VENUS METALS
CORPORATION LIMITED

ASX Release: 18 March 2019 **ASX Code: VMC**

YOUANMI VANADIUM PROJECT

World-Scale JORC 2012 Vanadium Oxide Resource Confirmed

HIGHLIGHTS

- **The new JORC 2012 total resource estimate is 134.7 mt grading 0.34% V_2O_5**
- **The measured, indicated and inferred resources contain 458,900 tonnes** (approximately **1,011,415,600 lbs**) **of V_2O_5 (Vanadium Pentoxide)**
- **Current market price for V_2O_5 flake in China is A$24/lb**

Table 1. Youanmi Vanadium Oxide JORC 2012 Resource Estimates -2019

Resource Classification	Cut-off V_2O_5%	Tonnes (Millions)	V_2O_5 %
Measured	0.1%	31.55	0.33
Indicated	0.1%	54.37	0.33
Inferred	0.1%	48.82	0.36
Total	0.1%	134.73	0.34

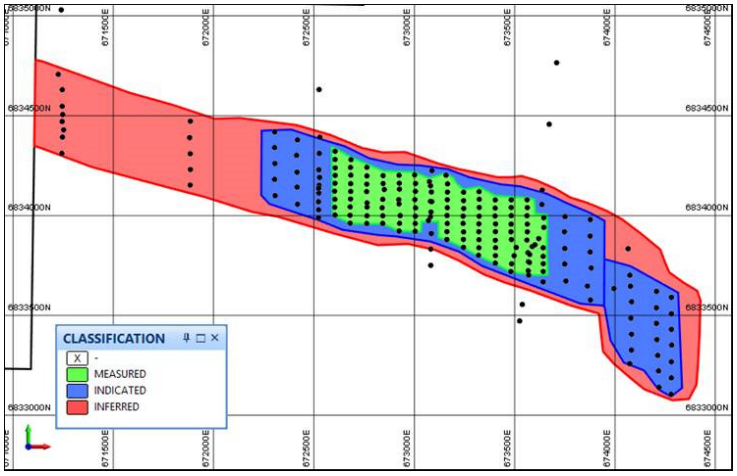

Figure 1. Plan View showing Measured, Indicated and Inferred Resources area

- New JORC 2012 Vanadium Oxide Resources were calculated by Company Consultant Widenbar and Associates, based on 139 recent RC holes for 5919m and 49 historical RC and 11 Diamond holes for 3268m .
- Significantly, the large measured resource status enables Venus to confidently proceed with metallurgical testwork and scoping studies to rapidly advance the project.

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Figure 2. Location of Youanmi Vanadium Oxide Project

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Project Background

1. Venus controls a unique open pit vanadium oxide resource of world-scale at Youanmi in the Midwest region of Western Australia. The resource has the potential to be a significant supplier to the world vanadium market particularly for the emerging renewable battery energy needs.
2. The project, 90% owned by Venus, is well located with respect to regional infrastructure. It is 460km east of the port of Geraldton, W.A., with a regional gas energy supply located at Windimurra, 40km northwest of Youanmi.
3. **At Youanmi, the world-scale oxide resource (JORC 2012) is now 134.7 million tonnes grading 0.34% V_2O_5 contain 458,900 tonnes** (approximately **1,011,415,600 lbs) of V_2O_5 (Vanadium Pentoxide). Current market price for V_2O_5 flake in China is** approximately **A$24/ lb (US $17/ lb)** (source: https://www.vanadiumprice.com/)
4. The proposed vanadium extraction for Youanmi is based on a potentially simple hydro-metallurgical process taking advantage of the unique weathered vanadium oxide ore, and with potentially more positive project economics compared to conventional hard rock deposits.
5. Recently, Venus completed a major drilling program of 139 holes for 5919m and focused on a zone 2km long by 300 to 400 m wide (ASX release 13th December 2018).
6. The oxide V_2O_5resource occurs from surface down to 30 –50 meters depth and is the focus of initial studies for potential development.
7. Venus has an exploration target potential * for over 1 billion additional tonnes @0.25 to 0.3% V_2O_5 along 25km of strike to the south. (ASX release 6th February 2015)

   "The exploration target potential quantity and grade is conceptual in nature, 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"

8. The friable, crumbly soft oxide material is derived from deeply weathered vanadiferous gabbro, characteristics unique to Youanmi.
9. Being soft, the oxide material enables simple mining by open cut methods and has a zero strip ratio.
10. Metallurgical studies show that simple beneficiation by way of low energy crushing and de-sliming can markedly increase the ore grade (from 0.58% V_2O_5 to 0.8% V_2O_5) before vanadium extraction by way of leaching (ASX release 16th October 2018).
11. Initial hydro-metallurgical leach tests at atmospheric pressures show that 81.6% of the vanadium can be recovered by leaching of the oxide material using acid solutions (ASX release 29 January 2019).
12. The Youanmi oxide vanadium project is therefore very different to the highly capital-intensive pyro-metallurgical process used by traditional hard rock vanadium.

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FORWARD PROGRAM

Further development of the hydro-metallurgical process is being planned and contracts have been prepared with a renowned Metallurgical Process Development team of experts to implement this strategy.

Venus is planning and scheduling the following project development stages:

- Intensive hydrometallurgical studies and pilot scale development,
- Further drilling to define a mining reserve as well as target drill the additional 25km of mineralized strike
- Scoping studies, prefeasibility studies, marketing studies, environmental studies, definitive engineering studies and all other works to rapidly advance the project.

Table 2. Youanmi Vanadium Oxide Resource Estimate - March 2019

Youanmi Vanadium Resource Model 15-03-2019 (Oxide Only)										
Cutoff	Resource	Volume	Tonnes	Density	V2O5	TiO2	Fe	SiO2	Al2O3	V2O5 Metal
V2O5%	Class	BCM Millions	Millions	t/m3	%	%	%	%	%	Tonnes
0.10	Measured	11,995,000	31,548,000	2.63	0.33	5.87	21.21	33.07	16.50	104,100
0.10	Indicated	20,671,000	54,365,000	2.63	0.33	6.28	21.30	32.82	17.33	181,400
0.10	**Meas+Ind**	**32,667,000**	**85,913,000**	**2.63**	**0.33**	**6.13**	**21.26**	**32.91**	**17.02**	**285,400**
0.10	Inferred	18,563,000	48,820,000	2.63	0.36	6.53	21.45	32.32	15.99	173,400
0.10	**Total**	**51,229,000**	**134,733,000**	**2.63**	**0.34**	**6.27**	**21.33**	**32.70**	**16.65**	**458,900**

(Widenbar and Associates,2019)

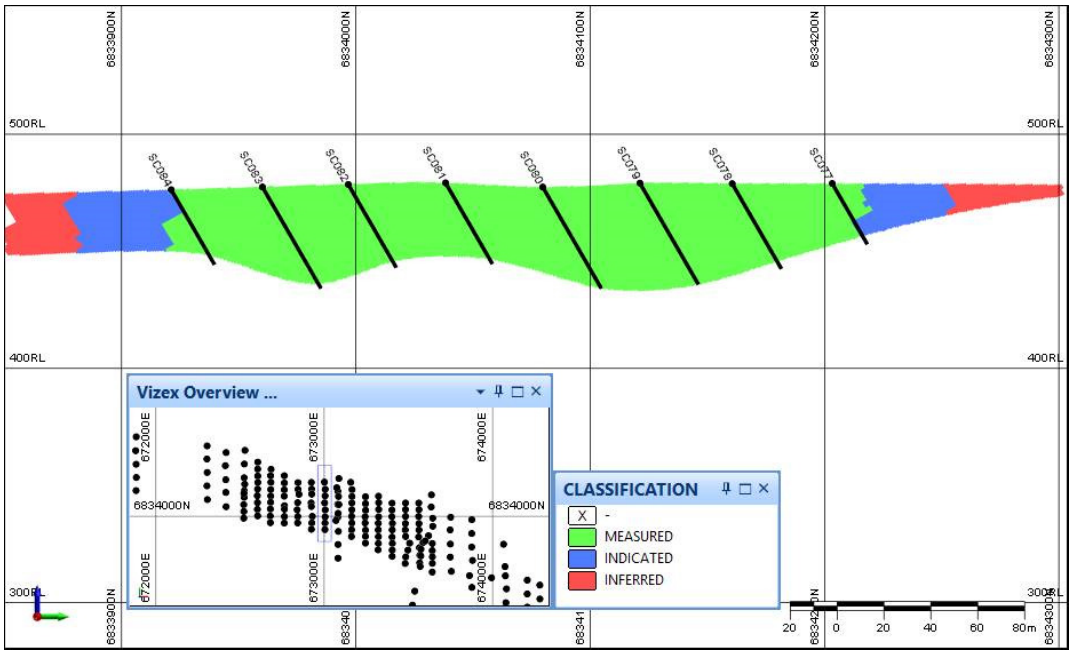

Figure 3. Sectional view showing Measured, Indicated and Inferred resources along 673000 E

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Mr Matthew Hogan, Managing Director of Venus Metals commented

"We are very pleased with this result that fully justifies our decision to proceed with a comprehensive drill-out of our vanadium project at Youanmi. As the world transitions into a low-carbon future it will require significantly more power storage capacity. Vanadium is a sustainable metal allowing unlimited storage life and capacity for clean energy as well as stronger, lighter and more resilient steels and alloys for infrastructure and transport. Vanadium is currently at the forefront of technology innovation yet it is in short supply. With our now proven world-scale resource base at Youanmi, we believe we have the potential to unlock the project with new processing technology advancements in vanadium extraction from oxide ore".

Bibliography

1. L. Widenbar, 2019, "Youanmi Vanadium Project Resource Estimate Summary Report, March 2019"- Internal Communications
2. VMC ASX releases dated 6 February 2015, 27 March 2018, 19 July 2018, 5 September 2018 16 October 2018 and 13 December 2018 and 29 January 2019.

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Venus Metals Corporation Limited planned exploration program 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 Venus Metals Corporation Ltd 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.

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Competent Person's Statement

The information in this report that relates to Mineral Resources and Exploration Targets has been compiled by Mr Lynn Widenbar. Mr Widenbar, who is a Member of the Australasian Institute of Mining and Metallurgy, is a full time employee of Widenbar and Associates and produced the Mineral Resource Estimate based on data and geological information supplied by Venus Metals. Mr Widenbar has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Widenbar consents to the inclusion in this report of the matters based on his information in the form and context that the information appears.

The information in this release that relates to the Youanmi Vanadium Project is based on information compiled by Mr Barry Fehlberg, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Fehlberg is Exploration Director of Venus Metals Corporation Limited. Mr Fehlberg has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves'. Mr Fehlberg consents to the inclusion in the release of the matters based on his information in the form and context that the information appears.

JORC Code, 2012 Edition – Table 1

Youanmi Vanadium Project

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg 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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• The historic exploration data were obtained from Open File WAMEX Reports on historical exploration Reverse Circulation (RC) drilling conducted by Australian Gold Resources (AGR) during 1998-1999. • Sampling has been by Reverse Circulation drilling, collected every 1m through a cyclone and riffle splitter. 4m composite samples were also collected via scoop and spear sampling from the residue bags. • In 2010, Youanmi Metals Pty Ltd carried out a drill program of 11 diamond drill holes, aimed primarily at assessing the iron ore potential of the Vanadium and Titanium bearing magnetite horizons. • To ensure accuracy in diamond drilling and sampling, downhole surveys were carried at the bottom of each hole, using a 'Camtech' digital camera. Electronic core orientation surveys were carried out after each 3m run in fresh/ competent rock, using a 'Reflex ACT' device to enable accurate orientation of the drill core. Magnetic susceptibility measurements and 'Niton' XRF readings for Fe, Ti and V were also carried out. • Diamond Core samples correspond to selected geological contacts (especially magnetite layers, ranging from 0.3 to around 1.1m) were marked out during the logging process and were cut to half on site using an Almonte core saw and these half cores were sent for assaying. • In 2018 Venus Metals Corporation (VMC) drilled 139 RC holes for a total of 5,919m • There are a total of 199 holes for a total of 9,187m (including 11 historic diamond drill holes).
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	• Reverse Circulation drilling by Australian Gold Resources (AGR) during 1998-1999 • Most RC holes in the program were drilled vertically with a few at -60°dip. • In 2010, 11 diamond holes were drilled using triple tube PQ3 and were drilled at dip varying -58 to -61 and azimuth varying between 0 and 5°N. • RC drilling by VMC in 2018; RC holes

Criteria	JORC Code explanation	Commentary
		drilled to fresh rock interface.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• No recovery issues were reported in the historical reports. • There is no apparent relationship between sample recovery and grade. • Core recovery in diamond holes was generally good, with excellent recoveries in fresh rock and reasonable recoveries in weathered material. • No recovery issues were reported in the VMC Driling reports
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• RC drill samples were geologically logged and the downhole magnetic susceptibility was also conducted as per the historical report. Drillhole geological logging, assay data and metallurgical testing were used to support resource estimation of V2O5. • Diamond drill (DD) core was comprehensively geologically and geotechnically logged. The geotechnical logging includes core recovery, RQD, rock strength, weathering and fracture counts, magnetic susceptibility measurements and 'Niton' XRF readings for Fe, Ti and V.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Sampling has been by Reverse Circulation drilling, collected every 1m through a cyclone and riffle splitter. 4m composite samples were also collected via scoop and spear sampling from the residue bags. • Sampling of diamond holes was at irregular intervals determined by geological logging. In addition to the geological logging geotechnical logging like magnetic susceptibility measurements and 'Niton' XRF readings for Fe, Ti and V were also carried out, to ensure the accuracy of selected core samples. These selected cores were cut to half on site using an Almonte core saw and these half cores were sent for assaying.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of*	• The methods used for assay analysis of RC drill samples are lithium meta-borate fusion XRF at AMDEL (XRF4) and fusion XRF at Analabs (X408). • Blanks were inserted every 30th sample. • A vanadium standard was inserted in each sample batch for holes YOUC19 to 40. • Down hole geophysical logging was carried out in eleven holes. • The half cut core samples were pulverized and analyzed for elements using acid test method (AT) followed by ICPMS/ICPOES. Also fusion XRF (11) method were also

Criteria	JORC Code explanation	Commentary
	accuracy (ie lack of bias) and precision have been established.	used for identifying the mineral composition. • All Venus RC samples were analysed at SGS Australia Pty Ltd laboratories • Assays used borate fusion with XRF finish for elements including Al, As, Ca, Co, Cr, Cu, Fe, K, Mg, Mn, Na, Ni, P, Pb, S, Si, Ti, V, Zn, and LOI. • VMC QAQC procedures were carried out at SGS Australia Pty Ltd laboratories and included 126 blanks (1 in 40), 249 standards (1 in 20), 249 repeats (1 in 20) and 123 duplicates (1 in 40). No issues were reported in the QAQC program. • Magnetic Susceptibility (Magsus) was measured using a handheld KT-10 Magsus susceptibility meter, Magsus readings were taken in the field by handholding Magsus meter directly on to the sample plastic bags.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No independent verification of sampling and assaying has been reported.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The RC drill hole locations (collar) were located using GPS. Grid systems used were Geodetic datum: AGD 84, Vertical datum: AHD and Projection: AMG, zone: 50. • The Diamond drillhole locations were located using a Garmin GPS 72. Geodetic datum: GDA 94, Projection zone: 50 . The historic data has been converted to GDA94 • The Venus 2018 RC drill hole locations (collar) were surveyed using DGPS. Grid systems used were Geodetic datum: GDA 94, Vertical datum: AHD and Projection: MGA, zone: 50.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Within the resource area, historic RC drilling was completed on 640m spaced sections with drill hole spacing of 80m. Additional 40m spaced drill holes were aimed at defining the tenor of mineralisation in fresh rock and the dip of the stratigraphy. • The DD holes were drilled at selected locations along historical RC drill hole lines within the Youanmi layered intrusive complex, where magnetite (Fe-Ti-V) bearing gabbroic rocks can be mapped at

Criteria	JORC Code explanation	Commentary
		surface. • VMC Infill RC drilling has been on an 80m by 40m pattern, with holes stopped just below the oxide/fresh interface.
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.* • *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.*	• Historic RC drilling is vertical; with the average dip of the magnetite rich units being approximately30° to 50° the hole orientation with respect to the mineralisation dip is appropriate. • DD drilling is approximately at right angle to dip and 90° to strike. • Venus RC drilling is oriented at right angles respect to the mineralisation.
Sample security	• *The measures taken to ensure sample security.*	• Details of sample security not given in historical reports.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or review have been located.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Youanmi Project tenement E57/986 is a granted Exploration License and is being jointly owned by Venus Metals Corporation Limited (90%) and a Prospector (10%).
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The tenement area was historically explored by many explorers since 1967. Australian Gold Resources Limited (AGR) explored extensively for vanadium resources within historical tenement E59/419.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The project area lies on the northern part of the Youanmi layered intrusion. Most of the area of interest is east-west striking with layering dipping to the south. At the eastern edge of intrusion area the layering swings round to a north-south strike and a westerly dip. The dip appears to become gradually shallower towards the bend: from approximately 50° at a distance of 5km west of the bend to 30° adjacent to the bend. A dip of only 10° was recorded in outcrop within the bend itself. A number of northwest faults offset the strata with an apparent sinistral displacement (displacement is only apparent because the same effect would be achieved by down throw of the eastern block). Chloritisation and the development

Criteria	JORC Code explanation	Commentary
		of a weak foliation has been recognised in RC drilling near one of the northwest faults with an apparent displacement of 1½km. Faulting is more complicated in the area of the bend where a number of broadly northeast striking faults and narrow shears are also recognised. • Gabbro (ranging from leucocratic to melanocratic), anorthosite, fine-grained gabbro, magnetite-gabbro and magnetite have been recognised in drilling and outcrop. The target zone is characterised by meter-scale layering of magnetite, magnetite-gabbro, anorthosite and leucogabbro. Leuco to melano gabbro is more common away from the target zone. • The magnetite bearing horizons appear to be more resistant to weathering and therefore the top of fresh rock is generally at a higher relative level than in adjacent weathered gabbro. However in the areas where the regolith has been stripped the saprolite derived from magnetite-in horizons has proved more resistant to erosion and often form the tops of the breakaways. Depth to fresh rock (Top of Fresh Rock-TOFR) in the higher ground is usually about 35m, but can be up to 55m.

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.*
		• Exploration results are not being reported for the Mineral Resource area. Database information is summarised in Sections 1 and 3.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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*	• Exploration results are not being reported for the Mineral Resource area. For methods of data aggregations used in the estimation refer to Section 3 Estimation and Reporting of Mineral Resources.

Criteria	JORC Code explanation	Commentary
	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.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Exploration results are not being reported for the Mineral Resource area. Sections 1 and 3 describe details of drill holes and geometry.
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.*	• Exploration results are not being reported for the Mineral Resource area. Plans and sections are located in the Mineral Resource Estimation Report.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Exploration results are not being reported for the Mineral Resource area.
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.*	• To assess the stratigraphy, structure and correlation between magnetic units and zones of high vanadium grade, AGR carried out low-level high resolution aeromagnetic survey by Universal Tracking Systems (UTS) during September 1999. The aeromag survey covered an area of 30 square kilometers, for 650 lines totaling 3km was flown in the northern area. Radiometrics and digital elevation data were also collected. The magnetic contrast between magnetite units and surrounding rock is so high (>5,000 nT) that the low relative signal to noise ratio allows data to be filtered to the 4th vertical derivative.
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.*	• Recent modelling and resource estimation will define further infill and extension drilling.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary

Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*
	• *Data validation procedures used.*
		• Review of printed logs versus the current database has been carried out; no issues have been reported.
		• Data has been entered into Excel spreadsheets and subsequently imported into Micromine software for further validation, including:
		  ○ Checks for duplicate collars.
		  ○ Checks for missing samples.
		  ○ Checks for down hole from-to interval consistency.
		  ○ Checks for overlapping samples.
		  ○ Checks for samples beyond hole depth.
		  ○ Checks for missing assays.
		  ○ Checks for down-hole information beyond hole depth.
		  ○ Checks for missing down-hole information.
		  ○ Checks for missing or erroneous collar survey.

Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person carried out a site visit on 30th July, 2014. • Numerous RC and DD hole sites were found, with RC sample cutting piles still in place. Samples were taken from one drill hole. • Outcrop and float were reviewed and the extent of the mineralised zone was clear at surface in parts of the deposit. • Review of the site confirmed for the CP that a mineral resource is likely present.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The geological interpretation used to guide estimation has used a combination of surface mapping, downhole logging, geophysics and chemistry to define mineralisation zones and oxide/fresh interfaces. • The two major magnetite units are fairly well defined and continuous geologically, though there is internal grade variation. • Grades tend to be higher at the footwall and hanging wall, and lower in the center of the domains.
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 area covered by the Mineral Resource extends approximately 5 km along strike by 500m laterally. • There are two mineralised zones, varying between 30m and 50m in true thickness and dipping between 30° and 60° to the south.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>• The mineralisation domains in the resource area have been interpreted to a depth of 180m below surface.</td></tr>
<tr><td>Estimation and modelling techniques</td><td>• 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.
• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.
• The assumptions made regarding recovery of by-products.
• Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).
• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.
• Any assumptions behind modelling of selective mining units.
• Any assumptions about correlation between variables.
• Description of how the geological interpretation was used to control the resource estimates.
• Discussion of basis for using or not using grade cutting or capping.
• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</td><td>• Samples were composited to 1m to allow for a few parts of some holes where only 4m composite data was available.
• Statistical analysis was carried out to confirm the validity of mineralisation domains.
• Geostatistical analysis failed to produce robust variograms due to lack of data, though down hole variography illustrated a low nugget effect and limited range across the mineralised structures.
• Statistical and geostatistical analysis was carried out in GeoAccess 2018 software.
• Resource estimation was carried out in Micromine 2018 (V5) software.
• Ordinary kriging (OK) modelling was used with parameters based on drill hole spacing and variography.
• Search ellipse orientations for the estimation based on geological orientations and an unfolding methodology was used to account for variations in dip and strike.
• The first pass search was 100m x 60m x 10m (along strike 020°, down dip -30°, across dip) with a minimum of 6 and a maximum of 12 composites, a maximum of 6 per hole and a minimum of 2 holes. The second pass search was 200m x 120m x 15m with a minimum of 4 and a maximum of 16 composites, a maximum of 6 per hole and a minimum of 2 holes. The third pass search was designed to fill any remaining gaps in the model and was 600m x 240m x 25m with a minimum of 2 and a maximum of 16 composites, a maximum of 6 per hole and a minimum of 1 hole.
• No top cuts were applied.
• A range of variables has been estimated, including:
<table>
<tr><td>V2O5%</td><td>TiO2%</td><td>Fe%</td><td>Al2O3%</td></tr>
<tr><td>As%</td><td>CaO%</td><td>Co%</td><td>Cr%</td></tr>
<tr><td>Cu%</td><td>K2O%</td><td>MgO%</td><td>MnO%</td></tr>
<tr><td>Na%</td><td>Ni%</td><td>P%</td><td>Pb%</td></tr>
<tr><td>S%</td><td>SiO2%</td><td>Zn%</td><td>LOI%</td></tr>
<tr><td>MAGSUS</td><td></td><td></td><td></td></tr>
</table>
• Block sizes were 20n (E-W) by 10m (N-S) by 2.5m (Elevation).
• Modelling results have been compared to the previously published resource estimate and have produced similar results.
• Validation of the final resource has been</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		carried out in a number of ways, including: ○ Drill Hole Section Comparison ○ Comparison by Mineralisation Zone ○ Swathe Plot Validation ○ Model versus Declustered Composites by Domain • All modes of validation have produced acceptable results. • As there has been no mining to date, no reconciliation data is available.
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 a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The resource has been reported at 0.10 and0.25 % V2O5 cutoffs. This has been determined from previous economic studies and is also typically used in similar Western Australian vanadium deposits.
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.*	• Mining is assumed to be by conventional open-pit mining methods. • There is no allowance in the Mineral Resource Estimate for dilution or mining losses.
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.*	• Metallurgical test work has been carried out by AGR to confirm that the mineral resource can be successfully and economically processed to produce a marketable product. • Composite samples from two drill holes were processed by magnetic separation and roast/leach methods with recoveries of 61% in oxide and 83% in fresh material.
Environmen-tal 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*	• At this stage, environmental factors have not been considered.

Criteria	JORC Code explanation	Commentary
	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.	

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.*
	• *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.*
	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*
		• Bulk density is based on over 6,800 downhole density log measurements.
		• Base of oxidation logging has been used to define two density domains, with the following bulk densities applied:
		  ○ Oxide 2.63 t/m^3
		  ○ Fresh 2.76 t/m^3

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie 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).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resource has been classified in the Measured, Indicated and Inferred categories in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). A range of criteria has been considered in determining this classification including: • Geological continuity. • Data quality. • Drill hole spacing. • Modelling technique. • Estimation properties including search strategy, number of informing data, kriging variance and other geostatistical properties and average distance of data from blocks. • The Competent Person endorses the final results and classification.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• There have been no external reviews of the Mineral Resource Estimate.
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*	• Relative accuracy and confidence has been assessed during the validation process by review of model versus data and variability statistics of individual block estimates. • A subjective relative risk analysis assessment has been carried out, with the overall risk level generally being considered Moderate. • The resource estimate is considered to reflect local estimation of grade.

Criteria	JORC Code explanation	Commentary
	confidence of the estimate. • *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.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• No production data is yet available for comparison.