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YOUANMI VANADIUM PROJECT METALLURGICAL TEST RESULTS CONFIRMS SIGNIFICANT HIGH GRADE BENEFICIATION OF OXIDE SAMPLES

The Directors of Venus Metals Corporation Limited ("Venus" or the "Company") are pleased to announce the results of preliminary beneficiation testwork on an oxide composite sample from the Youanmi Vanadium Project, Western Australia.

HIGHLIGHTS:

- The grade increased from 0.58% V_2O_5 to 0.80% V_2O_5 with a recovery close to 80% of the Vanadium.
- At -1 mm more than 40% of the mass can be rejected whilst recovering 80% of the Vanadium.
- Mass rejection of gangue minerals decreases downstream processing volume and is expected to reduce acid consumption.
- Assay by size data suggests the oxide sample can be significantly beneficiated without the need to grind the sample.
- Crush sizes tested showed minimal variation in the beneficiation potential.
- Further testwork is planned for hydrometallurgical studies on a beneficiated sample.

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Metallurgical Testwork

The Company commissioned METS Engineering Group ("METS") to develop a series of metallurgical tests aimed at beneficiating an oxide composite formed using different intervals from the deposit (Table-1) (Figure 1). The oxide composite was formed from shallow intervals spanning five diamond core holes seen in the table below. Only half of the mass for each interval was utilised, with the remaining kept in reserve. A total composite mass of approximately 48 kg was formed. The representative composite encompassed various weathered zones and a range of different spatial locations throughout the deposit.

Drill Hole	Easting	Northing	Depth (m)	Interval Mass (kg)
			34.0-35.2	6.92
YMDD001	673570	6833702	35.2-36.5	6.29
YMDD002	673574	6833765	37.0-38.0	7.24
YMDD003	673575	6833805	23.0-24.0	6.17
YMDD004			6.8-8.3	8.65
			8.3-9.8	9.68
	673601	6833854	14.8-16.2	9.28
			17.5-19.0	11.59
			1.0-2.5	5.84
YMDD005			2.5-3.7	5.3
			3.7-5.1	7.73
	673645	6833941	5.1-6.7	6.77
			6.7-8.0	5.05

Table-1. Details of Oxide Composite

Beneficiation testwork focused on low cost methods that avoided grinding. The testwork was conducted at three crush sizes: -3.35 mm, -2 mm and -1 mm (refer Appendix-1 JORC Table). Due to the friable nature of the oxide ore these crush sizes are expected to be achievable using a combination of comminution technologies.

Detailed size by assay tests illustrated that a significant portion of the mass reports to the fine size fractions and contains very little vanadium. Simple rejection of fines resulted in an increase in Vanadium grade from 0.58% V_2O_5 to a maximum grade of 0.83% V_2O_5 . The beneficiation process was not overly sensitive to crush size, suggesting fine crush sizes may not be required. The grade-recovery profiles for each crush size can be seen in Figure 2 below.



Figure 1. Southern Cross Vanadium Deposit Cross Section A-A' Looking West



A key outcome from this testwork was the high Vanadium recovery achieved. The grade-recovery profile illustrates that the material can be beneficiated to 0.80% V_2O_5 whilst recovering close to 80% of the Vanadium.

This compares to conventional magnetic separation, which typically struggles to achieve high vanadium recoveries on oxidised material.



Figure 2. V₂O₅ grade-recovery profiles at different crush sizes

Mills can contribute a significant amount of capital and operating expense, with much of the power utilised in milling consumed by the grinding of gangue minerals. This alternative beneficiation process avoids milling and the associated costs.

Further Metallurgical work

- Hydrometallurgical studies will be completed on a beneficiated sample in order to assess direct vanadium extraction using sulphuric acid from the beneficiated sample without the need to roast at high temperatures.
- Higher grades may be achieved at finer sizes, and future work will aim to assess the maximum grade achieved by crushing within the limits of modern comminution technologies.



Bibliography

- 1. L. Widenbar, 2015, "Youanmi Vanadium Project Resource Estimate Summary Report January 2015"- Internal Communications
- 2. METS Metallurgical Testwork Report J5123 dated 15 October 2018
- 3. VMC ASX releases dated 6 February 2015, 27 March 2018, 19 July 2018, 13 August 2018 and 5 September 2018.

Exploration Targets

The term 'Exploration Target' should not be misunderstood or misconstrued as an estimate of Mineral Resources and Reserves as defined by the JORC Code (2012), and therefore the terms have not been used in this context.

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.

Competent Person's Statement

The information in this report that relates to the Processing and Metallurgy Youanmi Vanadium Project is based on and fairly represents, information and supporting documentation compiled by Damian Connelly who is a Fellow, CP (Met) of The Australasian Institute of Mining and Metallurgy and a full time employee of METS. Damian Connelly 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 a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Damian Connelly consents to the inclusion in the report of the matters based on his information in the form and context in which it 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.

Appendix-1

JORC Code, 2012 – Table 1

Youanmi Vanadium Project

Section 1 Sampling Techniques and Data

Criteria	•	Commentary
Sampling	•	Venus Metals Corporation (VMC) has not conducted any exploration drilling or sampling on the tenement.
techniques	•	The 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.
	•	An oxide composite sample was formed from YMDD001, YMDD002, YMDD003, YMDD004 and YMDD005.
	•	A sub sample was assayed via XRF and returned a reading of 0.58% $V_2O_5.$
	•	The testwork product samples were sent for XRF analysis.
Drilling	•	Reverse Circulation drilling by Australian Gold Resources (AGR) during 1998- 1999
techniques	•	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.
Drill sample	•	No recovery issues were reported in the historical reports.
recovery	•	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.

Criteria	• Commentary
Logging	 Historically 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.
	 Historical Diamond drill (DD) cores were 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	 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	• 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).
data and laboratory tests	 Blanks were inserted every 30th sample. A vanadium standard was inserted in each sample batch for holes YOUC19 to 40.
	Historically 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 used for identifying the mineral composition.
	• The oxide composite for the beneficiation testwork was split into sub samples for testing.
	• Three sub samples were crushed to -3.35 mm, -2 mm and -1 mm respectively.
	 A 2.0 kg sub sample from the -3.35 mm composite underwent sizing by sieves at 3350 μm, 1000 μm, 500 μm, 212 μm, 150 μm, 106 μm, 75 μm, and 45 μm. The mass of material finer than 45 μm underwent cyclosizing at 42.9 μm, 29.4 μm, 20.2 μm, 14.3 μm and 11.2 μm (cyclosize cutpoints calculated based on operating conditions).
	 A 1.5 kg sub sample from the -2 mm composite underwent sizing by sieves at 2000 μm, 1000 μm, 500 μm, 212 μm, 150 μm, 106 μm, 75 μm, and 45 μm. The mass of material finer than 45 μm underwent cyclosizing at 42.1 μm, 28.9 μm, 19.9 μm, 14.0 μm and 11.0 μm (cyclosize cutpoints calculated based on operating conditions).
	 A 1.2 kg sub sample from the -1 mm composite underwent sizing by sieves at 1000 μm, 500 μm, 212 μm, 150 μm, 106 μm, 75 μm, and 45 μm. The mass of material finer than 45 μm underwent cyclosizing at 42.9 μm, 29.4 μm, 20.2 μm, 14.3 μm and 11.1 μm (cyclosize cutpoints calculated based on operating conditions).
	• The oxide composite and testwork product samples were assayed at the Iron Ore Technical Centre (ALS) via XRF.

Criteria	•	Commentary
Verification of sampling and assaying	•	No independent verification of sampling and assaying has been reported.
Location of data points	•	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
Data spacing and distribution	•	 Within the resource area, 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 surface.
Orientation of data in relation to geological structure	•	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.
Sample security	•	Details of sample security not given in historical reports. No audits or review have been located.
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Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	 The Youanmi Project tenement E57/986 is currently an Exploration License Application (ELA) and is being jointly applied for by Venus Metals Corporation Limited (90%) and Legendre, Bruce Robert (10%).
Exploration done 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	 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

Criteria	Commentary
	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 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.
Drillhole Information	 The Exploration Target is based aerial magnetics data which has been compared with the geophysics in the drilled area of the Inferred resource. No drilling is available for the exploration target area.
Data aggregation methods	Not applicable
Relationship between mineralisation widths and intercept lengths	 Mineralisation width assumptions for the exploration target area are based on drill intercepts in the resource model area
Diagrams	Plans are provided in the accompanying report.
Balanced reporting	Not applicable
Other substantive exploration data	 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

Criteria	Commentary
	derivative.
Further work	 Recent modelling and resource estimation will define further infill and extension drilling.
	 Future testwork will focus on hydrometallurgical studies on beneficiated material.