

ASX ANNOUNCEMENT

30 January 2018

Canegrass Project Vanadium Mineral Resource Estimate and Exploration Update

Highlights

- New Total Inferred Mineral Resource 79 Mt @ 0.64% V₂O₅, 6.0% TiO₂ and 29.7% Fe
- All Mineral Resources reported within 250 m of surface
- Thick vanadium rich zone intersected in recent drill hole close to surface
 - RC282-01: 51 m @ 0.72% V₂O₅ from 21 m downhole
- Evaluation of the lateral extents of the Vanadium Titanium Magnetite (VTM) Mineral Resource is ongoing with an expectation to increase the Mineral Resource
- Exploration to focus on identifying and delineating higher-grade VTM mineralisation

Mineral Resource Update

Flinders Mines Limited (ASX:FMS) is pleased to advise that the Canegrass Project Vanadium Mineral Resource¹ estimate has been re-assessed and reported in accordance with the JORC Code (2012 Edition)².

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 in Table 1.

Table 1: Canegrass Project Vanadium Mineral Resource estimate, 0.5% V₂O₅ cut-off grade, >210 m RL

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

* Due to the effects of rounding, the total may not represent the sum of all components

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.

¹ As defined in the JORC Code (2012 Edition) (see below).

² Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code (2012 Edition). Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

The Canegrass Vanadium Mineral Resource estimate was previously reported in accordance with the 2004 Edition of the JORC Code, and totalled 107 Mt @ 0.62% V₂O₅, 5.83% TiO₂ and 28.98% Fe. The difference in tonnage is due to CSA Global reporting the existing block model above 210 m RL, which effectively removed all blocks at a depth greater than 250 m below surface. FMS and CSA Global consider 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).

Exploration Update

FMS is also pleased to announce the results of an exploration program that was completed at the Canegrass Project in November 2017. The program comprised 2 reverse circulation (RC) drill holes and 31 air core holes which aimed to test various soil and rock chip anomalies.

The intersection of Vanadium Titanium Magnetite (VTM) mineralisation within drill hole RC282-01 is of interest and compares favourably with the updated (JORC 2012) Canegrass Vanadium Mineral Resource estimate. The mineralisation graded 0.72% V₂O₅ 7.29% TiO₂ and 32.8% Fe over a 51 m interval from 21 m downhole.

FMS Executive Director David McAdam said *“Flinders Mines is pleased to announce that the new Canegrass Vanadium Mineral Resource estimate has been reported in accordance with the JORC Code (2012 Edition). Furthermore, the recent exploration results confirm that vanadium remains the primary economic commodity of interest in the Canegrass Project.”*

Ongoing exploration work by FMS is planned to evaluate the lateral extents of the VTM Mineral Resource which remain open. The regional magnetics suggest strike extensions of several kilometres. The work will also focus on identifying and delineating any higher-grade VTM mineralisation, of similar grade to that intersected in RC282-01 throughout the Project’s tenure.

The Canegrass Project covers an area of approximately 700 km² and hosts laterally extensive VTM bearing horizons within the Windimurra Igneous Complex.

An image showing the Canegrass Project location is presented in Figure 1.

The Mineral Resource extent and the location of drill holes completed are shown in Figure 2.

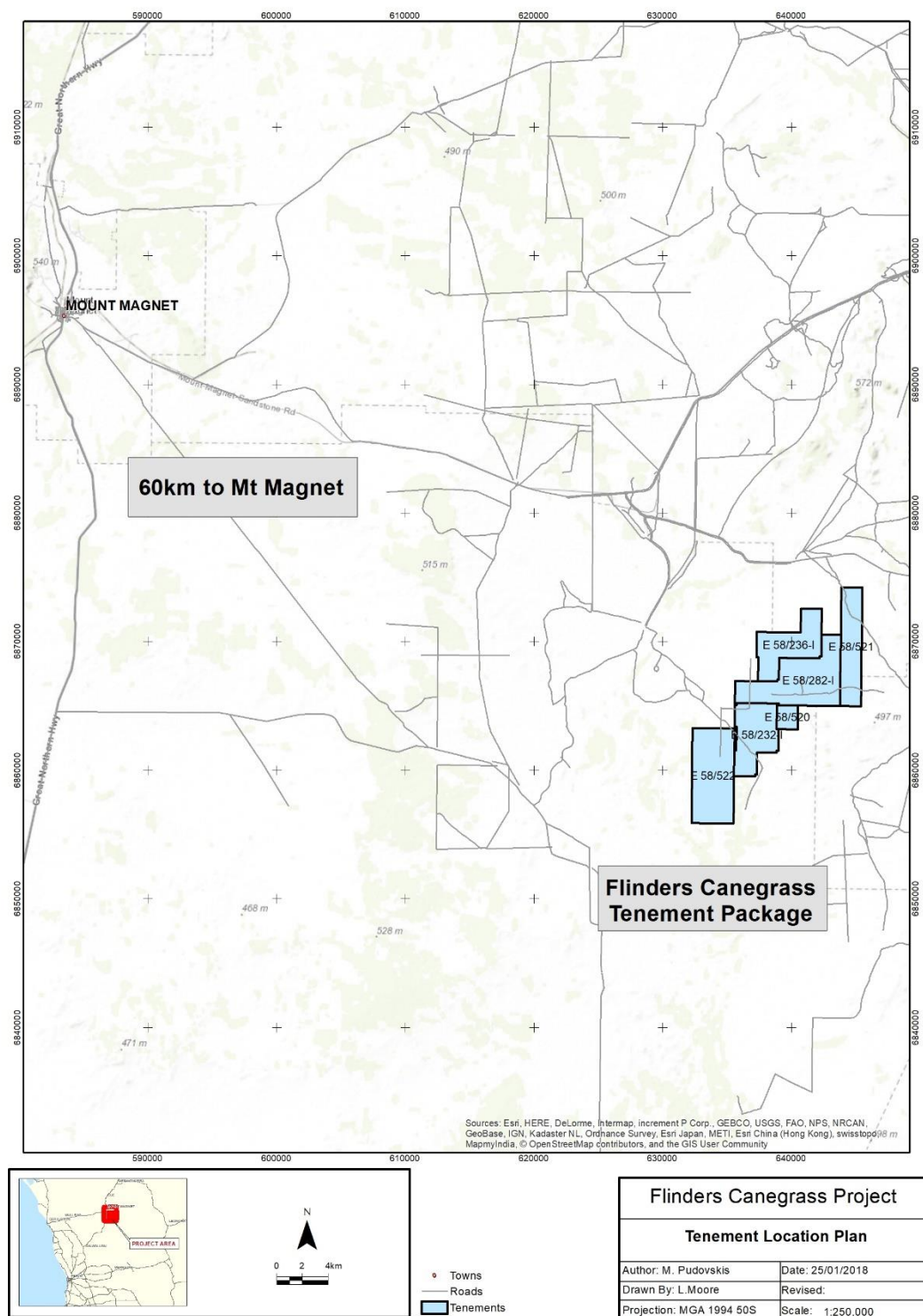


Figure 1: Canegrass Project Location Plan

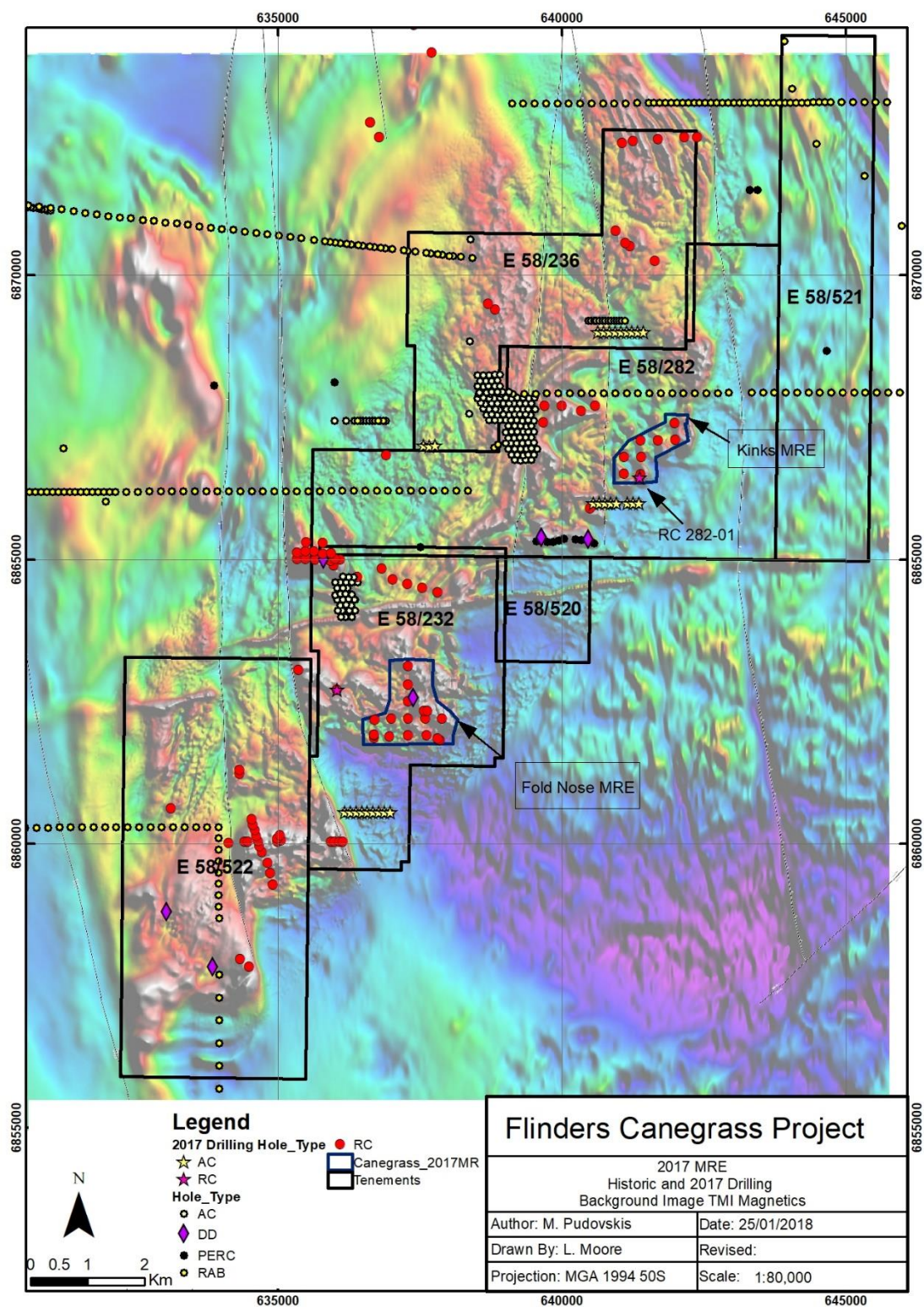


Figure 2: Canegrass Mineral Resource extent showing location of hole RC282-1.

Mineral Resource Estimate — Material Information Summary

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 $\text{TiO}_2/\text{V}_2\text{O}_5$ ratio, magnetics and geology.

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

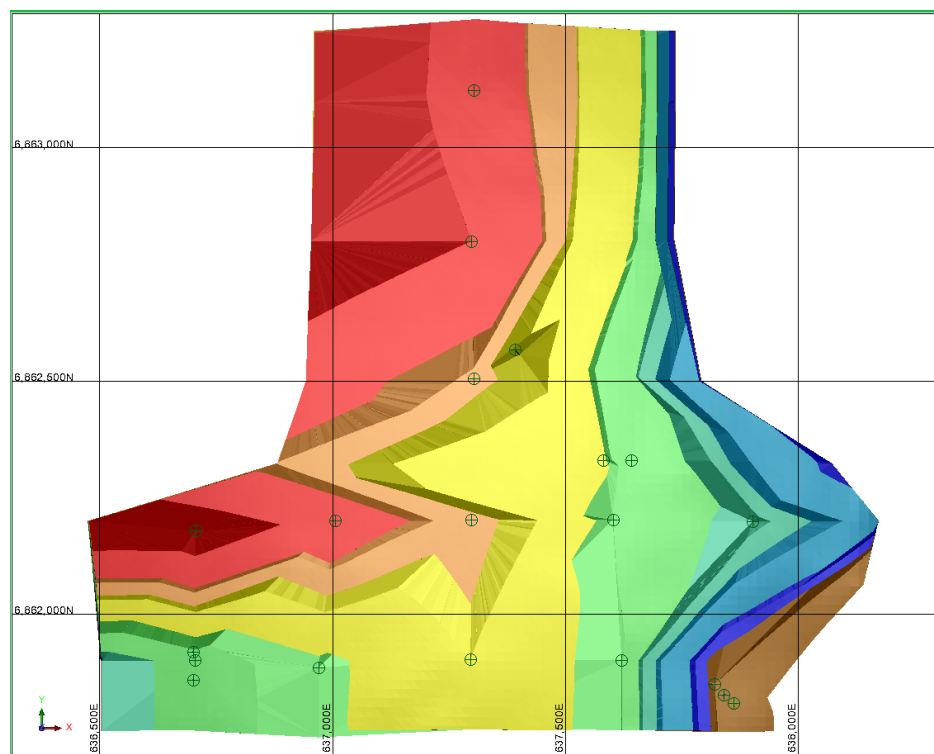


Figure 3: Fold Nose – Wireframe colours by sub-domain number (name): gold-brown=1 (Alpha); blue=2 (Bravo); pale-blue=3 (Charlie); blue-green=4 (Delta); green=5 (Echo); yellow=6 (Foxtrot); peach=7 (Golf); red=8 (Hotel).

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

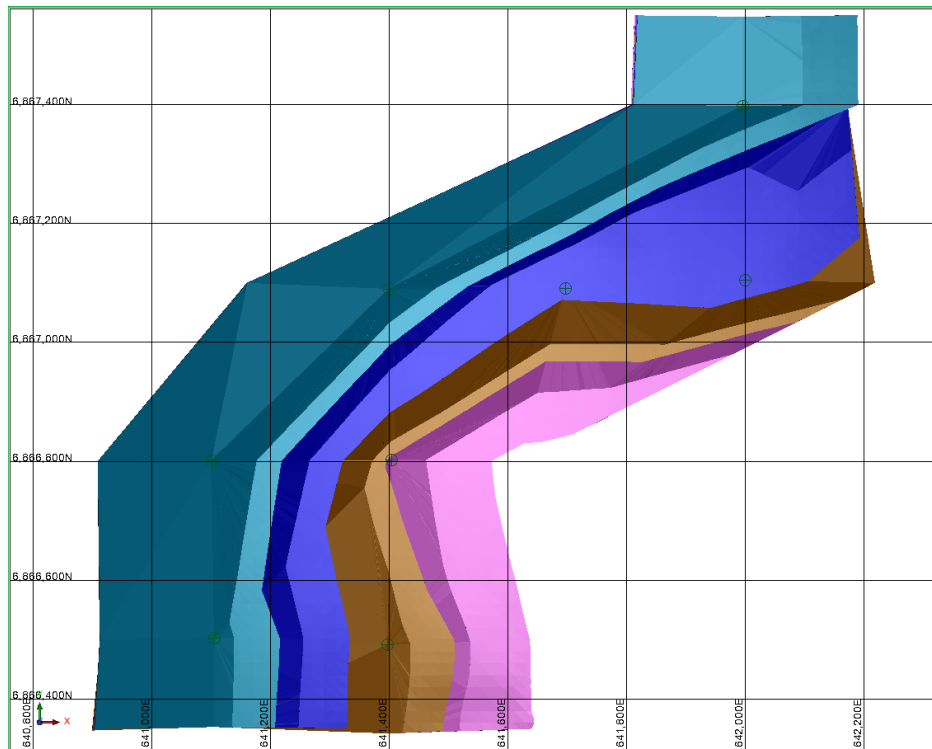


Figure 4: Kinks – Wireframe colours by sub-domain number (name): gold-brown=9 (Alpha); blue=10 (Bravo); pale-blue=11 (Charlie); blue-green=12 (Delta).

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 2 m intervals during RC drilling programmes with the rare 4 m composite samples obtained by spear sampling of bags. Diamond core was cut in quarter with a core saw and sampled at 2 m 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.

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 2,126.32 m and 59 reverse circulation (RC) holes (MNRC0004 to MNRC0067) for 7,066 m were drilled from 2007 through 2008. 39 RC holes (FCRC0001 to FCRC0039) for 8,048 m were drilled in 2010.

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

The Fold Nose area is informed by 19 RC drill holes (most FMS holes) and one diamond drill hole (completed by Maximus Resources) for 3,833 m. Twelve drill holes are vertical and eight drill holes

are inclined at -65° to the south and southeast. Holes were generally sampled at 2 m intervals. Minor sampling at 1 m and 4 m intervals also occurred. Drill holes were completed at approximately 300 m 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. Drill holes are spaced approximately 300 m 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° C. Samples were analysed by XRF for Fe, SiO_2 , Al_2O_3 , TiO_2 , P and V_2O_5 , in addition to other constituents that weren't estimated. The techniques are considered total.

Estimation Methodology

Drill hole samples were initially coded by mineralisation domain. Samples were then composited at 2 m 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 2 m composite samples (which corresponds to the dominant sample length) used to interpolate V_2O_5 , Fe, Al_2O_3 , LOI, P, SiO_2 and TiO_2 grades into blocks using ordinary kriging. 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 5 m RL to honour the wireframe boundaries.

The search parameters used for Fold Nose and Kinks are shown in Table 2 and Table 3 respectively. A maximum of 3 samples was allowed per drill hole.

Table 2: 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 3: 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 3.1 g/cm³ and 3.6 g/cm³ were applied to fresh material where V₂O₅ ≤ 0.5% and > 0.5% respectively. A fixed density value of 2.8 g/cm³ was assigned to oxide material.

Cut-off Grades

A cut-off grade of 0.5% V₂O₅ has been applied when reporting the Mineral Resource. A 0.5% V₂O₅ 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% V₂O₅ has been applied when reporting the Mineral Resource. A 0.5% V₂O₅ 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 250 m of surface.
- Demand for vanadium is likely to increase in the future, particularly given potential battery applications.

Exploration Update — Significance of Intersections

The location of RC drill hole RC282-01 that was completed at the Canegrass Project is included in *Table 4*. Significant intersections in hole RC282-01 are shown in *Table 5*.

Table 4: Summary of RC282-01 Collar Location

Drill Hole ID	Easting	Northing	Dip	Azimuth	Depth
RC282-01	641371	6866442	-60	270	101

Table 5: Significant Intersections

Drill Hole ID	From (m)	To (m)	Fe (%)	V2O5 (%)	TiO2 (%)
RC282-01	21	72	32.84	0.71	7.29

Hole RC282-01 was collared 100 m southwest of an outcropping VTM horizon. The significance of the reported grade is that it demonstrates that there are higher grade domains of VTM mineralisation at Canegrass, occurring in thicknesses which are amenable to conventional open pit mining. It also lays the foundation for ongoing exploration activities targeting the higher-grade vanadium.

Competent Persons Statements

The information in this report that relates to Exploration Results is based on, and fairly reflects, information compiled by Mr Mark Pudovskis. Mr Mark Pudovskis, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Pudovskis is a consultant to FMS, employed by CSA Global Pty Ltd, independent mining industry consultants. Mr Pudovskis 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 Pudovskis consents to the disclosure of the information in this report in the form and context in which it appears.

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 FMS, 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.

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About Flinders Mines Limited

Flinders Mines Limited is an ASX-listed (ASX: FMS) exploration and development Company focused on the commercialisation of its large, high quality hematite resource - the Pilbara Iron Ore Project (PIOP).

Attachment 1 JORC Table 1

JORC Table 1 Section 1 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	RC and diamond samples were collected for analysis. All samples and safely sealed in labelled calico bags There was no downhole geophysics assisting the sampling
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	No measures were taken to ensure sample representivity. No calibration of any measurement tools were required.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. "RC drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay"). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	Mineral Resource Samples used in the Mineral Resource estimate were mainly 1 and 2m samples intervals collected by reverse circulation (RC) drilling methods with samples were split through a cone splitter. Some continuous diamond drilling was also completed. It is unknown what the collected RC samples weighed Exploration Results RC drilling collected cone split 1m samples. RC samples weighed approximately 3-4kg. Samples were riffle split to 250 g, and then pulverised for analysis.
Drilling techniques	<i>Drill type (e.g. core, RC, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i>	Mineral Resource 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 Exploration Results Drilling was completed by RC Percussion with a face sampling bit
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Mineral Resource 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 Exploration Results RC sample recovery was not measured but visual estimates indicate it was very high.

Criteria	JORC Code explanation	Commentary
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	<p>Mineral Resource</p> <p>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.</p> <p>Exploration Results</p> <p>Face sampling hammers and an external booster were used to maximise sample recovery.</p>
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	No relationship between grade and recovery has been identified.
Logging	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	<p>Logging included lithology, mineralisation and grainsize. Lithology codes were assigned to all intervals. It is unknown whether magnetic susceptibility was measured.</p> <p>There was no geotechnical logging</p>
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	Logging is generally qualitative in nature. Core has been photographed either wet and dry.
	<i>The total length and percentage of the relevant intersections logged.</i>	Logging exists for all drill holes. The entire drill hole was logged by appropriate methods with the relevant information recorded.
Subsampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Diamond samples were quarter-cored using a core saw.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	<p>Mineral Resource</p> <p>RC samples were generally collected using a cone splitter at 2 m intervals. Minor 1 m and 4 m sampling also occurred. Samples were reported as both wet and dry however details are not readily available</p> <p>Exploration Results</p> <p>RC samples were logged on 1 m intervals and sampled using a cone splitter at 3 m intervals. All samples were dry.</p>
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	<p>Mineral Resource</p> <p>RC samples were cone split into bags at 2 m intervals.</p> <p>Samples were submitted to Ultratrace laboratory in Perth for analysis. Samples were then sorted, 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.</p> <p>Exploration Results</p> <p>RC samples were cone split and composited into bags at 3 m intervals and then sent to ALS Perth for analysis.</p> <p>Samples were riffle split to 250 g, and then pulverised. Analysis was by inductively couple plasma-atomic emission spectroscopy (ICP-AES) and inductively coupled plasma-mass spectroscopy</p>

Criteria	JORC Code explanation	Commentary
		(ICP-MS) (48 elements - ME-MS61 method). Fire assay was used for Au, Pt and Pd, with an ICP-AES finish. The CPs consider the sub sampling techniques and preparation appropriate for the style of mineralisation.
	<i>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</i>	Subsampling is performed during the preparation stage according to the laboratories' internal protocol.
	<i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i>	Mineral Resource RC field duplicates were inserted in the sample stream as a check on sample precision at a rate of 3%. No CRMs were submitted to the laboratories. It is unknown whether any blanks were submitted. There was no twinning of drill holes Exploration Results No field duplicates were collected. No blanks, CRM or standards were submitted.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes are considered appropriate to the grain size of the material being sampled.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Mineral Resource Samples were analysed by XRF for Fe, SiO ₂ , Al ₂ O ₃ , TiO ₂ , P and V ₂ O ₅ , in addition to other constituents that weren't 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 ^o C. The performance of the laboratory is unknown Exploration Results Samples were analysed by ICP-AES and ICP-MS (48 elements - ME-MS61 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. A CSA Global review of the ALS Perth QAQC analyses did not reveal any concerns with the performance of the laboratory
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	No geophysical tools have been used in the preparation of this Mineral Resource estimate.
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	Mineral Resources Field duplicate samples were taken by FMS to monitor sample precision. No field duplicate results were found for earlier holes completed by Maximus Resources. Certified reference materials (CRMs) were inserted at a rate of 4% by FMS, however there was no certified vanadium CRM. CRMs

Criteria	JORC Code explanation	Commentary
		<p>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.</p> <p>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 this Mineral Resource estimate for the FMS samples. Vanadium CRMs need to be sourced in future drilling programmes to increase confidence in the accuracy and precision of this data. Field duplicate data collected by FMS in 2010 gives confidence in sampling procedures in place at that time.</p> <p>Exploration Results</p> <p>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 this Exploration Result</p>
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	<p>Mineral Resource</p> <p>Alternative FMS personnel have verified significant intersections over the Project's history.</p>
	<i>The use of twinned holes.</i>	<p>No twinning has occurred.</p> <p>Exploration Results</p> <p>CSA Global managed the drilling program and verified the intersection reported.</p>
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	<p>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.</p>
	<i>Discuss any adjustment to assay data.</i>	<p>No adjustment was made to the assay data.</p>
Location of data points	<i>Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	<p>Mineral Resource</p> <p>Collars have been surveyed by a handheld GPS instrument for the FMS holes. There is there 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.</p> <p>Downhole deviations have generally not been measured given most holes are vertical. Inclined holes have used electronic multi-shot instruments.</p> <p>Exploration Results</p> <p>Collars have been surveyed using a handheld GPS instrument and considered accurate to within 5m</p>
	<i>Specification of the grid system used.</i>	<p>The adopted grid system is MGA94_50.</p>
	<i>Quality and adequacy of topographic control.</i>	<p>The method used to create topography file is unknown, however the topography file matches the drill hole collar coordinates, hence the Competent Person considers that it is likely to be relatively accurate.</p>
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	<p>Mineral Resource</p> <p>Drill spacing is approximately 300 m by 300 m in the Mineral Resource area.</p>

Criteria	JORC Code explanation	Commentary
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	Mineral Resource The Competent Person believes the mineralised domains have sufficient geological and grade continuity to support the classification applied to the Mineral Resources given the current drill pattern.
	<i>Whether sample compositing has been applied.</i>	Mineral Resource Samples were composited to 2 m prior to grade interpolation. This was considered appropriate given that most the samples have been collected over this interval. This allowed the natural variability of the sample data to be maintained prior to grade interpolation.
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Mineral Resource Most holes are vertical. The orientation of the mineralisation is variable for both deposits given the folded nature of the mineralisation. The holes generally intersect the mineralisation at a high-angle. Exploration Results RC282-01 was drilled -60 towards 270.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	The relationship between the drilling orientation and the orientation of key mineralised structures is not considered to have introduced a sampling bias.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	A geologist or field assistant was present at the RC drill rig while samples were being drilled and collected. Additional measures taken to ensure sample security are unknown.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or reviews of sampling techniques and data have been carried out.

JORC 2012 Table 1 Section 2 – Key Classification Criteria

<i>Mineral tenement and land tenure status</i>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i>	The Fold Nose Mineral Resource is located on E58/232 which is held by Flinders Canegrass Pty Ltd, a wholly owned subsidiary of FMS. Hole RC-232-02 was drilled on this tenement. The Kinks Mineral Resource is located on E58/282 which is held by Flinders Canegrass Pty Ltd. Hole RC-282-01 was drilled on this tenement.
	<i>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.</i>	E58/232 and E58/282 are granted tenements with expiry dates of 28 July 2018 and 2 May 2018 respectively.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	No exploration completed by other parties is relevant for the Mineral Resource estimates or Exploration Results reported herein.

<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The deposit represents part of a large layered intrusion. 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.</p> <p>Given the mode of formation, mineralisation displays excellent geological and grade continuity.</p>					
<i>Drill hole information</i>	<p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <i>Easting and northing of the drill hole collar</i> <i>Elevation or RL (Reduced Level – Elevation above sea level in metres) of the drill hole collar</i> <i>Dip and azimuth of the hole</i> <i>Downhole length and interception depth</i> <i>Hole length.</i> 						
		Drill Hole ID	Easting	Northing	Dip	Azimuth	Depth
		RC282-01	641371	6866442	-60	270	101
		The significant intercept was between 21m and 72m downhole depth.					
	<i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	The elevation was not measured however the terrain across the Project is relatively flat and no material relevance to the drill hole position.					
<i>Data aggregation methods</i>	<i>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.</i>	The reported significant intercept grade is a raw average based on 3m sample lengths					
	<i>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.</i>	The significant intercept has not been aggregated.					
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	Metal equivalents are not being reported.					
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	See below					
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	The drill holes generally intersect the mineralisation at high angles.					
	<i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g.</i>	The downhole dip of the hole was not surveyed and assumed as - 60. The true width of the mineralisation is known known but if extrapolated from the adjacent Kinks Mineral Resource the intersect angle is high.					

	<i>"downhole length, true width not known").</i>	
<i>Diagrams</i>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	A significant discovery is not being reported. Figure 2 in the body of the report highlights RC-282-01
<i>Balanced reporting</i>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	The VTM mineralisation occurs in distinct layered horizons. The reported 51m intercept has not excluded any assays and is a true representation.
<i>Other substantive exploration data</i>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	No other substantial exploration data is considered meaningful or material in making this announcement.
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Results of historical exploration has identified numerous high priority targets across the Canegrass Project for iron-titanium-vanadium (Fe-Ti-V) bearing horizons within the Windimurra Igneous Complex. Ongoing geophysics, drilling and geo-metallurgical work will be considered to examine the lateral and depth extents of any vanadium mineralisation and investigate further the metallurgical properties.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Diagrams have been included in the body of this report showing the dimensions of the modelled Mineral Resource, however no additional drilling is planned in the near future.

JORC 2012 Table 1 Section 3 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	<i>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.</i>	Detail has not been provided to CSA Global.
	<i>Data validation procedures used.</i>	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.

Criteria	JORC Code explanation	Commentary
		All holes were visually reviewed in Surpac to ensure hole paths were sensible.
Site visits	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i>	The Competent Person has not completed a site visit given that no drilling is currently taking place and limited knowledge would have been gained.
	<i>If no site visits have been undertaken indicate why this is the case.</i>	Not applicable.
Geological interpretation	<i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i>	A moderate confidence is placed in the interpretation of the mineral deposit.
	<i>Nature of the data used and of any assumptions made.</i>	All interpretations were based on drill holes. $\text{TiO}_2/\text{V}_2\text{O}_5$ ratios, geological logging and magnetic signatures.
	<i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i>	Alternative interpretations could potentially materially impact on the Mineral Resource estimate. This is reflected in the classification of the Mineral Resource.
	<i>The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.</i>	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	<i>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.</i>	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	<i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i>	<p>A Mineral Resource estimate has been completed for the Fold Nose and Kinks deposits.</p> <p>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).</p> <p>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.</p> <p>Variography was completed for the main Fold Nose areas only. A two-structure spherical model was adopted for variogram modelling.</p> <p>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.</p> <p>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.</p>
	<i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i>	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).

Criteria	JORC Code explanation	Commentary
	<i>The assumptions made regarding recovery of by-products.</i>	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.
	<i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i>	P, SiO ₂ and Al ₂ O ₃ have been estimated, but only whole rock concentrations.
	<i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i>	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.
	<i>Any assumptions behind modelling of selective mining units.</i>	No assumptions were made regarding selective mining units.
	<i>Any assumptions about correlation between variables</i>	No assumptions have been made regarding correlation between variables.
	<i>Description of how the geological interpretation was used to control the resource estimates.</i>	All interpretations were based on drill hole grades and logging. In particular, TiO ₂ /V ₂ O ₅ ratios, geological logging and magnetic signatures were used to discern several magmatic units which were used to constrain grade interpolation.
	<i>Discussion of basis for using or not using grade cutting or capping.</i>	No grade cuts were applied given the low variability of the data.
	<i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i>	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	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	Tonnages are estimated on a dry basis. No moisture values were reviewed.
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	A cut-off grade of 0.5% V ₂ O ₅ has been applied when reporting the Mineral Resource. The 0.5% V ₂ O ₅ 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	<i>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</i>	No assumptions regarding mining method have been made. The large shallow nature of the mineralisation means the deposit lends itself to open pit mining.

Criteria	JORC Code explanation	Commentary
	<i>explanation of the basis of the mining assumptions made.</i>	
<i>Metallurgical factors or assumptions</i>	<i>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.</i>	No assumptions regarding metallurgy have been made. Preliminary metallurgical test work has indicated production of a magnetite concentrate is possible with higher grades than the current Mineral Resource implies. Metallurgical test work is ongoing.
<i>Environmental factors or assumptions</i>	<i>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.</i>	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.
<i>Bulk density</i>	<i>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.</i>	Bulk density is based on determinations made using the water displacement method. 68 density measurements were taken from drill core in 2008.
	<i>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.</i>	The methods adopted adequately account for void spaces.
	<i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i>	Bulk density was assigned to the block model as follows: <ul style="list-style-type: none"> • Fresh 3.6 g/cm³ (V₂O₅ > 0.5%) • Fresh 3.1 g/cm³ (V₂O₅ ≤ 0.5%) • Oxide 2.8 g/cm³
<i>Classification</i>	<i>The basis for the classification of the Mineral Resources into varying confidence categories.</i>	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.

Criteria	JORC Code explanation	Commentary
	<i>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).</i>	Appropriate account has been taken of all relevant criteria including data integrity, data quantity, geological continuity, and grade continuity.
	<i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	The Mineral Resource estimate appropriately reflects the Competent Person's views of the deposit.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	The current model has not been audited by an independent third party but has been subject to CSA Global's internal peer review processes.
<i>Discussion of relative accuracy/confidence</i>	<i>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.</i>	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.
	<i>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.</i>	The Mineral Resource statement relates to a global tonnage and grade estimate. Grade estimates have been made for each block in the block model.
	<i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	No production has occurred.