its additional battery mineral potential with Nickel, Copper and Cobalt credits.

In addition to the focus on the existing Resource base, the geology of the host Layered Igneous Complex is comparable to the Bushveld Complex in South Africa and has the potential to host PGE's which have had limited prior focus and will form part of our exploration strategy.

I am excited that we have secured this Project for Viking Mines and see potential to add substantial value to Viking and its shareholders through a targeted exploration and Resource development programme."



### **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  $\sim 95 \, \text{km}^2$  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) RESOURCE**

In January 2018, Flinders Mines reported an update to the Global Inferred Resource for the Project in line with the JORC Code (2012 Edition)<sup>1</sup> (Table 1). The Resource has been calculated across two separate areas called the Fold Nose and Kinks deposits (Figure 8), each with eight and four separate mineralised domains modelled respectively. 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). The Resource is being restated by Viking and further details regarding the resource estimate can be found later in this announcement along with the JORC tables in Appendix 3.

Table 1; 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)<sup>1</sup>.

Deposit	JORC Classification	Tonnage (Mt)	V <sub>2</sub> O <sub>5</sub> %	Fe %	TiO₂ %	Al <sub>2</sub> O <sub>3</sub> %	P %	SiO <sub>2</sub> %	LOI %
Fold Nose	Inferred	59	0.66	30.5	6.5	11.9	0.006	22.9	2.9
Kinks	Inferred	20	0.57	27.4	5.5	13.0	0.009	25.9	3.1
T	OTAL	79	0.64	29.7	6.0	12.2	0.007	23.6	3.0

### **Cut-off grade**

A substantial Inferred Resource has been estimated to contain **79Mt at 0.64%**  $V_2O_5$ , **29.7% Fe and 6.0% TiO**<sub>2</sub> above a **0.5%**  $V_2O_5$  **cut-off grade** (Table 1). As part of Vikings due diligence, it was noted that the cut-off grade used to report the Resource results in only mineralisation from the higher-grade Alpha Domain at both deposits reporting to the published Resource.

Substantial volumes of lower grade mineralisation occur in the remaining domains, with the potential to substantially increase the Global Resource if a lower cut-off grade is warranted. Whilst the lower grade material requires suitable confidence and evaluation for its economic potential, the Company sees this as a significant opportunity to add value to the Project.

Other VTM projects being explored in Australia report their Resources at cut-off grades ranging from 0.2% to 0.4%  $V_2O_5$  which is lower than the 0.5%  $V_2O_5$  being used for the Canegrass Battery Minerals Project. As such, Viking is of the opinion that further technical work is warranted to investigate the appropriate cut-off grade to use when reporting the



Mineral Resource and that there is the potential for a substantially larger resource within the current drilled limits of mineralisation.

Viking intends to undertake a more comprehensive future review of the Resource model which will include an evaluation of the cut-off grade appropriate to use for this style of mineralisation. Any assessment will be completed in line with JORC reporting requirements and apply the RPEEE test (Reasonable Prospects for Eventual Economic Extraction).

### **Depth of Mineralisation**

The reported Resource has been restricted to mineralisation occurring above the 210RL (a maximum depth of ~250m from surface). However, mineralisation does continue below this depth as proven by drilling with the deepest drillhole encountering VTM mineralisation at the Fold Nose deposit to a depth of 320m from surface. To date, no economic assessments or pit optimisation studies have been completed on the Project to determine potential economic limits for mining.

The Resource is a shallow dipping stratiform type deposit, meaning that it is comprised of multiple layers of disseminated and massive magnetite zones within a gabbro host rock which have formed during the cooling of the mafic layered igneous intrusion. As such, it is expected that mineralisation will continue with depth and that deeper drilling combined with economic assessment has the potential further grow the Resource.

Whilst not an initial priority due to shallow outcropping targets available for follow up, Viking see this as an additional opportunity to grow the Resource once the shallower mineralisation has been fully defined.

## **Nickel, Copper and Cobalt Potential**

The Project database contains assay results for Ni, Cu and Co (intercepts reported in Appendix 1), however no resource estimation has previously been completed for these metals. During the due diligence field visit, the Company identified traces of copper oxides in outcrop, confirming the presence of Cu at the Fold Nose deposit (Figure 1).

Metallurgical testwork by peer companies Australian Vanadium Ltd (ASX:AVL) and Bryah Resources Ltd (ASX: BYH) has demonstrated potential to recover these battery metals from the comparable Australian Vanadium Project ("AVP") Resource hosted in the Gabanintha greenstone sequence, 160km north of the Canegrass Battery Minerals Project. The AVP Resource reports 36Mt at 766ppm Ni, 212ppm Cu and 231ppm Co as part of AVL's total  $V_2O_5$  resource<sup>2</sup>. Metallurgical testwork at the AVP has proved successful in floating the sulphides into a concentrate from the non-magnetic tail produced from the  $V_2O_5$  ore.

These by-products have not previously been considered at the Canegrass Battery Minerals Project and Viking sees an opportunity to add significant further value. These metals will be included into the exploration targeting strategy and future metallurgical testwork programmes to assess their potential. Example results found across the Project include;

- Kinks Resource CGRC0010; 40m at **793ppm Ni**, **801ppm Cu** and **185ppm Co**
- Fold Nose Resource FCRC0010; 40m at 650ppm Ni, 661ppm Cu and 209ppm Co
- Kinks South target FCRC0030; 66m at **731ppm Ni**, **980ppm Cu** and **202ppm Co**
- Kinks South Target CGD01; **21.6m at 549ppm Ni and 1021ppm Cu** (Co not assayed)



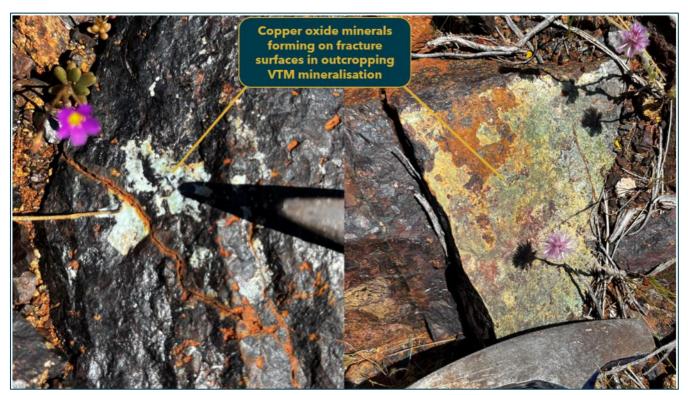


Figure 1; Copper oxide minerals observed in outcrop during field visit to the Canegrass Battery Minerals Project - location CG-11 (Figure 4).

## **METALLURGY**

Two rounds of preliminary metallurgical testwork have been identified in data searches of the West Australian Government WAMEX database and in data provided by Flinders Mines. The historical testwork was focussed on using magnetic separation methods to produce a magnetite concentrate which also recovers the Vanadium hosted in the deposit.

Viking has completed a preliminary review as part of the Company's due diligence and is confident that conventional magnetic separation methods are applicable to the deposit and can be used to recover the Vanadium.

As part of the planned metallurgical testwork strategy, Viking intends to engage an external metallurgical consultant to complete an assessment of the historical testwork and incorporate the findings into the design of a comprehensive testwork programme as part of the Stage 1 Farm-In (Table 2). The results of this assessment will be released upon completion.

As noted previously, the Company also recognises a significant opportunity to define and recover other battery metals from the Project, namely Nickel, Cobalt and Copper.

No prior testwork has been completed on analysing the concentrate and tails for these other battery metals in the historical testwork. Given that the assay results from drill samples contain these elements and the successful testwork completed by other companies in producing a sulphide concentrate from similar deposits, Viking will include this in the scope of future metallurgical testwork programmes.



#### **EXPLORATION POTENTIAL**

As part of a thorough due diligence process, Viking has focussed on the exploration potential and upside to discover additional resources to those already defined at the Project. This review has involved assessing the historical exploration activity completed by Flinders Mines and previous owners of the Project, as well as a field visit in September 2022.

The key findings from the review of the exploration potential for the Project has identified outcropping VTM mineralisation immediately adjacent to both the Fold Nose and Kinks Resource areas which is outside the current limits of the estimated Resources. This outcropping mineralisation indicates that there is significant potential to grow the existing Resource base with shallow mineralisation occurring from surface which has not previously been estimated.

## **Fold Nose Exploration Potential**

The Alpha domain in the Fold Nose Resource contains all the reported Inferred Resource mineralisation (59Mt at  $0.66\% \ V_2O_5$ ) and outcrops in the east and dips shallowly to the west. On review of the data supplied by Flinders Mines, Viking noted that the wireframes did not continue to surface in the north-eastern area of Fold Nose (Figure 4).

During the field visit, VTM mineralisation was traced in outcrop from the modelled position at the south-eastern limits of the Fold Nose Resource to the north for >1.3km (Figure 2 and Figure 3). Of this length, >750m (58%) remains outside of the modelled Resource limits (Figure 4).

Based on observations seen in outcrop, combined with the presence of magnetic highs (caused by the magnetite mineralisation) and analysis in the field using portable XRF (pXRF), the Company is confident that VTM mineralisation continues along the entire 1.3km traced and dips shallowly to the west. Further field work is required to confirm this hypothesis.

Drilling will be required to determine the grades and thicknesses of the VTM units, however this area presents itself as an immediate *high priority drilling target with the potential to substantially grow the Resource* with further high-grade VTM mineralisation from surface. The thicker and higher-grade zones within the Alpha Domain will be targeted which has produced intercepts >0.9%  $V_2O_5$  cut-off such as (Figure 4);

- MNRC0016; 18m at 1.17% V<sub>2</sub>O<sub>5</sub>, 43.6% Fe, 11.5% TiO<sub>2</sub>
- FCRC0010; 8m at 1.00% V<sub>2</sub>O<sub>5</sub>, 44.4% Fe, 10.1% TiO<sub>2</sub>

Based on the findings of the due diligence assessment, the Company is of the opinion that the Fold Nose Resource is open to the North as evidenced by outcropping VTM mineralisation which subsequently extends under cover (Figure 4) and is only limited by the extent of drilling completed.

The field visit was focussed on the northern extensions and an assessment of the continuity from the outcropping mineralisation to the south will form part of future field visits and mapping programmes. It is important to note that mineralisation to the South and West is open with little to no drilling completed in these areas.





Figure 2; Looking east over large outcrop of VTM mineralisation observed at location CG-10 (see Figure 4).



Figure 3; VTM mineralisation observed in outcrop at location CG-12 (see Figure 4).



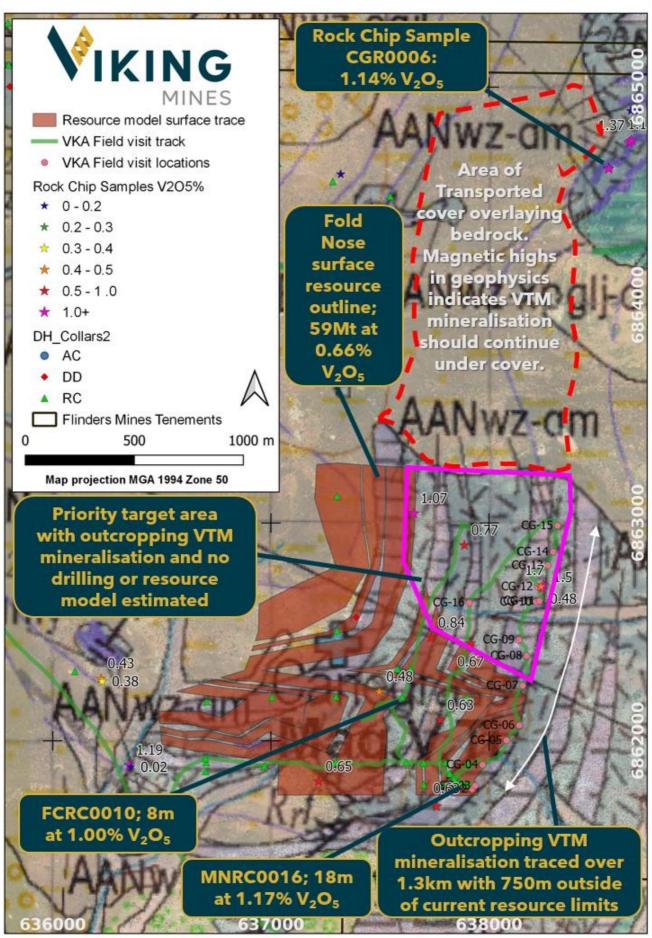


Figure 4; GSMA geology map overlain with the Fold Nose deposit surface expression of mineralisation in red shading and areas visited during Viking DD field visit. Note large area with outcropping VTM mineralisation and no drilling or Resource estimate and high-grade  $V_2O_5$  intercepts. Annotated values are rock chip grades from WMC historical data.



### **Kinks Exploration Potential**

Like the Fold Nose Resource, the Alpha domain at the Kinks Resource outcrops in the east (Figure 6) and dips to the west and contains all the reported Resources (20Mt at  $0.57\% \, V_2 O_5$ ). The wireframes of the 4 domains of the Kinks Resource are truncated to the south based on the extent of drilling and modelling completed.

During the field visit, Viking identified outcropping VTM mineralisation 100m south of the current resource model limits at location CG-23, demonstrating further Resource growth potential outside of the modelled area (Figure 6). Well-formed layering of the VTM was also observed in outcrop at field location CG-21, confirming the stratiform nature of the mineralisation and the shallow dip (Figure 5 and Figure 6).

The Kinks Resource is smaller than the Fold Nose Resource, containing 25% of the total Canegrass Project Resource tonnes and 22% of the estimated  $V_2O_5$  metal. Flinders have completed six drillholes within the limits of the Kinks resource area since the 2018 Resource model update **which have not been updated into the Resource estimate**. Within this drilling there are significant intersections which are higher than the current Kinks Resource average grade >0.5%  $V_2O_5$  cut off, such as;

CGRC0010;
 40m at 0.88% V₂O₅, 39.1% Fe, 7.4% TiO₂ including;

**24m at 1.00% V2O5**, 43.1% Fe and 8.4% TiO<sub>2</sub> (>0.9% V<sub>2</sub>O<sub>5</sub> cut-off)

CGRC0008;
 36m at 0.78% V₂O₅, 36.0% Fe, 7.8% TiO₂

RC282\_01;
 45m at 0.71% V₂O₅, 32.4% Fe, 7.1% TiO₂ including;

**15m at 0.90% V<sub>2</sub>O<sub>5</sub>**, 38.8% Fe, 7.9% TiO<sub>2</sub>

Based on the drilling results and field observations, Viking believe that **there remains** significant upside opportunity to grow the Kinks Resource tonnes and improve the  $V_2O_5$  grade by further assessing and evaluating this area.



Figure 5; Distinct layering of massive VTM mineralisation seen in outcrop at field location CG-21 dipping to the NW within the Kinks resource area.



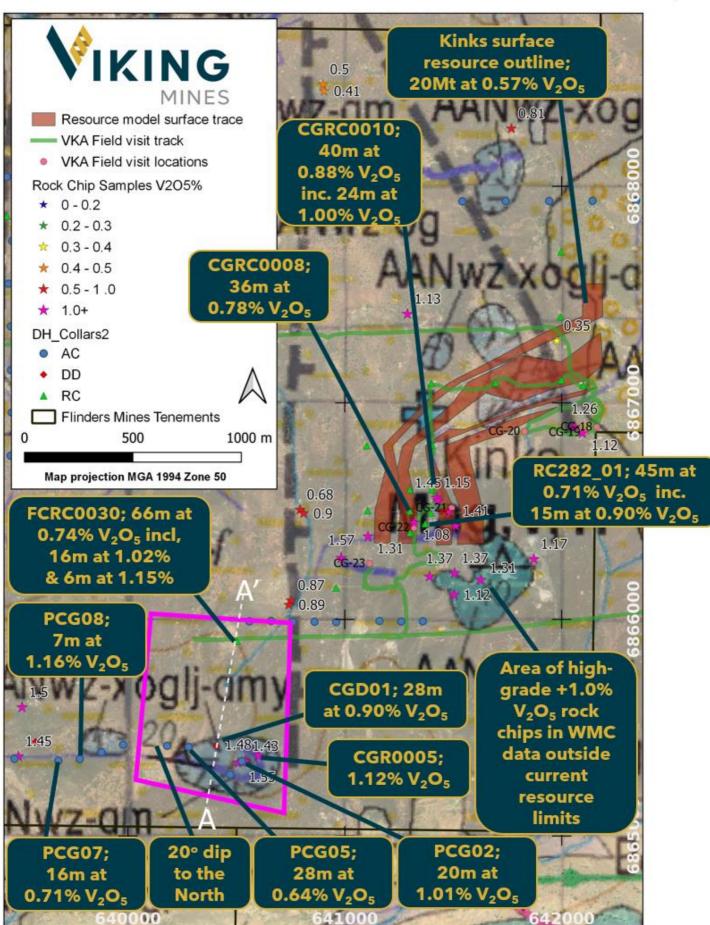


Figure 6; Kinks Resource model outline, drillhole locations and WMC historical rock chip sampling data  $V_2O_5$  assays annotated (stars) overlain on the GSWA geology map. Note priority target area in pink polygon with significant intercepts of  $V_2O_5$  mineralisation and location of schematic cross section A-A' (Figure 7) between holes FCRC0030 and CGD01.



## **Kinks South Exploration Target**

In addition, and as part of the data review, Viking noted Flinders had collected a high-grade surface rock chip sample 1.2km southwest of the Resource model limits (**CGR0005**; **1.22% V<sub>2</sub>O<sub>5</sub>**, **50.0% Fe & 12.5% TiO<sub>2</sub>**). It is important to note that on the Geoscience Western Australia (GSWA) geology maps, the area marked as outcrop from where Flinders Mines collected the high-grade rock chip, the layered VTM stratigraphy is recorded as dipping to the North at 20° (Figure 6).

Also located in the target area (500m north of the high-grade rock chip sample CGR0005 and 800m SW of the Fold Nose Resource) drillhole **FCRC0030** (Figure 6 and Figure 7) reports the following **spectacular high-grade intersection**;

- 66m at 0.74% V₂O₅, 34.4% Fe, 7.1% TiO₂, 731ppm Ni, 980ppm Cu & 202ppm Co including;
- 16m at 1.02% V₂O₅, 45.1% Fe, 9.8% TiO₂, 811ppm Ni, 913ppm Cu & 263ppm Co and
- 6m at 1.15%, 48.3% Fe, 10.2% TiO<sub>2</sub>, 937ppm Ni, 603ppmm Cu & 250ppm Co.

This drillhole represents the second highest thickness X grade V<sub>2</sub>O<sub>5</sub> intercepts identified in the drilling data collected on the Canegrass Battery Minerals Project, with the additional presence of significantly elevated Ni, Cu and Co.

Further supporting the Flinders rock chip and drill sampling, historical data collected by Western Mining Corporation ("**WMC**") has also been sourced by Viking from publicly available databases stored on WAMEX (the WA government geological data repository).

WMC undertook a period of exploration in the area from 1976 to 1984 and during this time completed a programme of rock chip sampling, diamond, percussion and RC drilling. Viking are in the process of collating the data, however initial review has provided further encouraging drilling results in the Kinks target area. Of note are holes:

- CGD01; **28m at 0.90% V<sub>2</sub>O<sub>5</sub>, 37.1% Fe, 8.5% TiO<sub>2</sub>, 525ppm Ni & 915ppm Cu** (Co not assayed)
- PCG02; 20m at 1.01% V<sub>2</sub>O<sub>5</sub>, 291ppm Ni, 801ppm Cu & 102ppm Co (Fe & TiO<sub>2</sub> not assayed)
- PCG07; 16m at 0.71% V<sub>2</sub>O<sub>5</sub>, 37.2%Fe, 6.6%TiO<sub>2</sub> (exc. 1m no sample & no Ni, Cu & Co assays)
- PCG08; 7m at 1.16% V<sub>2</sub>O<sub>5</sub>, 45.0% Fe, 12.9%TiO<sub>2</sub> (no Ni, Cu & Co assays)

By combining the surface rock chip sampling, orientation of stratigraphy, historical drilling completed by WMC and the spectacular results in Hole FCRC0030, Viking has interpreted a **high-potential target for significant V\_2O\_5 mineralisation not yet effectively tested at the <b>Project** (Figure 6). When the mineralisation identified at outcrop is projected at the 20° dip recorded on the GSWA geology map, it intersects drillhole FCRC0030 at exactly the expected projected position (Figure 7).

Given the layered nature of these types of VTM deposits, this is a robust interpretation warranting further investigation and represents a high-priority target for follow up. If further intercepts are encountered that are comparable to those received in holes FCRC0030 and



CG01, a **substantial high-grade V2O5 resource could be defined at this target**. Drill hole planning is underway to test this target as part of the Stage 1 Earn-In (Table 2).

Based on the physical extent of the untested area, Viking believes that a significantly larger and higher grade  $V_2O_5$  resource than that already defined could be discovered at the Kinks South target area with the additional upside of Ni, Cu and Co to be investigated.

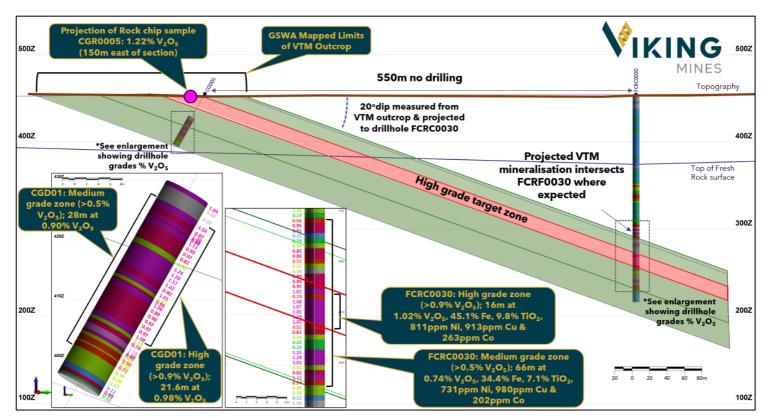


Figure 7; Schematic cross section A-A' showing projection of outcrop to depth to intersect hole FCRC0030 with high grade VTM mineralisation. Section clipping +/- 25m. Cautionary statement; No potential quantity and grade has been determined and the target is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

## **Regional exploration potential**

Outside of the immediate vicinity of the Inferred Resource areas as already discussed, there remains further excellent regional potential. Viking has not had the opportunity to extensively assess the tenement package at this time, however two aspects provide encouragement for further discovery of additional VTM mineralisation.

Rock chip sampling by Flinders Mines and WMC across the tenure returned grades >1.0%  $V_2O_5$  at various levels in the stratigraphy which have not been followed up (Figure 8) e.g.

- CGR0006; 1.14% V<sub>2</sub>O<sub>5</sub>, 50.0% Fe & 11.7% TiO<sub>2</sub>
- CGR0012; 1.03% V<sub>2</sub>O<sub>5</sub>, 43.5% Fe & 10.7% TiO<sub>2</sub>

In addition, the magnetic geophysical datasets detect the magnetite in the VTM mineralisation. Preliminary review of these data sets shows that further VTM mineralisation could be expected across the Project (Figure 8). The total area of interpreted VTM mineralisation on the tenure is ~12.1km², whilst the Kinks and Fold Nose areas represent ~2.4km² (only 20% of the prospective area). This leaves 80% of the prospective horizon for VTM mineralisation largely unexplored. Viking will assess these areas for follow up fieldwork.

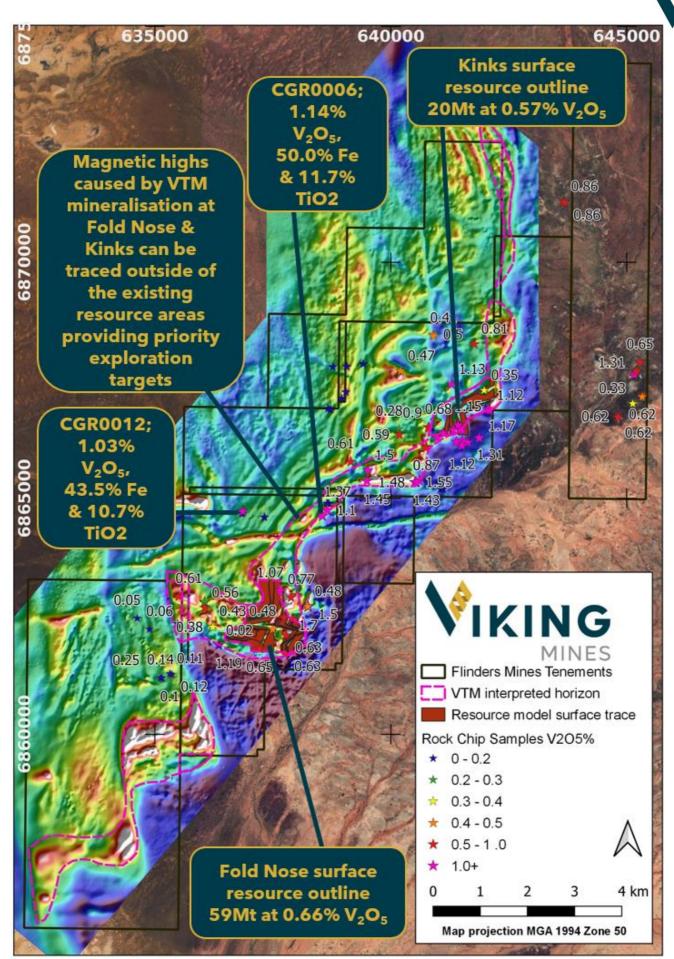


Figure 8; Map of Canegrass Battery Minerals Project tenements with surface trace of Fold Nose & Kinks resources and historical WMC rock chip sampling data annotated. Backdrop is magnetic geophysics RTP map provided by Flinders Mines. Note magnetic highs (white and red) defining interpreted VTM horizon (pink dash) which traces outside of the known resource areas and form high priority exploration targets.



#### TRANSACTION TERMS

The Viking Board believe that it has negotiated an extremely compelling Farm-In Agreement, giving Viking shareholders exposure to a **Project with substantial potential to become a globally significant Battery Minerals Resource**.

The terms of the Farm-In Agreement allow a low cost of entry with all funds to be focussed on advancing the Project through both Resource growth and technical studies to demonstrate the economic potential of the Project. This will be undertaken using Vikings existing strong cash balance of \$4.2M at the end of the September quarter FY23, with no requirement to dilute shareholders with capital raises in the near term.

The key commercial terms of the transaction are detailed below.

- Viking has the right to earn up to 99% interest in the tenements (Figure 8 and Table 4) with associated rights to all minerals on the tenure;
- Earn-in occurs over 4 stages spread over a maximum 54 month period;
- Exploration spend of \$4M and total cash payments of \$1.25M across all the stages;
- Viking can elect at any stage to not proceed further with the Farm-In Agreement and will
  enter into a Joint Venture Agreement with Flinders. Viking will retain its equity stake for
  any previously completed stages, with funding reverting to a pro-rata basis;
- On completion of the Farm-In Agreement, Flinders can sell its remaining 1% to Viking for the consideration of a series of production and milestone related payments totalling \$845k;
- If Flinders does not exercise its right to sell the remaining 1% to Viking, the right lapses and Viking then has the right to buy the remaining 1% for the same production and milestone and related payments; and
- Viking has committed to an initial \$50k fee (as part of the \$1.25M cash payments) to initiate the Farm-In Agreement
- A legacy 2% NSR with Maximus Resources remains over 3 of the Project tenements (Table 4), including the existing Inferred Resource base.
- The Farm-In Agreement is subject to a final 30-day due diligence period (which has commenced) and the parties executing a deed of covenant for the existing 2% NSR due to Maximus Resources:

Table 2 below outlines the schedule of the Farm-In Agreement and Table 3 details the production and milestone related payments for consideration of the remaining 1% of the Project.



Table 2; Farm-In Agreement terms for Viking to acquire up to 99% of the Canegrass Battery Minerals Project.

ltem	Cash Payment at completion of each stage	Exploration Spend	Duration (months)	Stage Equity Earned (VKA)	Cumulative Equity Earned (VKA)
Signing of agreement	\$50,000	\$0	1	0%	0%
Stage 1 earn-in	\$225,000	\$1,000,000	18	25%	25%
Stage 2 earn-in	\$275,000	\$1,000,000	12	24%	49%
Stage 3 earn-in	\$325,000	\$1,000,000	12	26%	75%
Stage 4 earn-in	\$375,000	\$1,000,000	12	24%	99%
TOTAL	\$1,250,000	\$4,000,000	<b>54</b> <sup>i</sup>	-	-

i) Excludes 1-month due diligence period

Table 3; Production and milestone related payments in consideration for the remaining 1% of the Canegrass Battery Minerals Project after Viking complete stages 1-4 of the JV Farm-In Agreement.

Period	\$ payment on annual anniversary of 1 <sup>st</sup> production	\$ Total
Grant of Mining Lease	\$100,000	\$100,000
Years 1-3	\$50,000	\$150,000
Years 4-6	\$75,000	\$225,000
Years 7-9	\$90,000	\$270,000
Year 10	\$100,000	\$100,000
TOTA	\$845,000	

Table 4; Tenements subject to the Farm-In Agreement on the Canegrass Battery Minerals Project with details on which are affected by the Maximus Resources NSR.

Tenement ID	Name	Status	Area (blocks)	<b>Grant Date</b>	Expiry Date	NSR
E58/232	Boulder Well	Granted	5	29/07/2002	28/7/2023	2% Maximus Royalty
E58/236	Challa	Granted	4	22/03/2002	21/03/2023	2% Maximus Royalty
E58/282	Windimurra	Granted	8	03/05/2007	02/05/2023	2% Maximus Royalty
E58/520	Warramboo	Granted	1	14/09/2017	13/09/2022 <sup>i</sup>	None
E58/521	Warramboo	Granted	5	14/09/2017	13/09/2022 <sup>i</sup>	None
E58/522	Warramboo	Granted	8	14/09/2017	13/09/2022 <sup>i</sup>	None

i) 5 year extension of term applications lodged for these tenements on 25 August 2022 and pending approval by Department of Mines, Industry, Regulation and Safety



#### **INDICATIVE STAGE 1 EARN-IN EXPLORATION PROGRAMME**

Viking's strategy is to undertake comprehensive work programmes throughout the first stage of the Farm-In Agreement ensure that there is sufficient information available to make a well-informed decision on whether to proceed to the second stage of the Farm-In Agreement. The key information which the Company is focussed on obtaining is to determine:

- Resource size potential with a focus on high-grade (targeting >1.0%  $V_2O_5$ ).
- Assess the additional metal potential for Ni, Cu and Co.
- Metallurgical properties of the mineralisation and ability to effectively extract value.

To achieve these goals and deliver on the strategy, Viking are planning the activities outlined in Table 5 as part of the stage 1 earn-in period.

Table 5; Indicative work programme for the stage 1 earn-in on the Canegrass Battery Minerals Project Farm-In Agreement with Flinders Mines

Category	Dec Q Activity FY23			Ma	r Q F	Y23	Jur	ı Q F	<b>/23</b>	Sep	QF	Y24	Dec Q FY24		Y24	Mar Q FY24		Y24	Jur	Q FY	<b>/24</b>
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Geological interpretation & targeting	Historical data compilation and database review																				
rpret	Field mapping & rock chip sampling																				
jical interpr & targeting	Geophysical data review & reprocessing																				
ogica & ta	Structural geology interpretation and modelling																				
Geole	Geological interpretation & drill targeting/planning																				
യ് യ	Heritage review & surveys																				
Drilling & resource update	Resource drilling & exploration target testing																				
٥٠	Resource update																				
79.Y	Metallurgical consultant engagement																				
Metallurgy	Mineralogical studies																				
Ĕ	Metallurgical testwork																				
	Agreement signed																				
	Due Diligence																				
JV Mile stones	Stage 1 Earn-in Period			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
_ <b>-</b>	Stage 2 decision point																				

Disclaimer; The timelines and activities listed in this table are indicative and subject to change based on knowledge gained at any point in the exploration process. The work programmes outlined are conceptual and require further activity to determine the most effective course of action to advance the Canegrass Battery Minerals Project. The Company reserves the right to amend or suspend any of the listed items at its discretion.

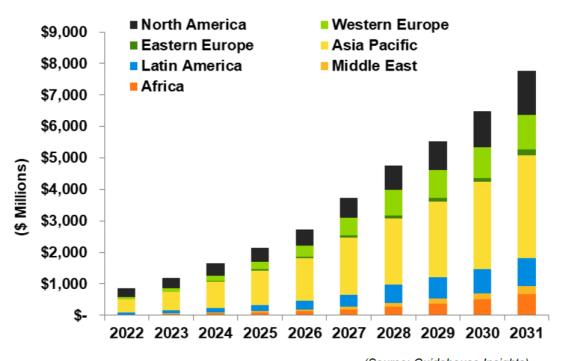


#### **VANADIUM REDOX FLOW BATTERIES - GREEN ENERGY FUTURE**

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

VRFB's are a developing market as an alternate solution to lithium-ion ("**Li-ion**") in specific large energy storage applications. Guidehouse Insights Market Intelligence White Paper<sup>3</sup> published in 2Q 2022 forecasts the VRFB sector to grow >900% by 2031 through the installation of large, fixed storage facilities (Figure 9).

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



(Source: Guidehouse Insights)

Figure 9; Forecast growth of the VRFB Sector through to 2031 (source – Guidehouse Inisghts)

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.



#### **CORPORATE STRATEGY**

Viking has updated its corporate strategy to expand exploration activities into the important Critical Minerals sector (which includes battery minerals). The Board recognise the growing importance of this sector due to both the global drive towards decarbonisation as well as the efforts of Western economies to reduce exposure to the risks associated with Critical Minerals where supply is dominated by Russia and China.

The Mineral Resource estimate for the Canegrass Battery Minerals Project, combined with the growth potential for the existing Resource base and coupled with the upside potential for Ni, Cu and Co to be discovered, meet this strategic objective of the Company. The Project represents a high-value asset with significant upside which Viking can make major advancements using the Company's strong cash position of \$4.2M as of the end of the September quarter FY23.

#### **NEXT STEPS**

Viking has commenced final due diligence on the Project and is in the process of contacting specialist consultants to plan the activities required to advance the various stages as outlined in the indicative stage 1 earn-in programme (Table 5). The near-term focus for Viking is to:

- Identify and engage a metallurgical consultant to review historical work and design a forward metallurgical testwork programme.
- Undertake a further field visit and mapping exercise before the end of December quarter FY23 to assist in targeting and exploration planning.
- Complete review and collation of historical data from WAMEX and establish an updated drillhole and sample database.
- Retrieve samples from Flinders Mines to Vikings offices for logging, review and testwork.
- Drillhole programme planning to test and grow the existing resource with immediate extensions, obtain samples for metallurgical testwork and test new targets outside of the currently defined resources.
- Review and update programme of work applications for drilling.
- Heritage consultation and planning of surveys as required to access areas targeted for drilling.
- Identify strategic partners in research and industry to develop conceptual metallurgical flowsheets to extract maximum value from the resource potential.



#### MINERAL RESOURCE ESTIMATE – MATERIAL INFORMATION SUMMARY

Due to ASX reporting requirements, Viking are required to restate the published Resource calculated by CSA Global for Flinders in 2018. In compliance with listing rule 5.8.1, the following information relates to the reporting of the Canegrass Battery Mineral Project Resource:

In 2018, FMS commissioned mining industry consultants CSA Global Pty Ltd (CSA Global) to review the existing Mineral Resource estimate and prepare documentation in accordance with the JORC Code (2012 Edition). The revised Mineral Resource estimate is presented above in Table 1.

A summary of sampling techniques and data, and estimation and reporting methodologies is contained in JORC Table 1 which is included as an attachment to this ASX release.

The Resource is reported above the 210 m RL, which effectively removes all blocks at a depth greater than 250 m below surface. CSA Global consider that this approach results in a Mineral Resource which appropriately and transparently addresses the "Reasonable Prospects for Eventual Economic Extraction" requirement for Mineral Resources reported under the JORC Code (2012 Edition).

## **Geology and Geological Interpretation**

All interpretations were based on drill holes. Mineralisation comprises magnetite-titanium-vanadium horizons within the Windimurra Complex – a large, differentiated, layered, ultramafic to mafic intrusion within the Murchison Province of the Yilgarn Craton. Eight magnetic horizons were modelled in the Fold Nose area and four magnetic horizons were modelled in the Kinks area. The mineralisation interpretations were based on the  $TiO_2/V_2O_5$  ratio, magnetics and geology.

A plan view of the Fold Nose area mineralisation (coloured by Domain) is shown in Figure 3.

A plan view of the Kinks area mineralisation (coloured by Domain) is shown in Figure 4.

## **Sampling and Sub-Sampling Techniques**

Reverse circulation ("**RC**") drilling was the primary sampling method, with lessor diamond (NQ2 size) drilling. Cone splitters were used for sampling 1 and 2m intervals during RC drilling programmes with the rare 4m composite samples obtained by spear sampling of bags. Diamond core was cut in quarter with a core saw and sampled at 2m intervals. RC recoveries were reported as all very good based on visual estimates but not quantified. The diamond recoveries reported as excellent but not quantified.

Samples were then sorted, dried and weighed at the laboratory. The whole sample was then crushed, and split with a riffle splitter to collect a sub-sample, which was then pulverised using a vibrating pulveriser.



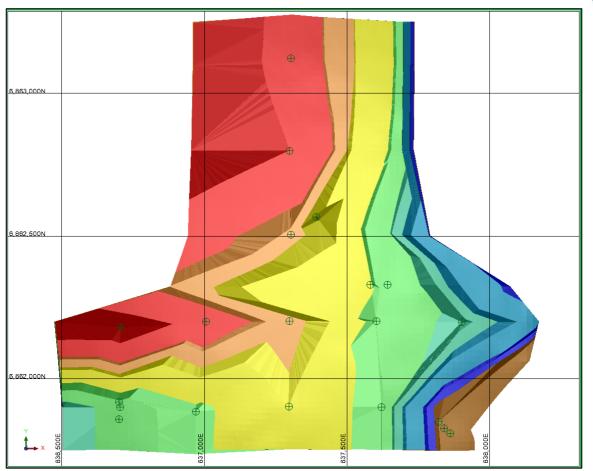


Figure 10; Fold Nose – Wireframe colours by sub-domain number (name): gold-brown=1 (Alpha); blue=2 (Bravo); pale-blue=3 (Charlie); blue-green=4 (Delta); green=5 (Echo); yellow=6 (Foxtrot); peach=7 (Golf); red=8 (Hotel).

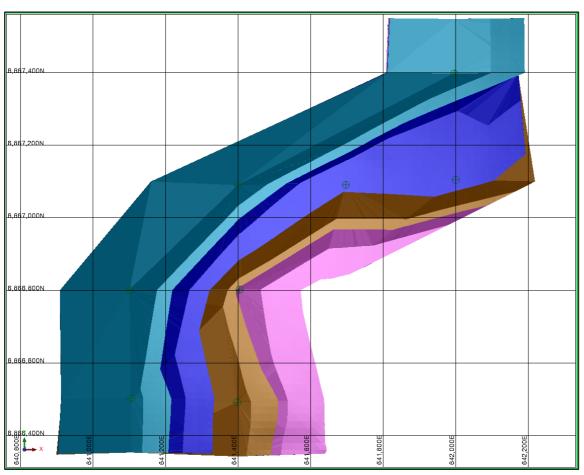


Figure 11; Kinks – Wireframe colours by sub-domain number (name): gold-brown=9 (Alpha); blue=10 (Bravo); pale-blue=11 (Charlie); blue-green=12 (Delta).



## **Drilling Techniques**

Drilling was completed from 2007 through 2008 by Maximus Resources (MNDD and MNRC series) and in 2010 by FMS (FCRC series). Four diamond holes (MNDD0001 to MNDD0004) for 2,126.32m and 59 reverse circulation (RC) holes (MNRC0004 to MNRC0067) for 7,066m were drilled from 2007 through 2008. 39 RC holes (FCRC0001 to FCRC0039) for 8,048m were drilled in 2010.

The Kinks area is informed by eight RC drillholes which were completed by FMS for 1,644 m. All holes are vertical and were sampled at 2m intervals. Drill holes were completed at approximately 300m spacings.

The Fold Nose area is informed by 19 RC drillholes (most FMS holes) and one diamond drill hole (completed by Maximus Resources) for 3,833m. Twelve drill holes are vertical and eight drill holes are inclined at -65° to the south and southeast. Holes were generally sampled at 2m intervals. Minor sampling at 1m and 4m intervals also occurred. Drillholes were completed at approximately 300m spacings.

#### **Classification Criteria**

The Mineral Resource has been classified in accordance with guidelines contained in the JORC Code (2012 Edition). Data quality, data distribution, and the geological and grade continuity at the project were considered prior to forming a judgement on Mineral Resource confidence. Following consideration of these aspects, both the Fold Nose and Kinks Mineral Resources were classified as Inferred. Drillholes are spaced approximately 300m apart in the Mineral Resource area.

#### **Sample Analysis Method**

Samples were submitted to Ultratrace laboratory in Perth for analysis. Samples were cast using a 12:22 flux to form a glass bead then determined by x-ray fluorescence (XRF). Loss on ignition results were determined using a robotic TGA system. Furnaces in the system were set at 425, 650 and  $1000^{\circ}$  C. Samples were analysed by XRF for Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub>, P and V<sub>2</sub>O<sub>5</sub>, in addition to other constituents that weren't estimated. The techniques are considered total.

#### **Estimation Methodology**

Drillhole samples were initially coded by mineralisation domain. Samples were then composited at 2m intervals within each domain prior to statistical analysis and variography.

A 3D block model of the mineralisation was created using Surpac software for each deposit, with 2m composite samples (which corresponds to the dominant sample length) used to interpolate  $V_2O_5$ , Fe, Al<sub>2</sub>O<sub>3</sub>, LOI, P, SiO<sub>2</sub> and TiO<sub>2</sub> grades into blocks using ordinary kriging.

A parent cell size of 75m N by 75m E by 10m RL was used, with sub-celling to 9.375m N by 9.375m E by 5m RL to honour the wireframe boundaries.

The search parameters used for Fold Nose and Kinks are shown in Table 6 and Table 7 respectively. A maximum of 3 samples was allowed per drill hole.



Table 6: Fold Nose Search Parameters

Parameter	Pass 1	Pass 2	Pass 3	Pass 4						
Major-Semi ratio		1.5								
Major-Minor ratio		!	5							
Search Radius	600 m	900 m	900 m	1,500 m						
Minimum Samples	15	15	5	1						
Maximum Samples	25	25	25	25						
Discretisation		5 X by 5	Y by 5 Z							

Table 7; Kinks Search Parameters

Parameter	Pass 1	Pass 2	Pass 3	Pass 4
Major-Semi ratio		1	.5	
Major-Minor ratio		!	5	
Search Radius	600 m	900 m	900 m	1,500 m
Minimum Samples	15	15	5	1
Maximum Samples	25	25	25	25
Discretisation		5 X by 5	Y by 5 Z	

Fixed density values of  $3.1g/cm^3$  and  $3.6g/cm^3$  were applied to fresh material where  $V_2O_5 <= 0.5\%$  and > 0.5% respectively. A fixed density value of  $2.8g/cm^3$  was assigned to oxide material.

#### **Cut-off Grades**

A cut-off grade of 0.5%  $V_2O_5$  has been applied when reporting the Mineral Resource. A 0.5%  $V_2O_5$  cut-off grade is within the range adopted for reporting Mineral Resources at other Australian VTM deposits for planned open cut operations.

#### **Modifying Factors**

Only minor Davis Tube Recovery (DTR) test work has been completed at the Project. Results give some indication that a vanadium iron product could be produced, however significant additional metallurgical test work is required to better understand the marketability of any product which may be produced at the Project.

## **Reasonable Prospects Hurdle**

Clause 20 of the JORC Code (2012 Edition) requires that all reports of Mineral Resources must have reasonable prospects for eventual economic extraction, regardless of the classification of the Mineral Resource.

Although the project is at an early stage or evaluation, the Competent Person considers there are reasonable prospects for eventual economic extraction of mineralisation on the following basis:



- The mineralisation is relatively continuous and laterally extensive. Should exploration prove successful, additional mineralisation could be discovered and a long-term view taken for the asset.
- The higher-grade vanadium mineralisation occurs at relatively shallow depths at the Kinks deposit and the southern end of the Fold Nose deposit, which could be amenable to open pit mining.
- Although only minor DTR test work has been completed, the results give some indication that a vanadium iron product could be produced. Additional metallurgical test work is required.
- A cut-off grade of  $0.5\% \text{ V}_2\text{O}_5$  has been applied when reporting the Mineral Resource. A  $0.5\% \text{ V}_2\text{O}_5$  cut-off grade is within the range adopted for reporting Mineral Resources at other Australian VTM deposits for planned open cut operations.
- All Mineral Resources that are reported lie within 250m of surface.
- Demand for vanadium is likely to increase in the future, particularly given potential battery applications.

## **END**

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

Julian Woodcock Managing Director and CEO **Viking Mines Limited**  For further information, please contact: **Viking Mines Limited**Sarah Wilson - Company Secretary
+61 8 6245 0870

1: ASX Announcement Flinders Mines (ASX:FMS) 30 January 2018 - Canegrass Project Vanadium Mineral Resource and Exploration Update

2: ASX Announcement Bryah Resources (ASX: BYH) 25 May 2022 - 36 Million Tonne Nickel-Copper-Cobalt Mineral Resource at Gabanintha
3: 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

#### **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 - Mineral Resources**

The information in this report that relates to Mineral Resources is based on, and fairly reflects, information compiled by Mr Aaron Meakin, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Meakin is a consultant to Flinders Mines Ltd and Viking Mines Ltd, employed by CSA Global Pty Ltd, independent mining industry consultants. Mr Meakin has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr Meakin consents to the disclosure of the information in this report in the form and context in which it appears.

#### **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'. The Mineral Resources stated in this news release have been previously reported by Flinders Mines Ltd. (ASX:FMS) in a news release dated 30 January 2018 and the appropriate JORC tables in that announcement should be referred to for information relating to the Mineral Resource. The Company confirms that it is not aware of any new information or data that materially affects the information and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original.

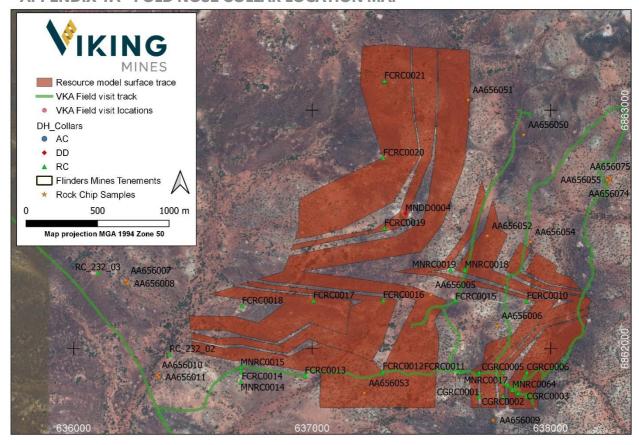


# APPENDIX 1 - SIGNIFICANT DRILLHOLE INTERCEPTS > 0.5% V2O5, CANEGRASS BATTERY MINERALS PROJECT

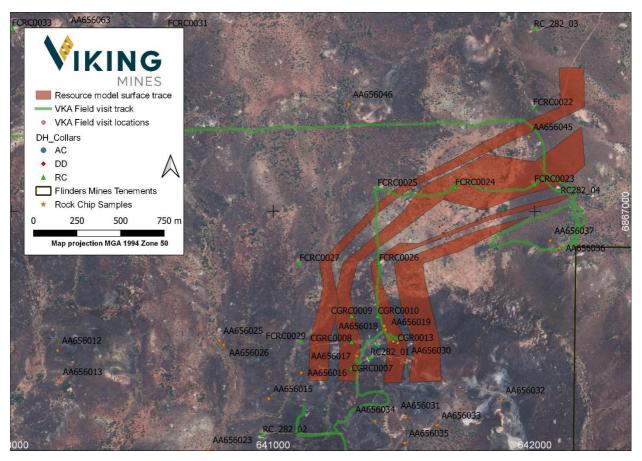
Hole ID	Hole Type	East (m) MGA94	North (m) MGA94	RL	End of Hole (m)	Azi (°)	Dip (°)	Depth From (m)	Length (m)	Cut Off V₂O₅ %	V <sub>2</sub> O <sub>5</sub> %	Fe %	TiO <sub>2</sub> %	SiO <sub>2</sub> %	P %	Ni ppm	Cu ppm	Co ppm
FCRC0010	RC	637901	6862199	454	184	0	-90	104	40	0.5	0.80	36.8	7.7	16.6	0.006	650	661	209
								118	8	0.9	1.00	44.4	10.1	8.3	0.005	700	640	225
FCRC0012	RC	637296	6861903	452	250	0	-90	186	36	0.5	0.71	33.1	6.5	20.7	0.006	607	654	181
FCRC0015	RC	637601	6862202	451	256	0	-90	204	46	0.5	0.67	30.7	6.5	23.0	0.006	578	650	162
FCRC0017	RC	637005	6862201	448	262	0	-90	2	24	0.5	0.52	24.2	6.0	28.9	0.007	344	672	128
FCRC0017	RC							104	18	0.5	0.53	28.0	5.9	24.9	0.004	526	558	167
FCRC0018	RC	636706	6862179	446	220	0	-90	0	10	0.5	0.56	29.0	6.6	26.9	0.007	368	486	146
FCRC0022	RC	641994	6867398	459	220	0	-90	114	16	0.5	0.51	26.1	4.9	28.4	0.019	423	609	159
FCRC0023	RC	641999	6867105	461	200	0	-90	82	18	0.5	0.60	30.9	6.1	23.9	0.009	582	886	181
FCRC0025	RC	641399	6867090	463	256	0	-90	154	30	0.5	0.70	31.7	6.6	21.2	0.007	639	785	176
FCRC0028	RC	641397	6866492	461	178	0	-90	38	26	0.5	0.77	36.9	7.4	18.8	0.005	582	748	223
FCRC0029	RC	641105	6866503	459	190	0	-90	144	28	0.5	0.73	33.7	6.8	20.3	0.007	647	824	187
FCRC0030	RC	640503	6865900	454	238	0	-90	156	66	0.5	0.74	34.4	7.1	19.6	0.007	731	980	202
								182	16	0.9	1.02	45.1	9.8	10.6	0.003	811	913	263
								208	6	0.9	1.15	48.3	6.9	10.2	0.004	937	603	250
MNDD0003	DD	633850	6857818	421	603	180	-75	460	16	0.5	0.55	27.2	6.2	28.1	0.001	450	364	136
MNRC0016	RC	637860	6861810	459	81	127	-60	0	32	0.5	0.92	36.0	8.7	17.7	0.007	n/a	n/a	n/a
								6	18	0.9	1.17	43.6	11.5	10.9	0.007	n/a	n/a	n/a
MNRC0017	RC	637820	6861850	457	81	135	-60	16	20	0.5	0.73	32.1	6.4	22.4	0.007	n/a	n/a	n/a
MNRC0020	RC	649137	6846224	481	82	135	-60	3	26	0.5	0.60	27.0	6.4	26.4	0.012	n/a	n/a	n/a
MNRC0021	RC	649046	6846204	471	82	90	-60	66	13	0.5	0.75	33.5	8.0	20.8	0.010	n/a	n/a	n/a
MNRC0023	RC	649369	6847329	476	80	90	-60	25	15	0.5	0.51	23.2	5.5	30.1	0.010	n/a	n/a	n/a
MNRC0045	RC	634726	6859852	430	124	90	-60	16	12	0.5	0.51	25.4	7.0	27.3	0.004	247	90	163
MNRC0048	RC	635063	6860048	431	192	165	-60.1	72	8	0.5	0.52	26.3	7.5	28.5	0.006	126	91	133
MNRC0050	RC	634495	6857835	425	96	165	-60.9	8	12	0.5	0.50	24.8	7.3	32.3	0.004	110	60	183
MNRC0064	RC	637839	6861827	458	200	122	-60.1	12	24	0.5	0.77	35.7	7.5	19.5	0.002	586	591	212
MNRC0067	RC	634824	6859661	431	102	165	-60	28	8	0.5	0.64	30.8	7.7	23.0	0.004	340	304	135
CGD01	DD	640407	6865415	455	74	180	-60	36	28.0	0.5	0.90	37.1	8.5	n/a	n/a	525	915	n/a
CGD01	DD							36	21.6	0.9	0.98	39.7	9.3	n/a	n/a	549	1021	n/a
CGRC0001	RC	637700	6861800	458	100	142	-60.2	44	26	0.5	0.67	29.6	6.3	24.1	0.004	534	539	145
CGRC0002	RC	637800	6861800	458	66	148	-60.7	22	26	0.5	0.77	34.8	7.3	18.8	0.003	630	755	181
CGRC0003	RC	637900	6861800	460	26	165	-61	0	22	0.5	1.07	42.7	9.9	11.4	0.004	565	1016	202
CGRC0004	RC	637700	6861900	456	100	134	-60.5	54	20	0.5	0.58	25.4	5.0	26.8	0.004	592	678	121
CGRC0005	RC	637800	6861900	456	80	141	-62	30	12	0.5	0.70	29.5	6.0	23.4	0.005	632	635	135
CGRC0008	RC	641300	6866500	460	96	135	-60.6	54	36	0.5	0.78	36.0	7.8	19.2	0.004	592	738	178
CGRC0009	RC	641300	6866600	462	126	145	-60.8	88	32	0.5	0.78	36.2	7.6	18.4	0.003	668	763	176
CGRC0010	RC	641400	6866600	462	108	143	-59.9	60	40	0.5	0.88	39.1	7.4	16.3	0.003	793	801	185
								62	24	0.9	1.00	43.1	8.4	12.7	0.002	896	968	203
PCG02	PERC	640525	6865345	455	70	225	-60	2	20	0.5	1.01	n/a	n/a	n/a	n/a	291	801	102
								6	16	0.9	1.09	n/a	n/a	n/a	n/a	285	839	110
PCG05	RC	640280	6865411	455	46	180	-60	7	8	0.5	0.63	34.5	n/a	n/a	n/a	n/a	n/a	n/a
PCG05	RC							28	15	0.5	0.64	35.5	n/a	n/a	n/a	n/a	n/a	n/a
PCG07	RC	639679	6865348	455	43	180	-58	0	17	0.5	0.71	37.2	6.6	n/a	n/a	n/a	n/a	n/a
PCG08	RC	639778	6865355	455	36	180	-59	4	22	0.5	0.77	36.9	8.2	n/a	n/a	n/a	n/a	n/a
								9	7	0.9	1.16	45.0	12.9	n/a	n/a	n/a	n/a	n/a
RC232_04	RC	637864	6861812	430	60	0	-90	2	24	0.5	0.96	38.6	9.3	15.4	0.003	684	932	220
RC282_01	RC	641371	6866442	455	101	270	-60	9	45	0.5	0.71	32.4	7.1	n/a	0.016	697	1133	152
								24	15	0.9	0.90	38.8	7.9	n/a	0.008	746	1031	158
RC282_04	RC	642099	6867081	430	108	0	-90	62	24	0.5	0.71	34.4	6.8	20.6	0.005	593	728	182
RC282 03	RC	641997	6867698	455	150	120	-65	108	9	0.5	0.58	25.3	5.5	24.2	0.003	397	684	135



## **APPENDIX 1A - FOLD NOSE COLLAR LOCATION MAP**



## **APPENDIX 1B - FOLD NOSE COLLAR LOCATION MAP**





# APPENDIX 2 - ROCK CHIP SAMPLE RESULTS, CANEGRASS BATTERY MINERALS PROJECT

Sample Number	Sample Description	East (m) MGA94	North (m) MGA 94	V2O5 %
AA656070	Outcrop (Oxide)	647305	6865515	1.38
AA656055	Outcrop (Oxide)	638238	6862707	0.48
AA656064	Outcrop (Oxide)	640900	6868470	0.5
AA656071	Outcrop (Oxide)	647309	6865480	1.19
AA656044	Outcrop (Oxide)	645203	6867696	0.77
AA656049	Outcrop (Oxide)	645280	6867883	0.65
AA656015	Outcrop (Oxide)	640983	6866283	1.57
AA656043	Outcrop (Oxide)	645155	6867619	1.31
AA656040	Outcrop (Oxide)	645126	6867003	0.33
AA656038	Outcrop (Oxide)	644822	6866731	0.62
AA656041	Outcrop (Oxide)	645328	6867166	0.62
AA656042	Outcrop (Oxide)	645326	6867149	0.41
AA656033	Outcrop (Oxide)	641627	6866182	1.31
AA656031	Outcrop (Oxide)	641507	6866213	1.37
AA656030	Outcrop (Oxide)	641512	6866430	1.41
AA656032	Outcrop (Oxide)	641872	6866278	1.17
AA656017	Outcrop (Oxide)	641320	6866446	1.08
AA656016	Outcrop (Oxide)	641107	6866382	1.31
AA656035	Outcrop (Oxide)	641503	6866113	1.12
AA656034	Outcrop (Oxide)	641390	6866197	1.37
AA656010	Outcrop (Oxide)	636351	6861889	1.19
AA656037	Outcrop (Oxide)	642059	6866888	1.26
AA656074	Outcrop (Oxide)	638244	6862700	1.7
AA656075	Outcrop (Oxide)	638249	6862714	1.5
AA656018	Outcrop (Oxide)	641424	6866561	1.15
AA656019	Outcrop (Oxide)	641429	6866547	1.45
AA656036	Outcrop (Oxide)	642095	6866859	1.12
AA656046	Outcrop (Oxide)	641289	6867410	1.13
AA656022	Outcrop (Oxide)	640541	6865345	1.43
AA656014	Outcrop (Oxide)	639495	6865367	1.45
AA656020	Outcrop (Oxide)	640508	6865338	1.48
AA656021 AA656028	Outcrop (Oxide)	640526 638653	6865341 6864755	1.55
	Outcrop (Oxide)			
AA656051 AA656076	Outcrop (Oxide)	637654 639512	6863043 6865593	1.07 1.5
AA656076 AA656027	Outcrop (Oxide)	639512	6865593	1.5
AA656027	Outcrop (Oxide) Outcrop (Oxide)	634388	6861184	0.25
AA656072	Outcrop (Oxide)	643672	6871285	0.23
AA656072 AA656061	Outcrop (Oxide)	635117	6861197	0.00
AA656061	Outcrop (Oxide)	635117	6861190	0.14
AA656045	Outcrop (Oxide)	641977	6867286	0.35
AA656048	Outcrop (Oxide)	641768	6868266	0.81
AA656073	Outcrop (Oxide)	643677	6871264	0.86
AA656009	Outcrop (Oxide)	637759	6861699	0.63
AA656057	Outcrop (Oxide)	636058	6862678	0.56
AA6560037	Outcrop (Oxide)	635507	6862921	0.61
AA656007	Outcrop (Oxide)	636220	6862285	0.43
/				
AA656008	Outcrop (Oxide)	636226	6862273	0.38

Sample Number	Sample Description	East (m) MGA94	North (m) MGA 94	V2O5 %
AA656059	Outcrop (Oxide)	635355	6861266	0.12
AA656002	Outcrop (Oxide)	634626	6862458	0.05
AA656001	Outcrop (Oxide)	634886	6862224	0.06
AA656052	Outcrop (Oxide)	637735	6862472	0.84
AA656054	Outcrop (Oxide)	637916	6862447	0.67
AA656029	Outcrop (Oxide)	639152	6865775	0.61
AA656050	Outcrop (Oxide)	637887	6862897	0.77
AA656053	Outcrop (Oxide)	637218	6861813	0.65
AA656011	Outcrop (Oxide)	636358	6861880	0.02
AA656005	Outcrop (Oxide)	637497	6862225	0.48
AA656006	Outcrop (Oxide)	637776	6862095	0.63
AA656026	Outcrop (Oxide)	640810	6866489	0.9
AA656023	Outcrop (Oxide)	640752	6866087	0.87
AA656039	Outcrop (Oxide)	644812	6866720	0.62
AA656025	Outcrop (Oxide)	640793	6866506	0.68
AA656013	Outcrop (Oxide)	640179	6866348	0.59
AA656063	Outcrop (Oxide)	640210	6867695	0.47
AA656024	Outcrop (Oxide)	640742	6866067	0.89
AA656012	Outcrop (Oxide)	640176	6866468	0.28
CGR0001	Outcrop (Oxide)	641060	6865200	0.23
CGR0002	Outcrop (Oxide)	641071	6865204	0.16
CGR0003	Outcrop (Oxide)	641091	6865209	0.14
CGR0004	Outcrop (Oxide)	641110	6865197	0.10
CGR0005	Outcrop (Oxide)	640602	6865370	1.22
CGR0006	Outcrop (Oxide)	638549	6864625	1.14
CGR0007	Outcrop (Oxide)	637320	6864600	0.08
CGR0008	Outcrop (Oxide)	637320	6864600	0.16
CGR0009	Outcrop (Oxide)	636861	6864732	0.19
CGR0010	Outcrop (Oxide)	636851	6864675	0.04
CGR0011	Outcrop (Oxide)	636873	6864721	0.05
CGR0012	Outcrop (Oxide)	636863	6864725	1.03
CGR0013	Outcrop (Oxide)	641476	6866496	1.17
CGR0014	Outcrop (Oxide)	641459	6866502	0.67
CGR0015	Outcrop (Oxide)	636049	6862789	0.21
CGR0016	Outcrop (Oxide)	636050	6862808	0.21
CGR0017	Outcrop (Oxide)	636052	6862810	0.20
CGR0018	Outcrop (Oxide)	636056	6862819	0.32
CGR0019	Outcrop (Oxide)	636050	6862802	0.22
CGR0020	Outcrop (Oxide)	638683	6864891	0.01
CGR0021	Outcrop (Oxide)	638650	6864891	0.01
CGR0022	Outcrop (Oxide)	635481	6862342	0.00
CGR0023	Outcrop (Oxide)	639047	6867249	0.00
CGR0024	Outcrop (Oxide)	639067	6867792	0.00
CGR0025	Outcrop (Oxide)	639416	6867845	0.01
CGR0026	Outcrop (Oxide)	638959	6867114	0.00
CGR0027 CGR0028	Outcrop (Oxide)	638769 638672	6867784 6866900	0.00
CGR0028	Outcrop (Oxide)	638672	6866878	0.00
CGRUUZ9	Outcrop (Oxide)	030/19	00000/8	0.01



## **APPENDIX 3 - JORC CODE, 2012 EDITION - TABLE 1**

**JORC Table 1, Section 1 - Sampling Techniques and Data** 

Criteria	JORC Code explanation	Commentary
	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.	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.  Summary Flinders Mines Exploration Drilling and Sampling  The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that RC and diamond samples were collected 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 Flinders Mines were collected from outcrop identified during geological mapping. The historical reports do not detail how the samples were selected or taken.
Sampling	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	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 -  Summary of Flinders Mines RC Exploration Drilling and Sampling  The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that no measures were taken to ensure sample representivity. No calibration of any measurement tools were required.
techniques	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	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. 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 Flinders Mines RC Exploration Drilling and Sampling  Prior to 2017 before CSA Global commenced managing the exploration for Flinders Mines, the JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that 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, the JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that 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.  Mineral Resource  The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that samples used in the Mineral Resource estimate were mai



Criteria	JORC Code explanation	Commentary
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.).	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).  Summary of Flinders Mines RC Exploration Drilling Prior to 2017 before CSA Global commenced managing the exploration for Flinders Mines, the JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that drilling was completed by RC percussion with a face sampling bit.  Subsequent to 2017, when CSA Global commenced managing the exploration for Flinders Mines, the JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that RCP and Air core drilling was completed.  Mineral Resource The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that RC and diamond (NQ2) drilling were completed to support the preparation of the Mineral Resource estimate. The details of the RC drilling technique are not known. The diamond core was drilled standard tube and the core was not orientated.
	Method of recording and assessing core and chip sample recoveries and results assessed.	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 Flinders Mines RC Exploration Drilling and Sampling Prior to 2017 before CSA Global commenced managing the exploration for Flinders Mines, the JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that 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 JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that 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.  Mineral Resource The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that drill core was logged for core recovery. Full diamond logs are available, and the recoveries were excellent, >95%. Recovery was reported for RC as very high but not quantified. The RC estimates were visual.
Drill sample recovery	Measures taken to maximise sample recovery and ensure representative nature of the samples.	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 Flinders Mines RC Exploration Drilling and Sampling  Subsequent to 2017, when CSA Global commenced managing the exploration for Flinders Mines, the JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that face sampling hammers and an external booster were used to maximise sample recovery.  Mineral Resource  The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that CSA Global has not been able to identify procedures that were in place during the drilling programmes to maximise sample recovery, such as the use of face sampling hammers or external boosters.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship between reported grade and drilling recovery has been identified or determined.



Criteria	JORC Code explanation	Commentary
	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.	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 Flinders Mines RC Exploration Drilling and Sampling The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that 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. The Competent Person considers the logging methods appropriate for this style of mineralisation and suitable to support appropriate Mineral Resource estimation.
Logging	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Historical Information Lithological logging is qualitative in nature. No core photographs have been identified.  Summary of Flinders Mines RC Exploration Drilling and Sampling The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that logging is generally qualitative in nature and core has been photographed, both wet and dry. All RC and AC sample intervals were collected in chip trays and are stored in the Flinders Mines storage facility.  The Competent Person considers the logging methods appropriate for this style of mineralisation.
	The total length and percentage of the relevant intersections 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 Flinders Mines RC Exploration Drilling and Sampling The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that 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.	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.  Summary of Flinders Mines RC Exploration Drilling and Sampling The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that where diamond core was collected and sampled, the core was quartered using a core saw.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	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 Flinders Mines.  Summary of Flinders Mines RC Exploration Drilling and Sampling The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that 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.  Mineral Resource The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that RC samples were generally collected using a cone splitter at 2m intervals. Minor 1m and 4m sampling also occurred. Samples were reported as both wet and dry however details are not readily available.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	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.



Criteria	JORC Code explanation	Commentary
		Summary of Flinders Mines RC Exploration Drilling and Sampling  The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that RC samples were cone split and composited into bags at 3m intervals and then sent to ALS Perth for analysis. Samples were riffle split to 250g and then pulverised. Analysis was by inductively couple plasma-atomic emission spectroscopy (ICP-AES) and couple plasma-mass spectroscopy (ICP-MS) (48 element – MEMS61 method). Fire assay was used for Au, Pt and Pd, with ICP-AES finish. The Competent Person considers that the sub sampling techniques and sample preparation for Exploration Results are appropriate for reporting Exploration results.  Mineral Resource  The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that RC samples were cone split into bags at 2m intervals. Samples were submitted to Ultratrace laboratory in Perth for analysis. Samples were then sorted and dried and weighed at the laboratory. The whole sample was then crushed, and then split with a riffle splitter to collect a sub-sample which was then pulverised using a vibrating pulveriser. The pulp was then submitted for XRF analysis.  The Competent Person considers that the sub sampling techniques and sample preparation are appropriate for the Mineral Resource reporting. This applies to all activity completed by Flinders Mines.
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	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 Flinders Mines RC Exploration Drilling and Sampling The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report collected subsequent to 2017 state that there were no fails for any of the elements indicating a reasonable to good control over the laboratory cleaning methods used whilst processing the samples and sampling practices.  Mineral Resource The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that subsampling is performed during the preparation stage according to the laboratories internal protocol.
	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.	Historical Information  No blanks, CRM's or standards have been identified as being submitted in the reports reviewed associated with the historical data and the Competent Person can not verify if the results are representative of the in-situ material collected.  Summary of Flinders Mines RC Exploration Drilling and Sampling Drilling prior to 2017 was primarily focussed on the Mineral Resource areas and the comments made in the JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report re stated in the Mineral Resources section below. 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 and the JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that analysis of the QC data indicates reasonable to good control of the laboratory cleaning methods used whilst processing the samples and the sampling practices and the CP considers that the sub-sampling techniques and sample preparation was appropriate for reporting Exploration Results.  Mineral Resource  The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that 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.
	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.  Mineral Resource



Criteria	JORC Code explanation	Commentary	
Quality of assay data and laboratory tests	JONE Code explanation	The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that sample sizes are considered appropriate to the grain size of the material being sampled.  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.	
	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Summary of Flinders Mines RC Exploration Drilling and Sampling  Date prior to 2017 - The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that 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 – The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that samples were sent to Wangarra Perth for preparation and analysis. Samples were riffle split to 250g then pulverised to a nominal 85% passing 75 microns.  Depending on target commodity, the following analysis methods were employed: The Vanadium and Gold samples both underwent analysis by ME-GRA5 (H20 LOI) and MEX-XRF21u (iron ore by XRF fusion).  The gold samples weer 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.  Mineral Resource The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that samples were analysed by XRF for Fe, SiO2, Al2O3, TiO2, P and V2O5, in addition to other constituents that were not estimated. The techniques are considered total and considered appropriate for the style of mineralisation. Loss on ignition results were determined using a robotic TGA system. Furnaces in the system were set at 425, 650 and 1000°C. The performance of the laboratory is unknown.  A CSA Global review of the ALS Perth QAQC analyses did not reveal any concerns with the performance of the laboratory.	
	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.	No data has been reported of this type.	
	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.	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 Flinders Mines RC Exploration Drilling and Sampling  The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that (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 considers 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 JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that the CP considers that a reasonable level of confidence can be placed in the accuracy and precision of the assay data collected.	



Criteria	JORC Code explanation	Commentary
		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.  Mineral Resources The JORC Table 1 reported in Flinders Mines ASX releases relating to data referred to in this report state that field duplicate samples were taken by FMS to monitor sample precision. No field duplicates were found for earlier holes completed by Maximus Resources.  Certified reference materials (CRM's) were inserted at a rate of 45 by FMS, however there was no certified vanadium CRM. CRM's were sourced from Geostats Pty Ltd (GIOP-7, GIOP-31 and GIOP-33) which are iron ore standards. No CRM results were found for earlier holes completed by Maximus Resources.  Given all available QC results, CSA Global considers that a reasonable level of confidence can be placed in the accuracy and precision of the non-vanadium analytical data used in the preparation of the Mineral Resource estimate for the FMS samples. Vanadium CRM's need to be sourced in future drilling programmes to increase confidence in the accuracy and prevision of this data. Field duplicate data collected by FMS in 2010 gives confidence in sampling procedures in place at that time.
	The verification of significant intersections by either independent or alternative company personnel.	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 Flinders Mines RC Exploration Drilling and Sampling  The JORC Table 1 reported in Flinders mines ASX releases relating to data referred to in this report state that 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.  The Competent Person considers the process described in the reports produced by CSA Global and provided by Flinders Mines as appropriate.
Verification of	The use of twinned holes.	No twin drilling has been identified in the database provided by Flinders Mines.
sampling and assaying	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Historical Information  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.  Summary of Flinders Mines RC Exploration Drilling and Sampling  The JORC Table 1 reported in Flinders mines ASX releases relating to data referred to in this report state that 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.  Mineral Resource



Criteria	JORC Code explanation	Commentary		
		The JORC Table 1 reported in Flinders mines ASX releases relating to data referred to in this report state that logging was carried out using templates developed for the project. The data within the database appeared to be clean, however, and free from any obvious validation errors.		
		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.		
	Discuss any adjustment to assay data.	Element Analysis Conversion to % Multiply element % to attain		
		V         V ppm / 10,000         V% X 1.7852 = V205%           Ti         Ti ppm / 10,000         Tl% X 1.6681 = TiO2%		
		Si Si ppm / 10,000 Si% X 2.1392 = SiO2%		
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.	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 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.  Mineral Resource  The JORC Table 1 reported in Flinders mines ASX releases relating to data referred to in this report state that Collars have been surveyed by a handheld GPS instrument for the FMS holes. There is a degree of uncertainty associated with this data, however at this level of resource confidence any survey error is unlikely material. Any error is likely +/- 10m.  Downhole deviations have generally not been measured given most holes are vertical. Inclined holes have used electronic multi-shot instruments.		
	Specification of the grid system used.	The adopted grid system is MGA94_50 and all data are reported in these coordinates.		
	Quality and adequacy of topographic control.	Historical Drilling and Flinders Mines RC Exploration Drilling The JORC Table 1 reported in Flinders mines ASX releases relating to data referred to in this report state that there has bene no topographical control established. Given the terrain is relatively flat, the Competent Person does not consider this a material risk.  Mineral Resource The JORC Table 1 reported in Flinders mines ASX releases relating to data referred to in this report state that 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.  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  Mineral Resource		



Criteria	JORC Code explanation	Commentary
		The JORC Table 1 reported in Flinders mines ASX releases relating to data referred to in this report state that drill spacing is approximately 300m x 300m in the mineral resource area.
	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.	Mineral Resource The JORC Table 1 reported in Flinders mines ASX releases relating to data referred to in this report state that the Competent Person believes the mineralised domains have sufficient geological and grade continuity to support the classification applied to the Mineral Resource given the current drill pattern.
	Whether sample compositing has been applied.	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 Flinders Mines RC Exploration Drilling and Sampling  Recent drilling occurring since 2017 is reported to have had no sample compositing applied.  Mineral Resource  The JORC Table 1 reported in Flinders mines ASX releases relating to data referred to in this report state that samples were composited to 2m prior to grade interpolation. This was considered appropriate given that most of the samples have been collected over this interval. This allowed the natural variability of the sample data to be maintained prior to grade interpolation.
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.	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.  Mineral Resource The JORC Table 1 reported in Flinders mines ASX releases relating to data referred to in this report state that most holes are vertical. The orientation of the mineralisation is variable for both deposits (Fold Nose & Kinks) given the folded nature of the mineralisation. The holes generally intersect the mineralisation at a high angle.
	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.	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 Flinders Mines RC Exploration Drilling and Sampling The JORC Table 1 reported in Flinders mines ASX releases relating to data referred to in this report state that 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.	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 Flinders Mines RC Exploration Drilling and Sampling The JORC Table 1 reported in Flinders mines ASX releases relating to data referred to in this report state that a geologist or field assistant 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.	Historical Information  No external audit of sampling techniques and data could be sourced from the documents sourced off WAMEX by Viking Mines.  Summary of 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
		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:  Tenement Status Holder Area (Blocks)
		E58/232-I LIVE Flinders Canegrass Pty Ltd 5 E58/236-I LIVE Flinders Canegrass Pty Ltd 4 E58/282-I LIVE Flinders Canegrass Pty Ltd 8
	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint	E58/520 LIVE Flinders Canegrass Pty Ltd 1 E58/521 LIVE Flinders Canegrass Pty Ltd 5
Mineral tenement and land tenure status	ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	E58/522 LIVE Flinders Canegrass Pty Ltd 8  The Fold Nose Mineral Resource is located on tenement E58/232-I and the Kinks Mineral Resource is 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. 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.  The tenements are held in good standing by Flinders Canegrass Pty. Ltd., a wholly owned subsidiary of Flinders Mines Ltd. There
	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.	are no fatal flaws or impediments preventing the operation of the exploration licences. Extensions of term are pending for tenements E58/232-I, E58/520, E58/521 and E58/522. The Competent Person is not aware of any reason why these extensions of term will not be granted, but this remains a decision by the Department of Mines, Industry, Regulation and Safety (DMIRS).
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Based on historical data searches completed to date by Viking, the Canegrass Battery Minerals Project exploration history for vanadium magnetite deposits dates back primarily to 1977 when WMC commenced exploration in the area. Exploration was completed through to 1984 and over this time they undertook mapping, rock chip sampling, soil sampling, geophysics (magnetics and induced polarisation) surveys, percussion drilling and diamond drilling. No resources were defined, but high grade Vanadium mineralisation was discovered as part of the exploration programme.  Viking have not completed searches for exploration data for the period 1984 to 2011 when Flinders Mines acquired the project and this work is ongoing.
	Tissue Treasgrient and appraisal of exploration by other parties.	Previous JORC table reports compiled by Flinders state the following:  The previous exploration across the Canegrass Project conducted by Flinders, and previous companies previously associated with the tenements such as Apex Minerals, Falconbridge Limited and Maximus Resources is significant, dating back to at least 2003.  Activities primarily concentrated on four key commodity groupings:  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;



Criteria	JORC Code explanation	Commentary
		<ul> <li>Fe-Ti-V bearing internal layers within the WIC;</li> <li>Au hosted in later fault structures that cross cut the WIC and offset the WIC internal geology.</li> </ul>
		Flinders Mines have also provided detailed exploration history since 2017 in their most recent announcement dated 10 June 2022 – Canegrass Project Exploration Update. Further information can be obtained by reading this release.
		Regional Geology 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.
Geology	Deposit type, geological setting and style of mineralisation	Deposit Geology Kinks & Fold Nose (30 January 2018 Canegrass Vanadium Mineral Resource Estimate & Exploration Update Release by Flinders Mines)
		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.
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.	A summary of the relevant drillhole information has been included in the body of the report with a table of DH collars and significant intersections reported in Appendix 1 with all drill hole details.
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.	All reported composited intersections are calculated using weighted averages by length of the samples in the intersection and no high grade top-cuts were applied to the reported exploration results.  V2O5 Reported Results  Exploration drilling results contained in this release have been reported at a nominal 0.5% V2O5 cut-off with a maximum of 6m internal waste (below 0.5% cut-off) and a minimum length of 8m and are presented in Appendix 1. Selected included intersections at a higher grade reported above a 0.9% V2O5 cut-off with a maximum of 2m internal waste (below 0.9% cut-off) and a minimum length of 6m.  Rock chip and soil samples are reported with the value received from assay at the grade received and no cut-off is applied.  No metal equivalents have been reported.
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	All reported intercepts are downhole lengths and the true width of mineralisation is not known. However, given the interpreted shallow dipping nature of mineralisation observed at the Fold Nose and Kinks deposits and many drillholes being vertical in



Criteria	JORC Code explanation	Commentary
mineralisation widths and intercept lengths	<ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	nature, the downhole length is interpreted to be close to true thickness due to the high intersection angles between the drillhole and the mineralisation.
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	All appropriate maps and plans and sections are included in the body of the report. A significant discovery is not being reported, however drillholes referred to in this report are highlighted on the maps with collar locations.
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.	All appropriate information is included in the report. References to previous releases used to provide the information in this report have been made and those respective releases provide the disclosure of the drilling results. Cross sections are provided for FCRC0030 and CGD-01. Data table of results for remaining holes being reported are included in this report in Appendix 1 if not made publicly available previously.
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	No other substantial exploration data is considered meaningful or material in making this announcement. All data is either publicly available through WAMEX, has been released previously by previous owners of the Project or is disclosed in the body of this report. The CP draws the reader attention to the limited metallurgical testwork results reported and notes the limited work completed in its nature and the small sample size collected. As noted in the report, the work is preliminary in nature and much more extensive metallurgical testwork is required.
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.	Future work programme and areas for potential extensions of mineralisation are detailed in the body of this report with diagrams detailing exploration target areas.  The CP is of the opinion that no additional information for Further Work needs to be reported.

## **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.	Detail has not been provided to CSA Global.
	Data validation procedures used.	Numerous checks were completed by CSA Global on the data. Downhole survey depths were checked to make sure they did not exceed the hole depth, hole dips were checked that they fell between 0 and –90, sample intervals were checked to ensure they did not extend beyond the hole depth defined in the collar table, and assay and survey information were checked for duplicate records. No material validation errors were detected.
		All holes were visually reviewed in Surpac to ensure hole paths were sensible.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person has not completed a site visit given that no drilling is currently taking place and limited knowledge would have been gained.
	If no site visits have been undertaken indicate why this is the case.	Not applicable.





Criteria	JORC Code explanation	Commentary
Geological interpretatio	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	A moderate confidence is placed in the interpretation of the mineral deposit.
n	Nature of the data used and of any assumptions made.	All interpretations were based on drill holes. TiO2/V2O5 ratios, geological logging and magnetic signatures.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Alternative interpretations could potentially materially impact on the Mineral Resource estimate. This is reflected in the classification of the Mineral Resource.
	The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	Geological logging and geochemistry has been used to guide mineralisation interpretations. Continuity of mineralisation appears reasonable. The mineralisation is limited to the interpreted gabbro unit.
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.	The Fold Nose deposit covers a strike length of 1.9 km and a dip extent of 1.5 km. The kinks deposit covers a strike length of 1.8 km and a dip extent of 0.8 km.
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	A Mineral Resource estimate has been completed for the Fold Nose and Kinks deposits.  Mineralisation domains were modelled at each deposit, and hard boundaries were placed between them for estimation (only samples within each domain were used to inform interpolation).
techniques	points. If a computer assisted estimation method was chosen include a description of computer software and parameters	No top cuts were applied following statistical analysis given the low variability of the data. A 2 m composite length was chosen to regularise the data prior to variography and grade interpolation given this was the dominant sample interval.
	used.	Variography was completed for the main Fold Nose areas only. A two-structure spherical model was adopted for variogram modelling.  A 3D block model of the mineralisation was created using Surpac software for each deposit, with 2 m composite samples used to interpolate grades into blocks using ordinary kriging.
		A four-pass search ellipse strategy was adopted whereby search ellipses were progressively increased if search criteria could not select sufficient data for the block estimate.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	To the best of CSA Global's knowledge, no previous Mineral Resource estimates have been made. This Mineral Resource estimate was originally publicly released in accordance with the JORC Code (2004 Edition) in 2011. CSA Global has prepared documentation to enable the Mineral Resource to be reported in accordance with the JORC Code (2012 Edition).
	The assumptions made regarding recovery of by-products.	Vanadium is considered the primary economic element of interest. Fe grades are reported based on the assumption that Fe could also be sold as part of the same product.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	P, SiO2 and Al2O3 have been estimated, but only whole rock concentrations.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The block size chosen represented approximately one quarter of the average drill spacing, and the search ellipse was varied to reflect the geometry of each deposit. A parent cell size of 75 m N by 75 m E by 10 m RL was used, with sub-celling to 9.375 m N by 9.375 m E by 1 m RL to honour the wireframe boundaries.
	Any assumptions behind modelling of selective mining units.	No assumptions were made regarding selective mining units.
	Any assumptions about correlation between variables	No assumptions have been made regarding correlation between variables.
	Description of how the geological interpretation was used to control the resource estimates.	All interpretations were based on drill hole grades and logging. In particular, TiO2/V2O5 ratios, geological logging and magnetic signatures were used to discern several magmatic units which were used to constrain grade interpolation.
	Discussion of basis for using or not using grade cutting or capping.	No grade cuts were applied given the low variability of the data.



Criteria	JORC Code explanation	Commentary
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Drillhole grades were initially visually compared with cell model grades. Domain drill hole and block model statistics were then compared. Swath plots were also created to compare drillhole grades with block model grades for easting, northing and elevation slices throughout the deposit.
		The block model reflected the tenor of the grades in the drill hole samples both globally and locally.
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 0.5% V2O5 has been applied when reporting the Mineral Resource.  The 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.	No assumptions regarding mining method have been made. The large shallow nature of the mineralisation means the deposit lends itself to open pit mining.
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.	No assumptions regarding metallurgy have been made. Preliminary metallurgical test work has indicated production of a magnetite concentrate is possible with higher grades that the current Mineral Resource implies. Metallurgical test work is ongoing.
Environment al 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.
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 is based on determinations made using the water displacement method. 68 density measurements were taken from drill core in 2008.



Criteria	JORC Code explanation	Commentary
	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.	Bulk density was assigned to the block model as follows:  • Fresh 3.6 g/cm3 (V2O5 > 0.5%)  • Fresh 3.1 g/cm3 (V2O5 <= 0.5%)  • Oxide 2.8 g/cm3
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 appropriately reflects the Competent Person's views of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The current model has not been audited by an independent third party but has been subject to CSA Global's internal peer review processes.
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 Mineral Resource accuracy is communicated through the classification assigned to this Mineral Resource.  The Mineral Resource estimate has been classified in accordance with the JORC Code, 2012 Edition using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table.
	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.