



**VENUS METALS**  
CORPORATION LIMITED

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## YOUANMI VANADIUM PROJECT

### New JORC 2012 Vanadium Oxide Mineral Resource Confirmed

This announcement replaces the announcement on 18 March as it includes updated information in respect of the mineral resource and exploration results.

#### HIGHLIGHTS

- The new JORC 2012 total resource estimate is 134.73 mt grading 0.34% V<sub>2</sub>O<sub>5</sub>
- The measured, indicated and inferred resources contain 458,900 tonnes (approximately 1,011,415,600 lbs) of V<sub>2</sub>O<sub>5</sub> (Vanadium Pentoxide)

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

Resource	Cut-off	Tonnes	V <sub>2</sub> O <sub>5</sub>
Classification	V <sub>2</sub> O <sub>5</sub> %	(Millions)	%
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

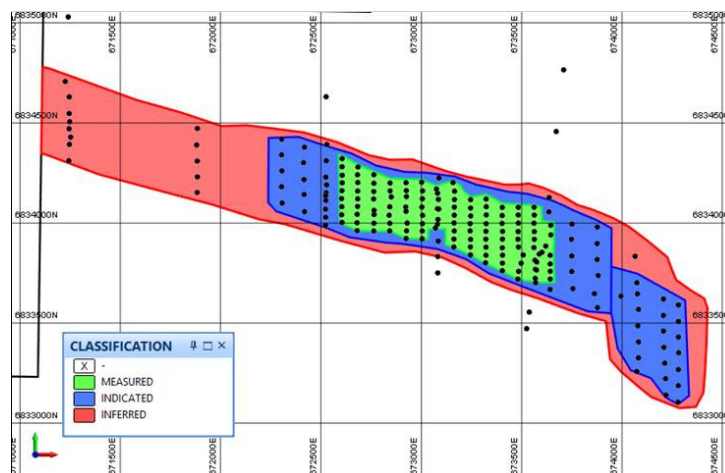


Figure 1. Plan View showing Measured, Indicated and Inferred Resources area

- 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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## PROJECT BACKGROUND

1. Venus controls a unique open pit vanadium oxide resource 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., (Figure 2) with a regional gas energy supply located at Windimurra, 40km northwest of Youanmi.
3. **At Youanmi, the 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).**
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. The oxide  $V_2O_5$  resource occurs from surface down to 30 –50 meters depth and is the focus of initial studies for potential development.
6. The friable, crumbly soft oxide material is derived from deeply weathered vanadiferous gabbro, characteristics unique to Youanmi.
7. Being soft, the oxide material enables simple mining by open cut methods with a likely zero strip ratio.
8. 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 16<sup>th</sup> October 2018).
9. 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).
10. The Youanmi oxide vanadium project is therefore very different to the highly capital-intensive pyro-metallurgical process used by traditional hard rock vanadium.



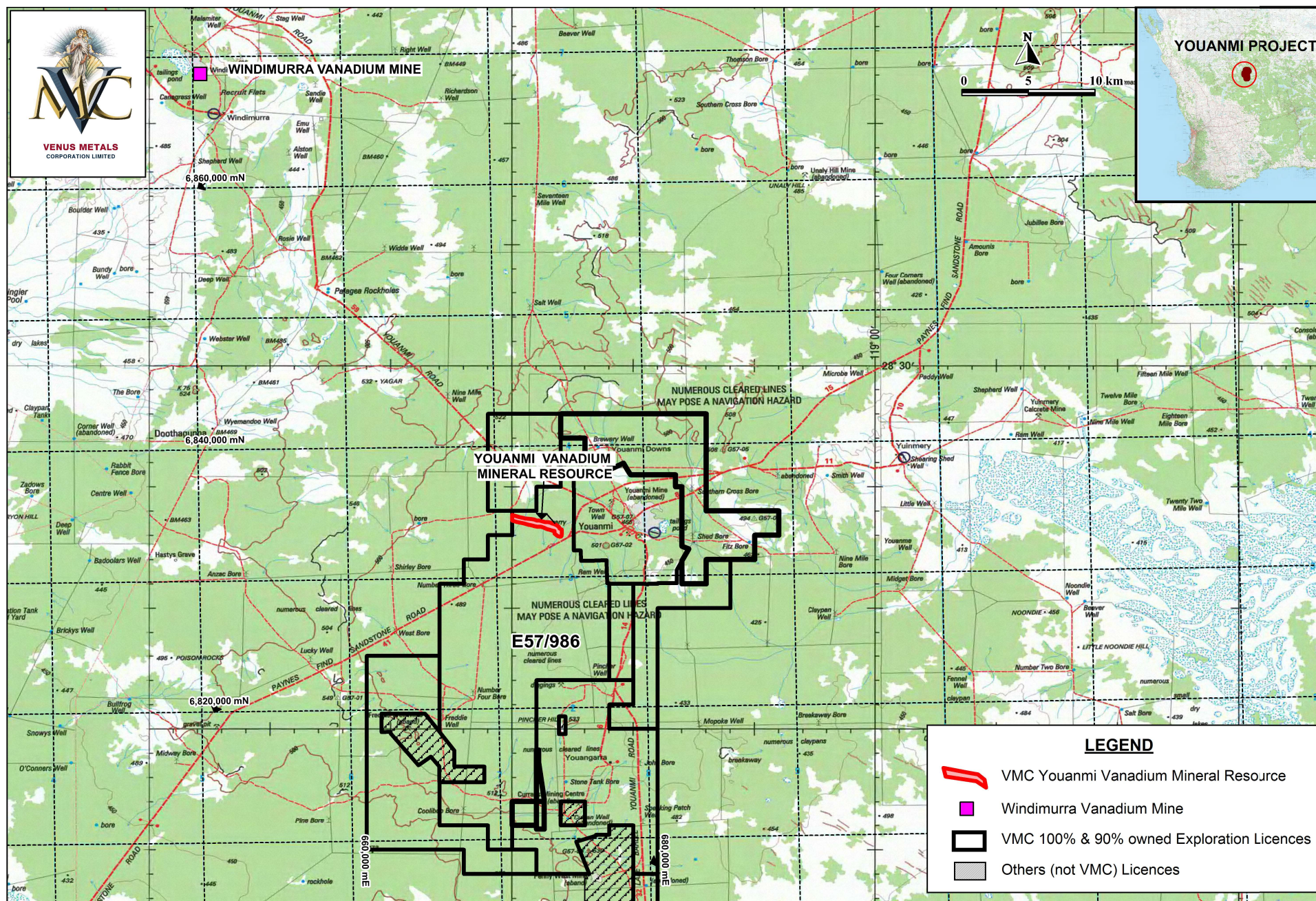


Figure 2. Location plan of Youanmi Vanadium oxide Project





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## **RESULTS OF RECENT INFILL DRILLING FOR RESOURCE DEFINITION PROGRAM**

In December 2018, Venus completed a major resource definition infill drilling program of 139 RC holes for 5919m within a zone of vanadiferous magnetite gabbro, 2km long by 300 to 400 m wide (ASX release 13<sup>th</sup> December 2018).

The RC holes were drilled on 40x80m and 80mx120m grid patterns along 19 drill lines (Figure 3) and are confined to the weathering zone of the resource area with the depth of the RC holes ranging from 19m to 50m (Appendix-1).

Drilling intersected duricrust in some holes, mottled zone clay, saprolitic clay, saprock and fresh rock; most holes were stopped a few metres into fresh rock.

Sampling was at 1m intervals using a riffle splitter. All one-metre samples were submitted to a SGS Laboratory, Perth, for analysis. At the laboratory, 1826 samples were composited into 2-metre intervals. All one-metre samples (4093) and the 2-metre composites (913) were analysed using a borate fusion with XRF finish (refer Appendix 3. JORC Table-1).

Best results include:

- **138 holes intersected zones of vanadium mineralization of more than 0.3%  $V_2O_5$ ,**
- **129 holes intersected zones of more than 0.5%  $V_2O_5$  and**
- **27 holes encountered zones of more than 1%  $V_2O_5$**  (see Appendix 2) with the maximum  $V_2O_5$  concentration of 1.30%  $V_2O_5$  at shallow depths in holes SC010 (15-16m) and SC015 (21-22m).

The vanadiferous clay zones in the weathering zone broadly correlate with vanadiferous magnetite zones in the bedrock and show a shallow southerly dip.

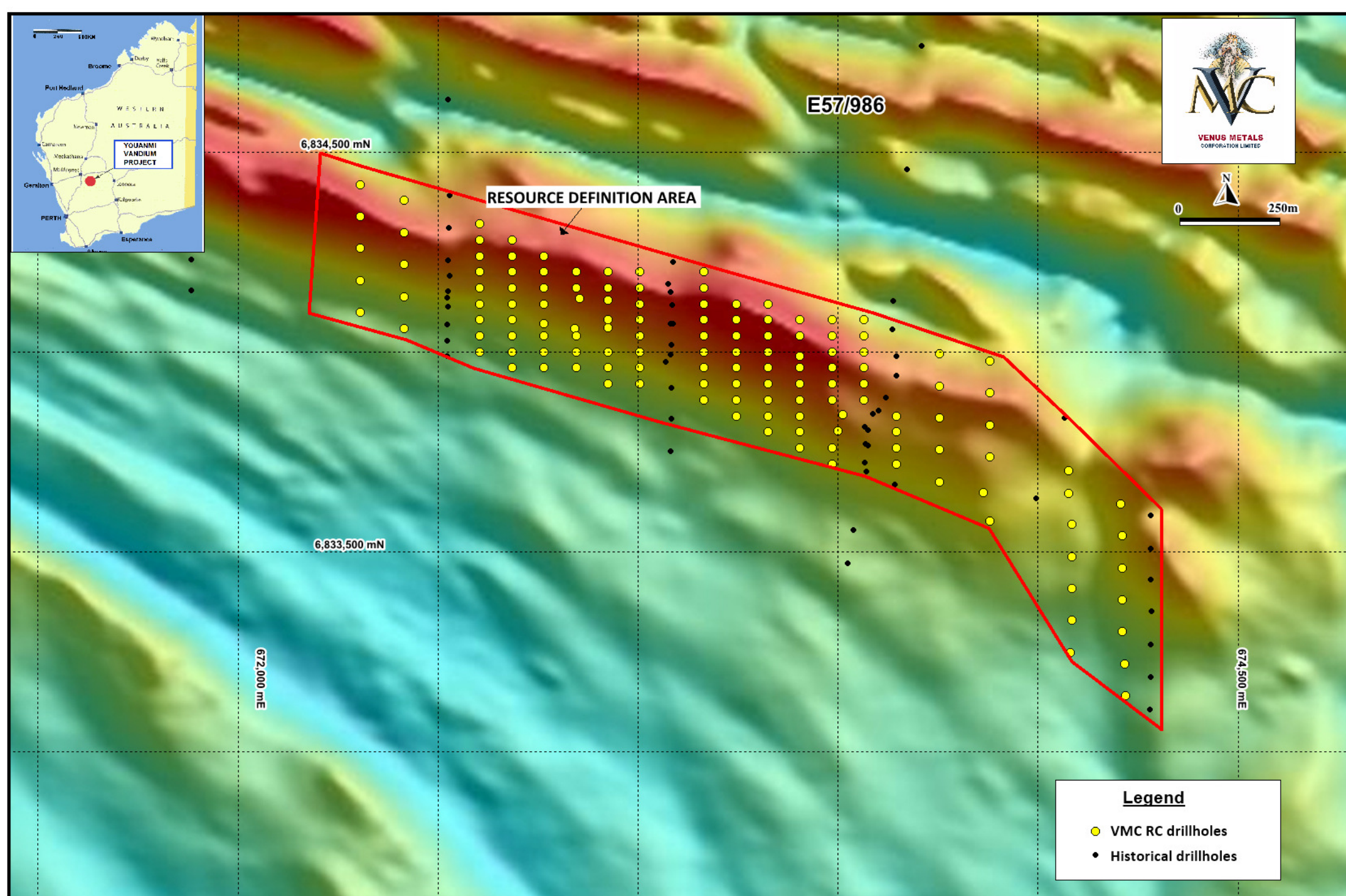


Figure 3. Location of drillholes at Youanmi Vanadium Oxide Project



## **SUMMARY OF MINERAL RESOURCE ESTIMATE**

Widenbar and Associates has produced an updated Mineral Resource Estimate for the Youanmi Vanadium Deposit, located 500 km north-east of Perth.

### **Drilling, Sampling and Assaying**

Earlier Reverse Circulation (RC) drilling at the Youanmi Vanadium Deposit was carried out by Australian Gold Resources (AGR) during 1998-1999 with most RC holes drilled vertically and a few at -60° angle.

Drill samples were collected at one-metre intervals using a cyclone and riffle splitter. Four-metre composite analytical samples were collected from the sample bags using a scoop or spear. RC drill samples were geologically logged and the downhole magnetic susceptibility measured as per the historical report. Drill hole geological logging, assay data and metallurgical test data are used to support the vanadium resource estimate.

In 2010, a diamond drilling program was carried out by Youanmi Metals Pty Ltd comprising 11 holes (YMDD001 – YMDD011) for 637.5m. All holes were geologically logged on site and the logs were subsequently uploaded into a digital relational database (Datashed™). Geological codes are those used as a standard by the Creasy Group of companies. Other relevant data collected during the logging process included structural measurements on oriented drill core, various geotechnical data (core recovery, RQD, rock strength, weathering and fracture counts), magnetic susceptibility measurements and 'Niton' XRF readings for Fe, Ti and V.

The methods used for assay analysis of historic 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. No issues were reported in the historic QAQC program.

In December 2018, Venus carried out an infill drilling resource definition program; 139 RC holes for a total of 5,919m were drilled, bringing the total drilling to 199 holes for a total of 9,187m. Venus' resource definition drilling was confined to the weathered, oxide component of the resource and fresh material is not reported in the current Mineral Resource Estimate.



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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.

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 bags.

Venus' 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.

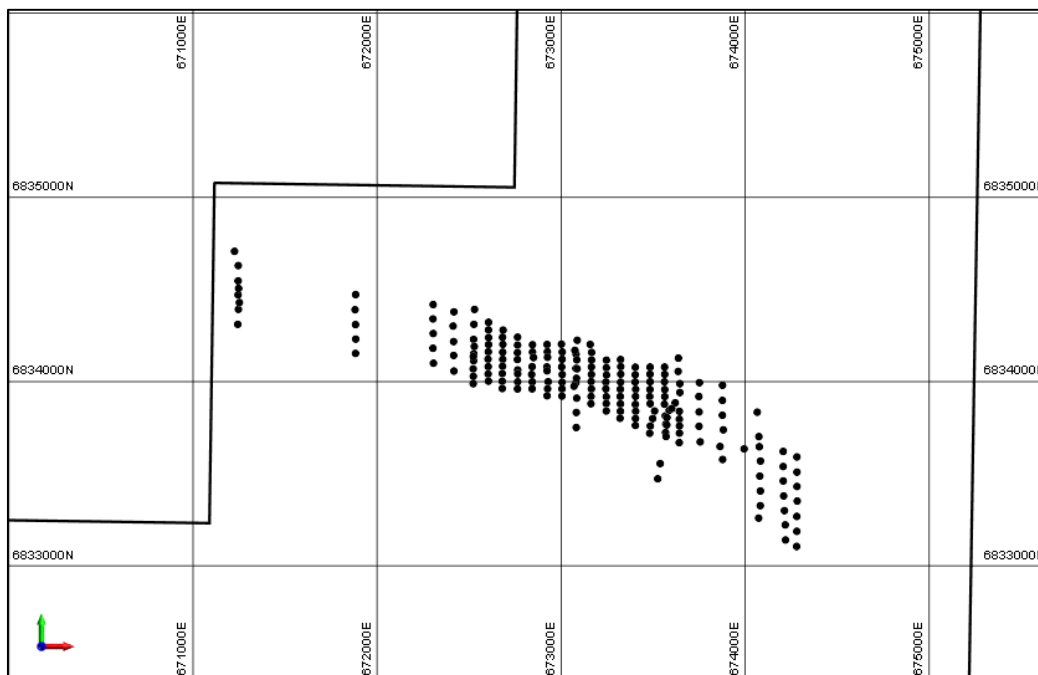


Figure 4. All DD and RC Holes used in Resource Modelling

The drill hole database was prepared by Venus in Excel spreadsheet format. Review of printed logs versus the current database has been carried out; no issues have been reported. Data has been imported into Micromine (2018.5) software for further validation, including:

- Checks for duplicate collars.
- Checks for missing samples.
- Checks for down hole from-to interval consistency.





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- 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.

There were a total of 263 RC and 11 DD holes in the database as provided. A total of 199 holes were in the area modelled as part of the updated Mineral Resource Estimate.

### **Geology and Mineralisation**

Youanmi is located within the Southern Cross Province and northwest portion of the Yilgarn Craton of Western Australia. The Province is characterised by arcuate, generally northerly trending greenstone belts that outcrop between areas of granite and gneiss. The regional geology is dominated by typical Archaean granite-greenstone terrain, with the greenstone sequences dated at between c. 3.0Ga (billion years) and 2.8Ga, and granites in the range 2.95-2.6Ga. The dominant regional structures are NE trending and N to NW trending folds, faults and shear zones.

The western portion of the Youanmi Greenstone Belt comprises two parts separated by the Youanmi Intrusion, which largely occupies the combined reporting area. The northern part consists of felsic volcanics, BIF and massive dolerite, forming a gently north plunging antiform, truncated by the Youanmi Intrusion to the south (Moody, 2007). The southern part consists of deeply weathered ultramafic intrusives and felsic volcanic rocks.

The Youanmi Intrusion occupies an oval shaped area about 20 kilometres north-south by 10 kilometres east-west bounded by marginal greenstone lithologies and granitic rocks. It consists of gabbro, leucogabbro, norite, melagabbro, pyroxenite and anorthosite. Detailed aeromagnetic data indicates the uniform consistency of the stratigraphy within the complex, particularly the magnetic horizons. These horizons are offset by several major NW trending faults.

The Project area and its surrounds contain numerous multi-commodity resources including gold, vanadium, and zinc (+copper) mineral occurrences or deposits.

Known metal mineralisation in the Youanmi area consists of:





- gold: associated with faulting, shearing and alteration (hosted by most rock types)
- base metals: stratabound copper mineralisation in supracrustal rocks, cupriferous quartz veins and shears, copper-nickel sulphides in gabbroic complexes vanadium and magnetite: massive and disseminated bands in layered mafic rocks (including gabbro, leucogabbro, melanogabbro, pyroxenite, anorthosite and magnetite rich rocks).

The prominent vanadiferous titano-magnetite horizons forming a strong magnetic signature have been interpreted to be at or near the base of the Youanmi Complex. The magnetite horizon appears to consist of two prominent units (Units 1 and 2) separated by leucogabbro and magnetite rich gabbro which are remarkably uniform around the entire length of the complex. These units comprise numerous individual massive magnetite bands varying in thickness from a few centimetres to approximately one meter, separated by magnetic gabbro.

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. Additionally, in the areas where the regolith has been stripped, the saprolite derived from magnetite-rich horizons has proven more resistant to erosion and often forms the tops of the breakaways. Depth to top of fresh rock (TOFR) in the higher ground is usually about 35m, but can be up to 55m. Petrographic analysis by AGR indicated that in the more oxidised samples magnetite is altered to martite and ultimately to hematite.

Previously, two broad mineralisation zones were recognised, varying between 30m and 50m in true thickness and dipping between at approximately 30° to the south. The Venus infill drilling campaign has confirmed the general location of these zone, but has also highlighted the alternation of minor mineralised and waste zones within these domains.

Grade shells at 0.1%, 0.2%, 0.25%, 0.3% and 0.4% have been generated but it has been found unnecessary to use these as constraints, as there is not a clear enough grade boundary to define consistent threshold values

Down hole geological logging data has been used to generate weathering codes and 3-dimensional wireframe surfaces have been generated.

- CW – completely weathered; PW – partially weathered; FR - fresh

The surfaces are used to assign bulk density to the block model and to assist in statistical analysis.



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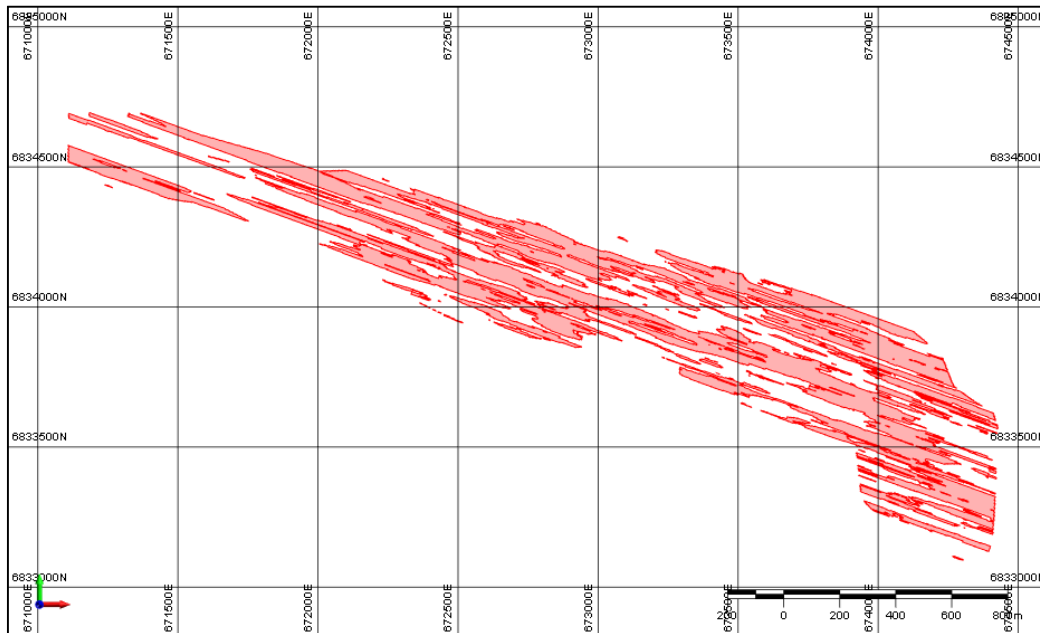


Figure 5. Plan of 0.3% Mineralised Envelope

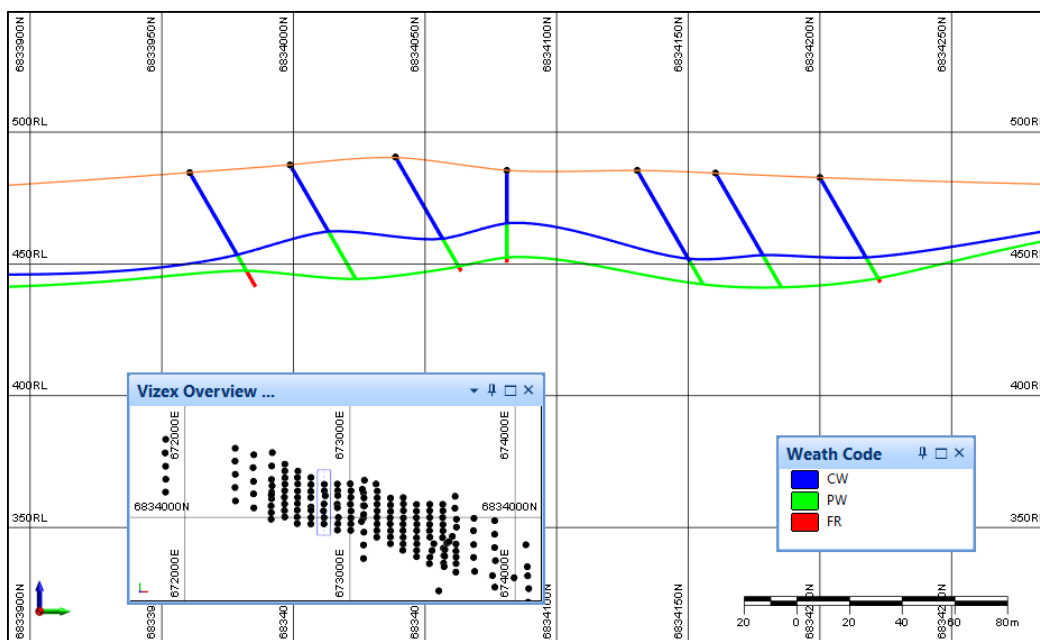


Figure 6. Typical Weathering Cross Section



### **Statistical Analysis**

A review of assay sample lengths indicated a need for compositing to a one-metre interval. Composites were flagged with weathering codes, and assay and MagSus data was merged together for further analysis.

Distribution analysis was carried out for the PW, CW and FR weathering codes and shows some differences between the weathering domains. There is a more marked difference in Magsus in the weathering domains, reflecting magnetite in the fresh material that has likely been weathered to hematite; there is significantly lower Magsus in the completely weathered material.

While there is no significant correlation between V2O5 and Magsus there are strong correlations for V2O5 vs Fe and V2O5 vs TiO2, while Al2O3 and SiO2 are negatively correlated with V2O5.

Variography was carried out for all domain data, and produced reasonably robust variograms which could be in kriging interpolation. Nugget effect was low (17%) and variogram ranges were 378m along strike, 202m down dip and 16.5m across the mineralised structures.

### **Block Model Setup and Interpolation**

Block sizes were based on approximately ¼ drill spacing (20m E-W by 10m N-S by 2.5m Elevation) with sub-cells to a minimum of 2m x 1m x 0.5m to honour topographic and mineralisation boundaries. Blocks were rotated 20° around the Z axis to align with the geological strike and 30° around the X axis to align with the geological dip. Rock models were also constructed at larger block sizes (40x20x5) and smaller block sizes (5x2x2) in order to assess the effect of block size on grade and tonnage estimation.

Resource estimation was carried out in Micromine 2018.5 software. Ordinary kriging (OK) interpolation was used with parameters based on variography and drill hole spacing.

Search ellipse orientations for the estimation were based on geological orientations. 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.





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As there has been no mining to date, no reconciliation data is available.

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<sup>3</sup>
- Fresh 2.76 t/m<sup>3</sup>

Modelling results have been compared to the previously published resource estimate and have produced similar results for the high grade domains. Validation of the final resource has been 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.

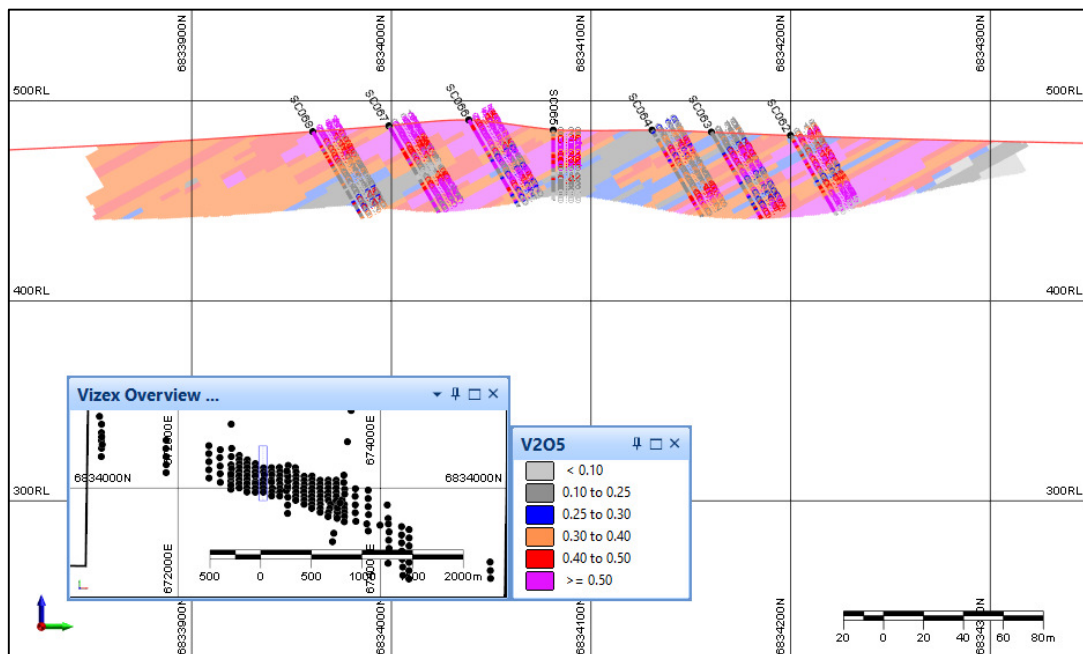


Figure 6. Drill Data and Block Model Section 672840 E



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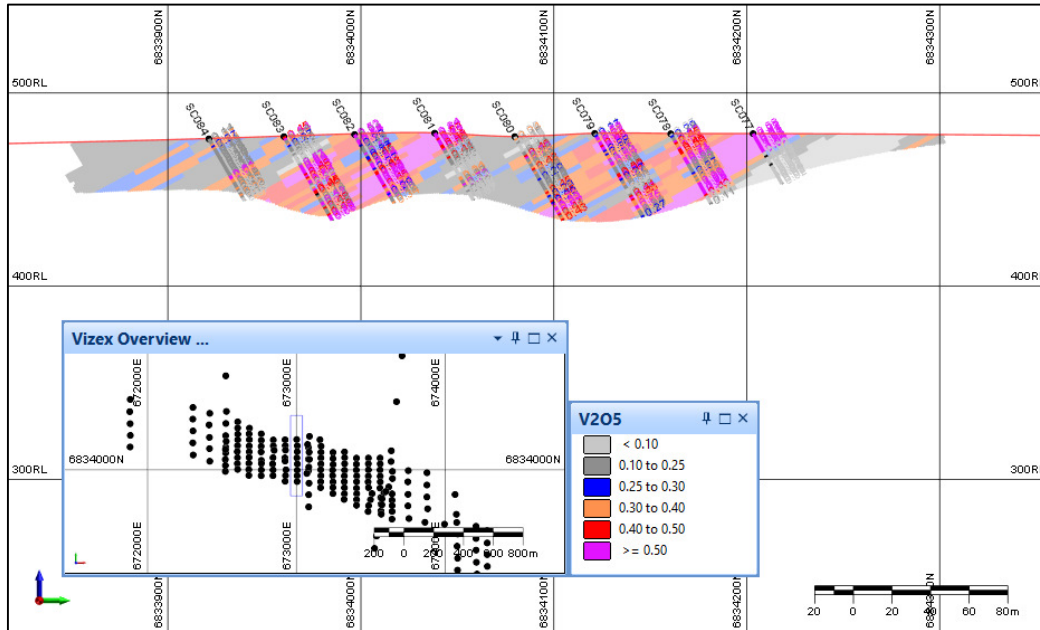


Figure 7. Drill Data and Block Model Section 673000 E

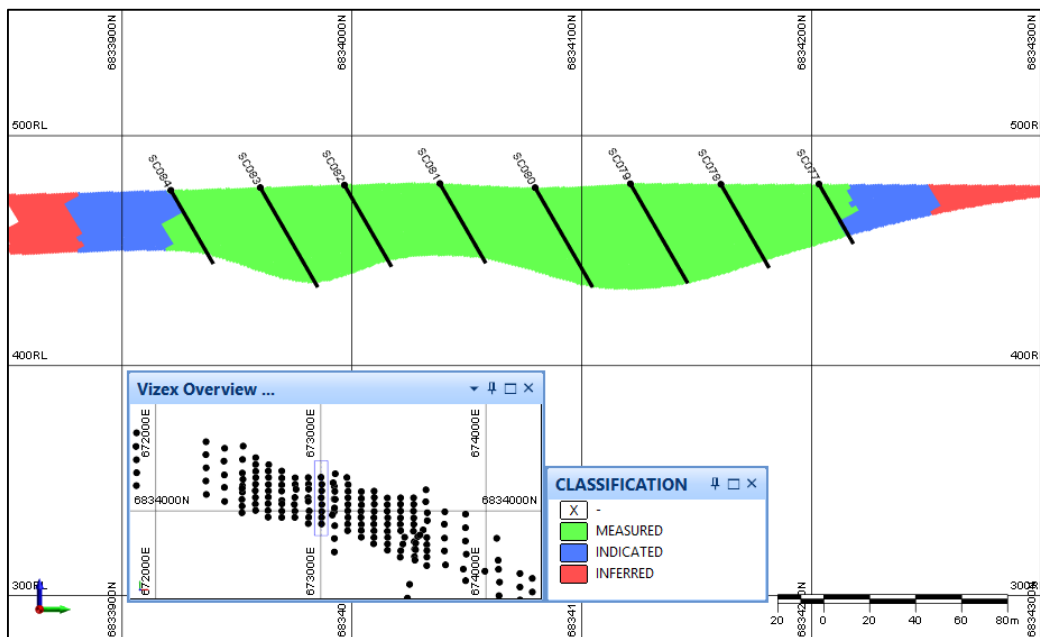


Figure 8. Sectional view showing Measured, Indicated and Inferred resources along 673000 E



The Youanmi Vanadium Mineral Resource has been classified in accordance with The 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). A range of criteria have been considered in determining this classification including:

- Geological continuity;
- Data quality;
- Sample spacing;
- Modelling technique.

#### **Geological Continuity**

The classification reflects a high level of confidence in the nature and location of the Vanadiferous mineralisation.

#### **Data Quality**

Resource classification is based on information and data compiled by Venus. Descriptions of sampling techniques indicate that data collection and management by previous owners and by Venus has been reasonable. The data is considered adequate to support the classifications proposed.

#### **Sample Spacing**

There is a sufficient spread of drill holes both along strike and down dip in the oxide portion of the deposit to support the proposed classification.

#### **Modelling Technique**

An Ordinary Kriging estimation methodology has been used for calculation of grades. Additional output from the kriging process (kriging variance, numbers of samples, average distance to samples, kriging efficiency and slope of regression) have also been generated and used to assist in classification definition.

#### **Final Classification**

Preliminary metallurgical work has that indicated that the oxide portion of the Youanmi Vanadium Deposit can be economically processed and thus represents a viable resource.

The Youanmi Vanadium 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). The Mineral Resource Estimate is confined to the he oxide





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portion of the deposit. Widenbar has reviewed the drilling, sampling and assaying data used in the estimate and considers it to be of sufficient quality to support the resource classification applied.

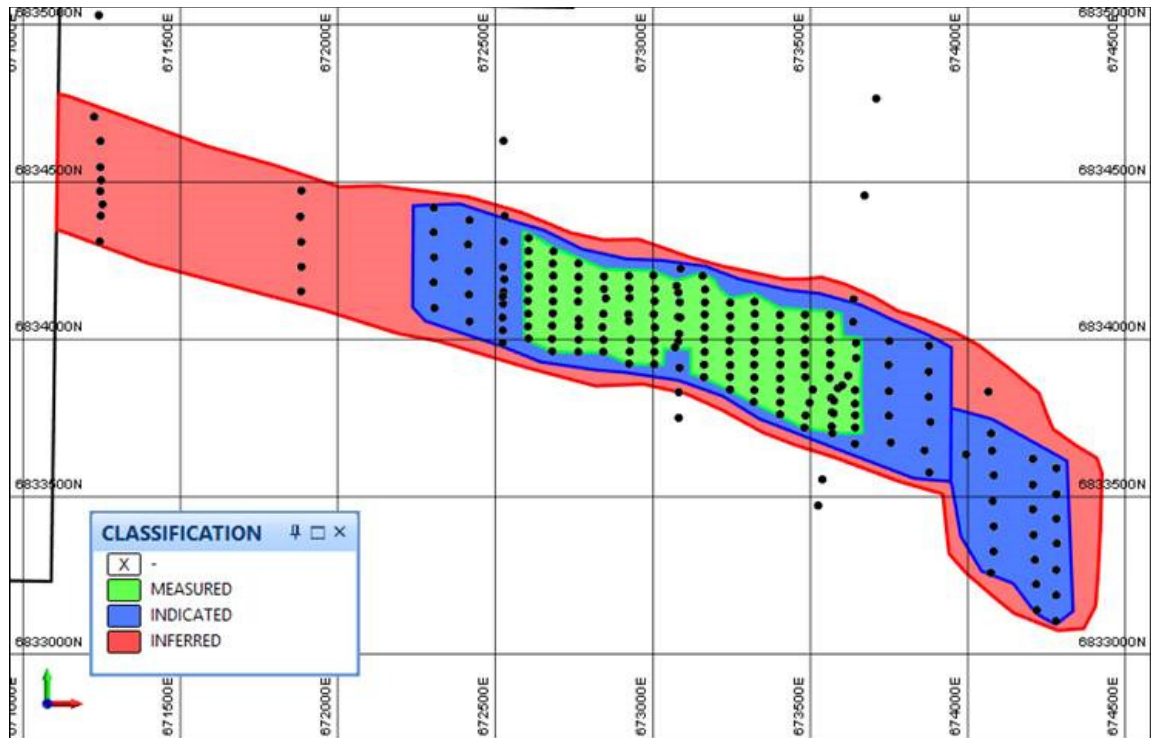


Figure 9. Plan of Resource Classification Areas

Table 2. JORC 2012 Youanmi Vanadium Oxide Mineral 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	<b>Meas+Ind</b>	<b>32,667,000</b>	<b>85,913,000</b>	<b>2.63</b>	<b>0.33</b>	<b>6.13</b>	<b>21.26</b>	<b>32.91</b>	<b>17.02</b>	<b>285,400</b>
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	<b>Total</b>	<b>51,229,000</b>	<b>134,733,000</b>	<b>2.63</b>	<b>0.34</b>	<b>6.27</b>	<b>21.33</b>	<b>32.70</b>	<b>16.65</b>	<b>458,900</b>

(Widenbar and Associates, 2019)



## 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.

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 Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

### **Competent 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 Corporation Limited. 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 and Exploration Results 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.



Hole ID	Easting GDA94 Z50	Northing GDA94 Z50	RL	Depth	Drill_Type	Azimuth	Dip
SC001	674206.4	6833620.9	478.217	50	RC	0	-60
SC002	674206.3	6833538.9	477.005	50	RC	0	-60
SC003	674206.7	6833460.8	474.531	50	RC	0	-60
SC004	674208.9	6833379.3	475.947	50	RC	0	-60
SC005	674213.2	6833299.7	478.708	50	RC	0	-60
SC006	674217.5	6833222.2	478.308	50	RC	0	-60
SC007	674219.1	6833140.4	477.201	50	RC	0	-60
SC008	674074.3	6833701.2	490.063	50	RC	0	-60
SC009	674076.6	6833646.4	487.745	50	RC	0	-60
SC010	674083.0	6833568.7	483.346	42	RC	0	-60
SC011	674079.3	6833486.9	478.066	42	RC	0	-60
SC012	674082.6	6833406.2	474.839	36	RC	0	-60
SC013	674081.8	6833326.5	473.208	50	RC	0	-60
SC014	674073.1	6833259.2	472.644	39	RC	0	-60
SC015	673876.9	6833980.0	483.308	33	RC	0	-60
SC016	673876.3	6833897.8	486.142	50	RC	0	-60
SC017	673876.2	6833817.3	488.851	50	RC	0	-60
SC018	673881.2	6833738.2	491.011	48	RC	0	-60
SC019	673863.2	6833647.6	490.497	50	RC	0	-60
SC020	673877.4	6833577.4	485.829	46	RC	0	-60
SC021	673751.2	6833994.4	481.213	30	RC	0	-60
SC022	673748.1	6833919.2	482.087	47	RC	0	-60
SC023	673749.6	6833835.2	482.372	38	RC	0	-60
SC024	673749.0	6833757.5	482.676	38	RC	0	-60
SC025	673755.6	6833672.8	482.5	37	RC	0	-60
SC026	672304.6	6834418.3	473.274	26	RC	0	-60
SC027	672303.8	6834340.2	474.435	39	RC	0	-60
SC028	672305.1	6834260.7	475.573	42	RC	0	-60
SC029	672303.7	6834180.8	476.291	38	RC	0	-60
SC030	672306.2	6834099.5	475.626	46	RC	0	-60
SC031	672417.6	6834378.8	476.378	21	RC	0	-60
SC032	672413.1	6834301.3	478.84	39	RC	0	-60
SC033	672415.6	6834217.5	483.479	43	RC	0	-60
SC034	672416.0	6834142.1	483.707	48	RC	0	-60
SC035	672417.7	6834057.2	480.31	50	RC	0	-60
SC036	672605.4	6834321.8	478.892	28	RC	0	-60
SC037	672605.1	6834280.6	480.047	34	RC	0	-60
SC038	672605.6	6834238.9	481.683	31	RC	0	-60
SC039	672605.8	6834201.0	483.627	41	RC	0	-60
SC040	672604.4	6834161.7	486.606	37	RC	0	-60
SC041	672602.9	6834122.0	491.066	48	RC	0	-60
SC042	672603.8	6834081.3	489.598	50	RC	0	-60
SC043	672603.4	6834041.3	486.37	50	RC	0	-60
SC044	672604.8	6834002.6	483.71	50	RC	0	-60
SC045	672684.5	6834279.5	478.73	27	RC	0	-60
SC046	672681.8	6834240.8	479.659	35	RC	0	-60
SC047	672683.6	6834202.0	481.17	40	RC	0	-60
SC048	672682.7	6834159.5	483.13	50	RC	0	-60

Hole ID	Easting GDA94 Z50	Northing GDA94 Z50	RL	Depth	Drill_Type	Azimuth	Dip
SC049	672682.8	6834120.6	485.819	44	RC	0	-60
SC050	672682.0	6834083.1	491.778	50	RC	0	-60
SC051	672680.3	6834043.5	488.835	50	RC	0	-60
SC052	672679.8	6834001.6	485.733	50	RC	0	-60
SC053	672680.3	6833962.3	483.162	50	RC	0	-60
SC054	672763.4	6834241.2	480.265	37	RC	0	-60
SC055	672763.6	6834198.2	480.558	44	RC	0	-60
SC056	672763.0	6834157.4	481.451	50	RC	0	-60
SC057	672762.5	6834119.8	483.305	50	RC	0	-60
SC058	672764.1	6834063.4	491.626	50	RC	0	-60
SC059	672764.1	6834042.2	490.644	50	RC	0	-60
SC060	672763.9	6833998.7	487.715	50	RC	0	-60
SC061	672763.0	6833960.1	485.18	50	RC	0	-60
SC062	672844.5	6834200.0	482.812	46	RC	0	-60
SC063	672844.6	6834160.3	484.498	50	RC	0	-60
SC064	672850.3	6834130.6	485.514	50	RC	0	-60
SC065	672842.5	6834081.1	485.489	35	RC	0	-90
SC066	672839.8	6834038.8	490.554	50	RC	0	-60
SC067	672842.9	6833998.7	487.556	50	RC	0	-60
SC068	672842.3	6833960.6	484.663	50	RC	0	-60
SC069	672923.7	6834201.5	481.27	35	RC	0	-60
SC070	672925.2	6834161.9	481.73	50	RC	0	-60
SC071	672926.2	6834131.8	482.246	50	RC	0	-60
SC072	672922.6	6834079.7	478.452	38	RC	0	-60
SC073	672923.7	6834058.3	478.86	26	RC	0	-90
SC074	672929.6	6833999.5	485.216	50	RC	0	-60
SC075	672926.5	6833960.8	481.858	50	RC	0	-60
SC076	672924.0	6833923.0	479.223	50	RC	0	-60
SC077	673001.5	6834203.3	478.944	30	RC	0	-60
SC078	673005.9	6834160.6	478.851	42	RC	0	-60
SC079	673005.1	6834121.2	479.093	50	RC	0	-60
SC080	673003.0	6834079.7	477.404	50	RC	0	-60
SC081	673006.0	6834038.3	479.204	40	RC	0	-60
SC082	673005.4	6833996.8	478.515	41	RC	0	-60
SC083	673004.7	6833960.1	477.412	50	RC	0	-60
SC084	673004.4	6833921.2	476.26	37	RC	0	-60
SC085	673158.0	6834201.8	474.965	20	RC	0	-60
SC086	673165.5	6834158.6	474.78	19	RC	0	-60
SC087	673165.1	6834117.6	474.872	33	RC	0	-60
SC088	673164.5	6834079.5	474.724	40	RC	0	-60
SC089	673164.4	6834039.1	474.606	41	RC	0	-60
SC090	673163.1	6834000.2	474.283	36	RC	0	-60
SC091	673164.3	6833960.1	473.633	28	RC	0	-60
SC092	673162.7	6833919.6	473.016	29	RC	0	-60
SC093	673162.1	6833880.1	472.86	36	RC	0	-60
SC094	673245.6	6834116.4	474.524	34	RC	0	-60
SC095	673245.5	6834075.0	474.085	41	RC	0	-60
SC096	673246.2	6834035.6	473.962	40	RC	0	-60

Hole ID	Easting GDA94 Z50	Northing GDA94 Z50	RL	Depth	Drill_Type	Azimuth	Dip
SC097	673242.9	6833997.4	474.104	40	RC	0	-60
SC098	673243.0	6833960.5	474.294	37	RC	0	-60
SC099	673245.5	6833918.0	474.411	29	RC	0	-60
SC100	673244.9	6833880.8	474.071	34	RC	0	-60
SC101	673245.0	6833840.7	474.464	34	RC	0	-60
SC102	673322.9	6834119.6	474.724	49	RC	0	-60
SC103	673323.7	6834081.3	474.826	39	RC	0	-60
SC104	673323.8	6834040.7	475.162	42	RC	0	-60
SC105	673323.2	6833996.9	475.602	43	RC	0	-60
SC106	673321.7	6833958.8	475.961	47	RC	0	-60
SC107	673321.2	6833919.4	475.991	42	RC	0	-60
SC108	673322.3	6833879.1	476.241	35	RC	0	-60
SC109	673322.0	6833838.7	476.667	43	RC	0	-60
SC110	673320.0	6833801.0	477.027	31	RC	0	-60
SC111	673403.2	6834078.1	476.136	41	RC	0	-60
SC112	673402.7	6834037.3	475.842	33	RC	0	-60
SC113	673402.1	6833998.1	476.414	50	RC	0	-60
SC114	673405.1	6833958.2	477.249	50	RC	0	-60
SC115	673404.2	6833919.6	478.076	50	RC	0	-60
SC116	673403.4	6833876.3	478.89	34	RC	0	-60
SC117	673404.9	6833839.1	480.062	41	RC	0	-60
SC118	673404.1	6833799.5	481.503	50	RC	0	-60
SC119	673403.6	6833761.9	482.333	50	RC	0	-60
SC120	673483.3	6834078.8	476.938	29	RC	0	-60
SC121	673482.8	6834040.3	477.024	38	RC	0	-60
SC122	673483.3	6833999.3	477.39	46	RC	0	-60
SC123	673482.5	6833957.2	478.097	50	RC	0	-60
SC124	673481.4	6833919.0	479.158	48	RC	0	-60
SC125	673483.9	6833880.2	480.328	50	RC	0	-60
SC126	673507.8	6833840.4	481.533	42	RC	0	-60
SC127	673497.2	6833799.2	483.048	49	RC	0	-60
SC128	673484.5	6833758.7	482.548	50	RC	0	-60
SC129	673481.0	6833719.6	480.313	50	RC	0	-60
SC130	673561.9	6834078.9	477.99	19	RC	0	-60
SC131	673562.8	6834039.6	478.186	37	RC	0	-60
SC132	673561.4	6833998.8	478.416	40	RC	0	-60
SC133	673562.8	6833957.0	479.135	50	RC	0	-60
SC134	673563.0	6833918.7	479.702	50	RC	0	-60
SC135	673561.2	6833877.1	480.333	50	RC	0	-60
SC136	673642.3	6833838.7	480.639	50	RC	0	-60
SC137	673642.1	6833795.7	479.69	46	RC	0	-60
SC138	673642.8	6833759.4	479.238	50	RC	0	-60
SC139	673642.6	6833720.4	478.9	50	RC	0	-60

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC001	9	10	0.80	13.43	42.3	7.29	13.11
SC001	16	17	0.59	9.79	34.1	8.86	23.32
SC001	27	28	0.57	9.47	34.8	11.98	18.80
SC001	30	31	0.71	11.54	36.7	11.16	15.91
SC001	32	33	0.80	13.31	41.7	8.37	11.49
SC001	43	44	0.57	8.91	30.9	12.62	20.88
SC001	44	45	0.55	8.91	29.5	14.38	23.74
SC001	47	48	0.52	8.52	27.1	15.58	26.10
SC002	6	7	0.64	10.76	32.20	12.15	22.46
SC002	11	12	0.86	13.98	42.80	7.48	12.24
SC002	33	34	0.70	11.58	37.00	7.08	16.09
SC002	44	45	0.55	9.59	31.70	8.92	23.10
SC003	2	3	0.80	14.23	34.10	10.41	17.67
SC003	4	5	0.73	12.09	28.80	16.47	22.03
SC003	5	6	0.73	11.58	25.50	18.89	24.38
SC003	6	7	0.77	13.59	23.50	19.83	24.38
SC003	7	8	0.66	11.19	20.10	22.48	27.81
SC003	8	9	<b>1.07</b>	20.02	38.20	9.45	10.76
SC003	9	10	<b>1.14</b>	20.68	33.90	10.90	13.69
SC003	10	11	<b>1.12</b>	15.25	30.30	14.89	18.95
SC003	11	12	0.93	11.56	23.30	20.40	25.45
SC003	12	13	<b>1.05</b>	22.35	33.70	10.43	13.05
SC003	13	14	<b>1.07</b>	19.68	34.60	10.92	13.71
SC003	14	15	0.59	12.09	17.90	21.91	31.02
SC003	20	21	0.55	17.35	16.60	11.84	37.43
SC003	25	26	0.84	14.41	40.80	7.22	12.94
SC003	26	27	0.52	8.69	32.30	14.02	21.15
SC003	27	28	0.50	8.69	24.90	18.53	26.74
SC003	40	41	0.57	9.67	30.40	12.13	21.07
SC004	1	2	0.59	10.54	35.80	9.50	19.10
SC004	2	3	0.52	9.04	30.20	13.98	24.38
SC004	5	6	0.50	9.32	32.30	15.85	20.11
SC004	13	14	0.77	14.70	47.30	5.91	6.82
SC004	14	15	0.57	11.91	44.30	8.46	9.58
SC004	15	16	0.70	12.81	45.70	7.48	8.32
SC004	18	19	0.50	9.56	34.50	14.98	18.74
SC004	23	24	0.57	9.81	29.20	16.19	22.89
SC004	25	26	0.82	15.78	43.00	7.40	9.43
SC004	26	27	0.68	13.13	40.60	7.37	14.07
SC004	32	33	0.73	12.21	39.10	7.20	15.72
SC005	5	6	0.54	12.84	21.40	19.27	28.23

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC005	20	21	0.62	8.97	37.30	7.48	22.46
SC005	21	22	0.55	9.74	30.30	8.63	33.15
SC005	22	23	0.55	10.02	31.80	9.33	29.30
SC005	23	24	0.52	8.96	31.60	8.14	31.87
SC005	24	25	0.68	12.18	39.10	6.72	19.74
SC005	25	26	0.55	9.74	34.40	8.56	25.45
SC005	26	27	0.68	11.79	42.30	6.21	14.91
SC005	27	28	0.59	9.92	36.60	8.18	21.18
SC005	28	29	0.54	9.37	34.10	9.24	23.53
SC005	29	30	0.57	9.59	35.60	7.80	22.67
SC005	33	34	0.62	10.61	34.40	10.26	21.11
SC005	35	36	0.57	10.17	31.70	12.00	23.32
SC005	42	43	0.66	13.23	37.60	8.41	13.75
SC005	43	44	0.61	11.41	33.70	8.86	18.55
SC005	47	48	0.55	10.37	31.90	12.26	20.96
SC006	0	1	0.52	8.71	29.4	10.45	31.23
SC006	2	3	0.52	6.20	16.6	18.44	41.50
SC006	3	4	0.52	4.69	18.4	20.02	37.86
SC006	21	22	0.55	9.92	40.4	10.45	13.86
SC006	46	47	0.62	11.44	33.3	6.42	25.45
SC006	49	50	0.50	9.09	31.6	5.65	26.10
SC007	44	45	0.61	11.04	36.70	7.23	20.15
SC008	2	3	0.62	12.83	16.6	21.35	32.73
SC008	4	5	<b>1.12</b>	18.35	42	7.25	8.79
SC008	5	6	0.71	7.67	24.4	21.72	26.31
SC008	15	16	0.55	10.61	18.9	22.67	26.95
SC008	16	17	0.66	12.36	22.7	20.40	24.81
SC008	31	32	0.66	12.38	22.7	20.97	25.03
SC008	32	33	0.52	9.46	15.2	26.07	31.66
SC008	33	34	0.73	12.11	21.2	21.91	25.67
SC008	34	35	0.57	9.67	17.6	24.75	29.52
SC008	35	36	0.66	13.81	25.3	18.87	22.46
SC008	36	37	0.54	9.26	19.5	23.99	28.88
SC008	38	39	0.93	15.80	32.3	14.36	16.38
SC008	49	50	0.55	8.71	24.6	21.16	25.67
SC009	4	5	0.84	21.02	26.3	14.90	18.22
SC009	5	6	0.55	8.26	17.7	24.75	30.59
SC009	8	9	0.75	9.24	29.1	18.15	21.35
SC009	9	10	0.68	10.43	25	20.40	23.96
SC009	20	21	0.71	11.64	34.5	14.47	17.86
SC009	21	22	0.57	8.94	26.8	19.46	23.96



Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC009	23	24	<b>1.04</b>	16.08	41.8	9.45	10.22
SC009	34	35	0.55	8.51	22.5	21.91	27.59
SC009	35	36	0.68	10.44	29.9	13.94	23.96
SC009	36	37	0.55	9.91	27.8	14.85	24.60
SC009	42	43	0.64	11.36	30.6	12.00	22.25
SC010	3	4	0.68	7.64	15.6	21.16	38.50
SC010	4	5	<b>1.27</b>	16.40	31	12.64	18.61
SC010	5	6	<b>1.27</b>	16.30	33.4	12.94	15.04
SC010	6	7	0.87	14.03	44.3	7.99	8.92
SC010	7	8	0.96	8.51	31.5	16.57	20.47
SC010	11	12	0.54	12.66	10.7	27.77	32.51
SC010	12	13	0.73	9.07	8.61	30.04	35.94
SC010	13	14	0.96	15.66	8.09	27.20	32.73
SC010	14	15	<b>1.02</b>	12.99	11	26.82	32.09
SC010	15	16	<b>1.30</b>	26.52	27.7	12.13	13.90
SC010	16	17	0.84	10.07	19.9	22.29	28.23
SC010	17	18	0.77	11.18	24.2	18.70	25.45
SC010	18	19	0.82	12.49	39.5	8.67	14.63
SC010	19	20	0.75	11.19	32.9	12.96	19.57
SC010	20	21	0.57	9.46	34.5	6.59	22.46
SC010	29	30	0.64	10.78	33	11.71	19.55
SC010	32	33	0.64	10.36	33.5	11.75	19.70
SC011	8	9	0.50	8.56	36.2	11.05	25.45
SC011	9	10	0.54	9.07	42.3	9.65	12.96
SC011	10	11	0.59	10.01	43.1	8.71	11.98
SC011	11	12	0.50	8.64	37.3	8.84	20.26
SC011	12	13	0.59	9.87	39.6	6.04	18.59
SC011	14	15	0.50	8.52	37.9	6.14	21.82
SC011	15	16	0.70	11.81	40.9	5.53	17.13
SC011	16	17	0.54	9.41	36.8	7.65	21.60
SC011	17	18	0.54	8.99	36.8	7.59	21.82
SC011	18	19	0.52	8.56	39.3	7.76	18.65
SC011	19	20	0.62	10.27	40	8.97	15.21
SC011	24	25	0.50	9.52	32.3	16.45	20.26
SC011	25	26	0.66	12.74	36.5	12.39	15.87
SC011	29	30	0.62	12.54	29.4	16.64	20.83
SC011	33	34	0.98	18.18	38.7	8.78	10.91
SC011	34	35	0.80	14.54	34.3	12.11	16.00
SC011	35	36	0.89	18.18	39.9	8.03	9.58
SC011	37	38	0.80	14.44	39.5	9.31	12.38
SC011	39	40	0.62	10.99	41.7	9.31	12.56

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC012	6	7	0.87	12.41	41.2	8.39	12.51
SC012	14	15	0.59	9.99	38.5	11.16	14.97
SC012	17	18	0.52	11.44	27.7	17.30	22.03
SC012	29	30	0.61	10.84	35.6	7.76	20.09
SC012	31	32	0.52	9.01	32.7	7.88	24.60
SC012	32	33	0.50	9.06	32.1	7.74	24.81
SC012	33	34	0.62	11.03	35.8	5.99	20.26
SC012	34	35	0.50	8.89	29.4	6.21	27.81
SC012	35	36	0.59	9.97	32.7	5.18	23.32
SC013	25	26	0.68	12.03	38.5	11.18	15.12
SC013	33	34	0.54	9.16	34.3	8.48	23.74
SC015	0	1	0.50	7.99	21.4	13.54	24.81
SC015	9	10	0.52	8.21	28.2	16.94	24.60
SC015	15	16	0.55	9.07	24	20.21	25.45
SC015	18	19	0.95	9.31	29.5	15.47	21.82
SC015	19	20	<b>1.23</b>	16.10	42.9	7.12	6.61
SC015	20	21	<b>1.29</b>	17.85	44.9	6.08	5.15
SC015	21	22	<b>1.30</b>	23.35	38.1	7.99	7.47
SC015	22	23	0.87	10.46	24.4	17.17	24.81
SC015	23	24	0.87	12.98	28.3	16.74	20.49
SC015	24	25	0.77	11.51	24.6	19.27	23.32
SC015	25	26	<b>1.02</b>	14.16	39	10.48	12.26
SC016	6	7	0.52	8.16	25	19.27	26.10
SC016	11	12	0.59	9.47	26.9	12.79	27.17
SC016	28	29	0.68	11.08	31.9	14.56	20.02
SC016	29	30	0.64	10.79	29.5	17.11	20.19
SC016	38	39	0.89	13.34	39.8	9.43	11.94
SC016	39	40	0.91	13.66	41.8	8.78	9.80
SC016	40	41	0.54	8.09	23.8	20.40	26.52
SC016	43	44	0.66	10.56	33.5	12.98	18.25
SC017	2	3	0.64	11.74	33.3	8.20	18.93
SC017	3	4	0.54	9.79	29.5	13.71	26.52
SC017	6	7	0.68	11.03	40.3	8.95	15.81
SC017	21	22	0.77	12.99	36.2	12.03	16.56
SC017	29	30	0.52	8.41	35.4	9.12	20.00
SC017	41	42	0.52	9.02	25.8	16.74	24.38
SC017	43	44	0.62	10.46	29.5	13.94	21.07
SC017	45	46	0.73	11.73	37.2	10.03	15.36
SC017	46	47	0.68	11.28	35	11.90	16.34
SC018	3	4	0.54	8.66	25.8	18.53	27.17
SC018	4	5	0.95	15.75	45.7	6.33	7.89

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC018	5	6	0.82	13.64	40.7	8.41	14.14
SC018	6	7	0.79	13.03	41.8	8.86	11.98
SC018	7	8	0.87	14.23	43.8	7.52	10.18
SC018	8	9	0.68	11.19	39	9.12	17.56
SC018	10	11	0.52	8.56	36	13.43	17.39
SC018	13	14	0.62	10.63	36.9	12.41	16.13
SC018	17	18	0.59	9.54	33.9	12.18	21.82
SC018	35	36	0.50	8.16	27.2	8.29	32.51
SC019	24	25	0.57	10.14	29.6	16.15	22.89
SC019	27	28	0.71	13.41	40.7	8.44	13.01
SC019	30	31	0.61	10.17	40.4	9.20	14.40
SC019	31	32	0.59	10.37	35.9	8.86	19.64
SC019	32	33	0.57	10.19	33.4	9.18	21.60
SC019	33	34	0.66	11.56	37.8	6.65	16.98
SC019	34	35	0.64	10.71	36.1	7.31	18.89
SC019	35	36	0.70	12.73	36.6	7.37	17.28
SC019	36	37	0.71	11.86	36.4	7.90	17.41
SC019	37	38	0.61	10.37	31.4	10.22	21.82
SC019	38	39	0.66	10.89	34	8.76	19.94
SC019	39	40	0.82	13.74	42.6	6.08	11.02
SC019	42	43	0.59	9.86	33.2	12.79	20.02
SC019	44	45	0.59	10.14	32.2	12.73	20.62
SC019	48	49	0.50	9.07	27.5	14.90	25.03
SC020	14	15	0.57	15.70	31.1	13.73	20.38
SC021	3	4	0.93	14.01	37	7.71	10.35
SC021	4	5	0.73	10.84	34.3	12.07	16.09
SC021	5	6	0.54	8.44	23.8	20.02	26.31
SC021	8	9	0.86	12.78	39.6	10.67	12.94
SC021	10	11	0.62	9.77	34.1	13.73	17.88
SC021	20	21	0.61	9.27	32	13.49	21.22
SC021	21	22	0.98	13.54	48	5.27	5.30
SC021	22	23	<b>1.14</b>	15.55	49.2	4.74	3.32
SC021	23	24	<b>1.07</b>	14.54	50.1	4.82	3.61
SC021	24	25	0.59	7.96	34	15.00	19.83
SC021	25	26	0.54	7.54	36.8	13.45	18.25
SC021	26	27	0.77	10.63	40.6	10.28	13.69
SC021	28	29	0.64	8.97	37.9	11.03	16.13
SC021	29	30	0.93	13.18	46.4	6.69	7.47
SC022	0	1	0.77	11.29	41.1	8.59	13.48
SC022	3	4	0.70	11.13	32.7	11.52	16.21
SC022	10	11	0.55	8.86	23.2	20.59	26.74

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC022	12	13	0.61	9.26	26	19.27	24.60
SC022	13	14	0.61	9.31	24.8	20.02	24.81
SC022	14	15	0.71	11.23	30.6	15.77	19.96
SC022	16	17	0.64	10.36	29.2	17.25	21.35
SC022	22	23	0.80	12.76	35.3	9.14	13.11
SC022	24	25	0.50	8.07	27.6	16.96	25.24
SC022	25	26	0.50	7.87	28	17.42	23.96
SC022	33	34	0.59	9.41	29.7	14.96	22.46
SC022	34	35	0.71	11.04	38.9	9.84	13.84
SC022	45	46	0.52	7.86	26.7	14.07	26.31
SC023	4	5	0.70	11.84	29.9	12.73	20.45
SC023	19	20	0.52	8.59	32.4	11.26	22.46
SC023	22	23	0.86	13.54	37.2	8.92	12.49
SC023	23	24	0.59	9.87	24.1	16.13	26.74
SC023	37	38	0.57	9.52	32.9	6.14	20.92
SC024	5	6	0.59	8.09	21	21.35	29.30
SC024	6	7	0.86	14.26	35	12.73	15.91
SC024	7	8	0.82	13.09	32.9	14.87	17.73
SC024	8	9	0.98	15.85	39.4	10.09	11.87
SC024	9	10	0.96	14.41	38.1	11.16	13.63
SC024	10	11	0.96	15.28	41.5	9.18	11.04
SC024	11	12	0.82	12.73	37.9	11.84	14.16
SC024	12	13	0.86	14.48	38	11.71	13.22
SC024	13	14	0.62	10.64	33.3	15.30	18.20
SC024	15	16	0.73	11.84	35	14.43	16.77
SC024	16	17	0.62	11.11	28.6	18.19	22.03
SC024	17	18	0.73	13.86	33.8	13.68	16.64
SC024	20	21	0.66	11.36	26.8	18.89	22.89
SC024	24	25	<b>1.20</b>	23.85	24.4	15.68	16.81
SC024	25	26	<b>1.07</b>	27.36	26.6	13.07	14.05
SC024	28	29	0.89	17.18	38.3	8.24	11.40
SC024	32	33	0.54	8.54	21.9	21.72	27.81
SC024	33	34	0.66	10.41	25.4	19.27	24.17
SC024	34	35	1.00	16.85	46.6	5.87	5.60
SC024	35	36	0.62	10.31	34.1	13.47	17.80
SC024	36	37	0.73	12.08	41.3	8.54	12.43
SC024	37	38	0.79	13.23	43.5	6.99	10.80
SC025	29	30	0.80	13.98	42.3	4.19	13.82
SC026	1	2	0.64	8.02	28.7	9.12	36.15
SC026	2	3	0.95	11.59	39.5	4.53	14.33
SC026	3	4	<b>1.04</b>	12.76	42.4	4.97	15.10

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC027	3	4	<b>1.02</b>	16.30	34.8	8.22	17.37
SC027	6	7	0.66	9.52	31.8	14.51	20.04
SC027	13	14	0.64	11.03	24.9	18.44	25.67
SC027	14	15	0.75	9.64	40.7	10.26	13.43
SC027	15	16	<b>1.04</b>	15.78	47.8	5.35	5.73
SC027	19	20	0.52	7.51	27.7	18.08	24.38
SC027	30	31	0.71	10.61	35.7	8.97	18.14
SC028	11	12	0.52	8.72	25.2	13.62	27.38
SC028	13	14	0.52	8.62	25.2	16.23	26.74
SC028	15	16	0.50	6.72	35.3	12.49	18.91
SC028	17	18	0.54	8.32	33.8	10.73	19.19
SC028	23	24	0.55	8.77	28.1	14.24	25.88
SC028	24	25	0.71	11.49	33.9	9.65	21.00
SC028	25	26	0.84	12.61	37.9	7.42	15.96
SC029	5	6	0.55	13.54	37.6	9.24	13.37
SC029	11	12	0.54	8.11	42.2	8.69	13.56
SC029	15	16	0.52	8.86	30.8	15.11	22.03
SC029	18	19	0.79	12.23	40.1	9.01	13.78
SC029	23	24	0.55	9.46	34.1	7.73	24.60
SC030	17	18	0.77	12.51	35.9	11.67	14.61
SC030	18	19	0.64	16.01	35.1	11.20	13.86
SC030	19	20	0.62	14.78	35.8	10.92	14.18
SC030	27	28	0.59	9.09	46.7	6.04	8.98
SC030	28	29	0.64	9.61	51.8	3.23	5.35
SC030	35	36	0.54	10.01	26	15.40	27.59
SC031	8	9	0.54	7.79	26.8	12.18	29.95
SC031	9	10	0.75	11.13	37.7	6.44	20.19
SC031	10	11	1.00	14.19	48.1	4.57	5.82
SC031	11	12	0.95	13.71	45.7	5.27	8.49
SC031	12	13	0.59	9.11	30.6	12.18	24.60
SC031	13	14	0.75	11.89	39.3	8.48	14.57
SC031	14	15	0.73	11.26	38.5	8.59	16.47
SC031	15	16	<b>1.02</b>	15.46	49.7	3.68	5.11
SC031	16	17	0.95	14.38	47.1	4.00	7.68
SC032	9	10	0.80	12.79	36.2	12.00	15.68
SC032	11	12	0.50	8.32	26.5	18.61	23.32
SC032	13	14	0.57	8.97	28.5	18.29	22.67
SC032	17	18	0.59	10.37	24.3	19.65	25.88
SC032	18	19	0.54	8.27	25.5	19.83	25.45
SC032	20	21	0.50	7.76	22.7	21.72	28.23
SC032	26	27	0.84	13.18	38.7	10.41	13.82

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC032	33	34	0.84	13.28	43.1	6.35	11.29
SC033	7	8	0.55	10.31	22.5	21.91	26.31
SC033	10	11	0.71	10.63	29.1	16.15	22.46
SC033	11	12	0.95	15.31	35.2	11.20	16.68
SC033	12	13	<b>1.04</b>	14.14	43.5	7.12	10.59
SC033	13	14	0.73	11.64	40.6	8.54	14.20
SC033	14	15	0.62	9.72	34.9	11.20	20.36
SC033	15	16	0.86	13.54	44.7	6.50	10.70
SC033	16	17	0.64	10.26	38.3	8.93	18.20
SC033	18	19	0.54	9.26	30	12.32	26.31
SC033	21	22	0.66	10.91	33.4	9.92	22.46
SC033	24	25	0.59	9.64	31.5	10.14	24.60
SC034	2	3	0.52	12.04	35.1	13.92	15.02
SC034	24	25	0.52	9.26	32.1	14.21	20.58
SC034	25	26	0.50	9.59	31.6	12.60	22.67
SC035	0	1	0.52	4.99	34.6	13.26	25.67
SC035	1	2	0.50	4.97	32.2	14.56	26.95
SC036	5	6	0.79	11.86	36	11.92	16.34
SC036	6	7	<b>1.02</b>	14.31	48.2	5.65	4.24
SC036	7	8	<b>1.04</b>	14.43	48.8	5.44	5.33
SC036	8	9	0.66	9.56	32	15.02	19.68
SC036	9	10	0.77	11.14	37.6	12.01	14.95
SC036	10	11	0.86	12.13	40.2	8.76	12.98
SC036	11	12	<b>1.05</b>	14.56	49.4	4.99	4.34
SC036	12	13	0.84	11.56	42.7	6.21	13.03
SC037	18	19	0.50	7.41	25	15.94	29.09
SC037	22	23	0.50	7.81	24.5	15.83	29.30
SC037	31	32	0.96	13.51	46.7	5.06	6.76
SC037	32	33	0.75	10.61	36.8	10.01	15.36
SC037	33	34	0.70	10.17	36	10.26	15.02
SC038	0	1	0.59	9.71	27.3	13.49	27.38
SC038	14	15	0.50	7.47	27.2	17.83	25.24
SC038	17	18	0.50	8.96	23.1	15.60	25.67
SC038	19	20	0.57	8.76	38.9	9.97	15.51
SC038	25	26	0.91	14.13	44.6	5.67	9.45
SC039	4	5	0.66	11.71	37	10.98	15.32
SC039	14	15	0.64	11.84	32.7	14.79	18.40
SC039	16	17	0.50	8.51	26.4	16.89	26.74
SC039	17	18	0.55	9.32	32.7	12.26	22.89
SC039	21	22	0.54	8.52	41.5	6.14	15.59
SC039	32	33	0.55	9.09	29	13.28	24.81
SC040	4	5	0.59	12.78	18.9	23.23	26.95

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC040	5	6	<b>1.16</b>	17.68	42.9	7.93	7.94
SC040	6	7	0.89	17.01	35.8	12.26	13.15
SC040	7	8	0.62	13.46	25	19.65	22.25
SC040	8	9	<b>1.05</b>	15.60	43	8.59	9.09
SC040	9	10	0.71	10.22	34	15.28	17.84
SC040	10	11	0.75	11.04	33.9	15.28	17.67
SC040	11	12	0.57	9.82	23.6	21.53	25.24
SC040	12	13	0.64	9.87	30.1	17.83	20.41
SC040	14	15	0.66	10.09	30.4	17.23	20.51
SC040	15	16	0.66	10.68	29.3	17.27	21.07
SC040	35	36	0.86	14.70	43.4	5.87	9.58
SC041	9	10	0.52	8.47	38.6	12.58	15.40
SC041	10	11	0.64	11.49	35.5	13.96	16.90
SC041	11	12	0.82	12.84	36.3	13.05	15.66
SC041	12	13	0.96	15.11	39.1	10.71	12.60
SC041	13	14	0.96	14.54	37.8	11.73	13.60
SC041	14	15	0.96	14.88	38.3	13.07	15.44
SC041	15	16	0.79	12.11	40.1	11.35	13.07
SC041	16	17	0.95	14.51	38.4	11.54	13.28
SC041	17	18	0.54	6.62	14.7	28.15	33.15
SC041	18	19	0.84	11.33	28.4	18.51	21.28
SC041	19	20	0.84	13.01	30.8	16.60	19.36
SC041	20	21	1.00	12.06	32	17.11	19.85
SC041	23	24	0.66	12.71	25.2	19.65	23.32
SC041	26	27	0.79	9.19	27.5	19.08	22.89
SC041	27	28	0.93	17.85	32	13.37	16.06
SC041	28	29	0.82	20.02	29.5	14.07	16.88
SC041	29	30	<b>1.02</b>	23.69	32.2	10.98	12.94
SC041	34	35	0.87	14.13	24.4	19.46	22.46
SC041	35	36	<b>1.14</b>	19.52	43.4	7.25	6.80
SC041	36	37	<b>1.04</b>	17.68	40.3	9.29	9.97
SC041	37	38	0.91	14.73	28.1	16.53	20.04
SC041	38	39	0.82	12.11	27.7	17.30	21.82
SC041	39	40	0.96	16.21	40.7	8.50	11.04
SC041	43	44	0.55	9.07	28.5	13.28	25.88
SC041	46	47	0.68	11.14	34.5	10.94	19.42
SC042	20	21	0.61	11.18	26.6	19.08	23.10
SC042	23	24	0.52	9.01	28.9	18.32	22.25
SC042	36	37	0.57	10.44	35.7	8.44	20.51
SC042	39	40	0.55	10.31	35.1	7.03	21.39
SC042	40	41	0.64	11.66	39	6.10	17.26
SC042	41	42	0.64	10.94	38.2	6.86	18.40

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC042	42	43	0.52	8.62	36.3	8.67	20.09
SC042	43	44	0.61	10.34	36.2	8.58	19.29
SC042	44	45	0.61	10.43	43.6	6.29	12.19
SC042	48	49	0.57	10.07	32	12.41	22.03
SC043	1	2	0.62	6.39	39.8	11.77	17.45
SC043	2	3	0.52	6.59	32.5	11.03	28.66
SC043	6	7	0.68	11.36	36.6	17.74	7.79
SC043	10	11	0.52	12.98	18.3	23.61	25.88
SC043	16	17	0.55	9.21	37.4	13.34	15.29
SC044	6	7	0.71	10.16	40.9	14.05	8.41
SC044	7	8	0.77	11.13	42.5	13.68	6.59
SC044	8	9	1.00	13.53	40.1	14.21	5.67
SC044	9	10	<b>1.25</b>	12.38	35.6	14.85	9.99
SC044	10	11	0.91	12.06	42.4	11.15	7.91
SC044	11	12	<b>1.27</b>	11.29	34.9	14.75	13.05
SC044	12	13	0.98	9.77	29.9	17.51	18.01
SC044	13	14	0.86	7.77	31.6	17.04	18.63
SC044	14	15	0.68	8.66	30.1	17.38	19.83
SC045	3	4	0.54	8.62	23.5	14.73	26.95
SC045	5	6	0.82	12.41	41.7	8.50	12.47
SC045	6	7	0.61	9.44	32.4	13.09	22.03
SC045	17	18	0.70	11.09	37.9	10.45	15.57
SC045	18	19	1.00	15.00	47.7	5.25	4.62
SC045	19	20	0.75	10.51	45.7	8.35	9.69
SC045	20	21	0.75	10.79	39.7	9.67	12.96
SC045	21	22	<b>1.05</b>	14.63	46.9	5.01	7.55
SC045	22	23	0.70	10.02	36.3	9.88	18.10
SC046	0	1	0.75	11.53	34.9	9.48	20.71
SC046	2	3	0.55	8.66	31.4	14.04	19.06
SC046	6	7	0.55	8.71	29	17.42	22.03
SC046	7	8	0.52	8.12	28.4	12.26	15.70
SC046	16	17	0.55	8.71	25.4	17.79	25.88
SC046	17	18	0.55	9.11	31.5	9.80	21.37
SC046	18	19	0.68	10.81	36.8	9.09	17.56
SC046	28	29	0.87	13.08	45.2	6.10	8.79
SC046	32	33	0.71	11.18	37.4	10.16	15.55
SC047	8	9	0.55	11.23	22.9	17.42	20.86
SC047	10	11	0.64	11.39	26.4	18.42	21.39
SC047	11	12	0.57	10.99	24.5	20.02	23.32
SC047	12	13	0.68	9.77	38.4	11.92	14.95
SC047	20	21	0.52	8.31	22.4	20.59	28.23
SC047	23	24	0.75	11.88	30.4	14.79	19.89



Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC047	24	25	0.77	11.53	36.8	11.49	14.97
SC047	25	26	0.50	7.76	26.5	19.65	23.96
SC047	35	36	0.50	8.24	26.8	14.28	26.10
SC048	14	15	0.80	14.63	32.2	11.22	19.36
SC048	17	18	0.71	12.41	38.1	9.46	16.17
SC048	29	30	0.75	12.01	39.1	8.86	15.61
SC048	45	46	0.57	9.36	30.2	12.60	22.89
SC048	47	48	0.71	11.96	36.6	10.05	15.79
SC049	2	3	0.84	14.39	36.8	10.69	15.46
SC049	3	4	0.91	15.78	42	8.44	10.48
SC049	4	5	0.89	15.40	46.2	6.08	7.57
SC049	5	6	0.73	12.64	44.3	8.03	9.71
SC049	13	14	0.50	7.62	33.1	15.92	19.85
SC049	14	15	0.55	9.94	37.5	12.71	15.49
SC049	15	16	0.79	16.16	35.9	12.07	13.84
SC049	16	17	0.91	19.68	42.4	7.33	7.55
SC049	17	18	0.84	14.23	44.1	8.07	9.65
SC049	18	19	0.52	9.07	31.9	15.45	20.13
SC049	20	21	0.82	13.24	44.6	6.84	11.42
SC049	28	29	0.80	12.58	39.8	9.18	13.63
SC050	1	2	0.75	5.32	29.1	15.58	28.45
SC050	5	6	0.64	9.72	27.1	17.11	25.24
SC050	22	23	0.54	8.82	40.4	11.07	13.48
SC050	23	24	0.68	11.26	42.9	8.90	10.97
SC050	24	25	0.64	10.73	48	5.91	7.29
SC050	25	26	0.62	10.99	43.8	8.75	11.12
SC050	26	27	0.66	11.08	41.3	9.99	12.26
SC050	27	28	0.64	11.03	40	10.90	13.43
SC050	28	29	0.59	9.96	39.2	11.39	14.63
SC050	29	30	0.55	9.62	48.2	5.89	8.09
SC050	33	34	0.64	11.83	35	13.68	17.88
SC050	34	35	0.50	9.77	29.5	16.76	22.67
SC050	38	39	0.91	16.51	38	9.07	13.33
SC050	39	40	<b>1.14</b>	21.85	37.2	8.16	10.42
SC050	40	41	<b>1.04</b>	21.85	20.9	14.55	22.03
SC050	48	49	0.61	10.46	32.3	11.11	23.10
SC050	49	50	0.75	14.04	40.7	8.08	12.83
SC051	1	2	0.52	8.66	25.4	18.15	25.03
SC051	8	9	0.50	4.10	26.5	17.06	20.75
SC051	22	23	0.70	13.26	32.9	13.87	17.80
SC051	24	25	0.54	10.27	32.7	14.98	18.80
SC051	31	32	0.61	10.01	40	10.43	15.04

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC051	47	48	0.52	9.42	33.3	6.74	23.10
SC051	48	49	0.50	8.69	28.9	7.78	26.10
SC051	49	50	0.59	10.19	31.5	6.48	22.46
SC052	6	7	0.50	8.67	24.3	25.88	11.44
SC052	25	26	0.61	11.26	32.5	14.68	17.78
SC052	32	33	0.52	11.54	32.4	14.79	18.67
SC052	37	38	0.50	9.34	30.4	16.51	22.03
SC053	0	1	0.59	5.39	37.7	13.96	19.91
SC053	6	7	0.64	11.83	28.7	13.71	15.49
SC053	7	8	0.54	12.34	29.9	14.56	14.29
SC053	8	9	0.68	11.81	32.8	16.30	11.74
SC053	9	10	0.71	9.64	28	18.61	18.16
SC054	5	6	0.54	7.71	30.5	11.62	16.41
SC054	6	7	0.70	10.69	39.9	9.46	10.42
SC054	8	9	0.50	8.11	21.4	21.35	26.31
SC054	12	13	0.86	13.13	41.8	9.67	11.66
SC054	13	14	0.68	10.58	35.5	12.88	16.88
SC054	25	26	0.68	11.06	31.6	11.24	20.36
SC054	26	27	0.96	15.41	48.1	4.61	4.51
SC054	27	28	<b>1.09</b>	16.40	49	4.25	3.14
SC054	28	29	0.84	14.16	35.9	10.54	14.93
SC054	29	30	0.71	10.01	38	11.43	15.72
SC054	30	31	0.68	10.56	35.2	11.41	17.80
SC054	31	32	0.80	12.08	43.6	6.88	10.48
SC054	32	33	0.73	10.02	39.8	6.82	15.79
SC055	5	6	0.57	7.81	31.2	17.19	21.11
SC055	7	8	0.61	10.81	27.9	18.32	21.82
SC055	8	9	0.77	10.71	34.9	14.28	16.96
SC055	10	11	0.64	11.83	25.9	19.08	22.67
SC055	16	17	0.73	10.93	45.1	8.14	9.05
SC055	27	28	0.86	14.26	41.5	8.76	10.31
SC055	28	29	0.54	8.49	31.3	15.91	20.45
SC055	39	40	0.87	13.46	42	7.86	10.40
SC056	6	7	0.61	10.07	33.1	13.85	19.34
SC056	11	12	0.62	10.79	34.5	13.90	18.31
SC056	23	24	0.61	10.36	31.5	14.36	20.56
SC056	26	27	0.70	12.33	36.7	10.90	15.51
SC056	29	30	0.71	12.21	32.4	11.26	17.54
SC056	36	37	0.54	8.67	23.7	20.59	26.31
SC056	39	40	0.77	11.74	39.4	9.86	12.92
SC056	40	41	0.55	10.06	23	19.65	25.67
SC056	47	48	0.91	13.88	44.3	6.89	8.86

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC057	2	3	0.66	10.07	37.7	11.16	16.60
SC057	7	8	0.50	8.57	35.3	13.58	19.02
SC057	24	25	0.54	9.37	30.4	8.61	25.88
SC057	36	37	0.57	9.39	31.2	7.73	24.17
SC058	0	1	0.50	6.29	19.4	17.51	38.93
SC058	13	14	0.59	9.86	38.9	11.75	14.42
SC058	14	15	0.57	8.96	42.4	9.90	11.98
SC058	15	16	0.59	9.44	43.2	9.24	11.44
SC058	16	17	0.64	11.24	40.1	10.73	12.83
SC058	17	18	0.50	8.47	36.3	13.90	16.64
SC058	18	19	0.57	9.91	45.8	7.69	9.80
SC058	22	23	0.54	9.09	31.3	16.70	19.96
SC058	23	24	0.64	11.81	33.3	15.15	18.76
SC058	24	25	0.64	12.76	35.1	13.60	16.79
SC058	30	31	0.75	13.48	44	7.76	9.73
SC058	31	32	0.66	12.58	38.9	10.81	13.78
SC058	32	33	0.80	14.36	42.1	8.07	11.08
SC058	39	40	0.52	8.82	27	17.27	25.67
SC058	40	41	0.95	15.75	48	5.18	5.58
SC058	41	42	0.84	13.91	44.9	6.06	9.37
SC058	43	44	0.59	9.82	32	10.31	23.74
SC058	44	45	0.64	10.59	35	9.90	20.09
SC058	45	46	0.75	12.34	40.7	8.22	13.56
SC058	48	49	0.52	8.16	27.8	13.20	25.24
SC059	2	3	0.55	5.22	32.8	14.22	25.03
SC059	3	4	0.71	3.95	31.2	15.81	26.10
SC059	5	6	0.57	7.04	29.4	15.60	26.31
SC059	10	11	0.50	7.62	28	18.00	23.53
SC059	24	25	0.64	12.26	41.6	8.86	11.49
SC059	27	28	0.59	10.71	42.3	9.20	12.13
SC059	28	29	0.62	11.21	41.4	9.54	12.79
SC059	29	30	0.55	9.69	40.6	9.73	14.18
SC059	30	31	0.59	9.76	38.4	8.20	18.95
SC059	31	32	0.54	7.92	34.4	7.37	23.96
SC059	32	33	0.61	9.81	35.9	6.25	21.82
SC059	33	34	0.50	7.49	29.8	8.50	27.38
SC059	34	35	0.50	7.99	31.6	7.22	26.95
SC059	35	36	0.54	9.74	31.7	8.73	23.74
SC059	43	44	0.52	9.79	27.1	15.58	25.67
SC059	47	48	0.66	11.09	36.9	9.41	16.71
SC059	49	50	0.75	13.58	41.4	7.01	11.72
SC060	4	5	0.52	7.29	32.8	15.24	20.83

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC060	7	8	0.57	7.79	33.5	15.83	16.94
SC060	13	14	0.54	10.93	38.2	12.52	14.07
SC060	22	23	0.50	9.02	30.5	16.26	21.07
SC061	2	3	0.59	8.84	33.7	13.03	22.89
SC062	4	5	0.89	14.19	39.1	9.58	12.30
SC062	5	6	0.89	13.76	44.7	7.20	8.13
SC062	14	15	1.00	15.88	43.5	7.48	8.49
SC062	15	16	0.62	9.44	29.6	17.78	21.26
SC062	19	20	0.54	8.91	21.3	21.53	28.45
SC062	20	21	0.79	12.84	33.9	11.88	17.67
SC062	21	22	0.68	10.98	29.6	15.68	21.60
SC062	22	23	0.50	8.41	25.7	18.85	25.88
SC062	35	36	0.70	10.93	32.1	13.05	19.57
SC062	36	37	1.02	16.06	47	5.06	4.32
SC062	37	38	1.09	15.16	47.1	4.91	5.39
SC062	38	39	0.55	7.74	32.7	13.64	20.45
SC062	39	40	0.79	11.33	38.1	9.99	14.78
SC062	40	41	0.89	11.89	41.2	7.88	12.56
SC062	41	42	1.16	15.16	49.1	4.29	4.26
SC062	42	43	1.00	13.64	47.8	4.59	6.50
SC062	43	44	0.80	11.51	40.5	7.14	15.08
SC063	14	15	0.54	9.34	21.00	21.91	28.02
SC063	15	16	0.50	8.97	18.50	23.80	29.52
SC063	16	17	0.55	10.32	21.80	21.91	25.88
SC063	17	18	0.59	9.44	17.90	24.18	29.09
SC063	18	19	0.70	13.29	27.40	17.42	21.00
SC063	19	20	0.50	8.59	22.10	22.29	26.95
SC063	20	21	0.61	9.42	27.10	19.08	23.53
SC063	25	26	0.57	9.02	33.40	15.30	19.02
SC063	26	27	0.79	10.59	40.90	10.20	13.13
SC063	27	28	0.57	8.47	28.90	18.19	22.67
SC063	28	29	0.57	10.39	26.40	21.72	26.10
SC063	36	37	0.70	10.86	34.60	10.67	17.73
SC063	46	47	0.84	12.83	40.40	7.61	11.87
SC063	47	48	0.68	10.26	34.40	11.62	18.10
SC064	12	13	0.75	12.11	38.70	11.15	13.48
SC064	15	16	0.55	9.31	20.80	21.53	29.30
SC064	18	19	0.55	9.02	29.40	14.19	26.74
SC064	39	40	0.50	8.54	25.30	20.02	25.67
SC064	41	42	0.73	12.18	33.30	13.22	17.71
SC064	43	44	0.52	9.02	25.50	18.83	25.03
SC064	45	46	0.54	8.91	26.90	18.76	23.53

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC065	5	6	<b>1.04</b>	16.33	41.7	8.90	9.80
SC065	6	7	<b>1.04</b>	17.18	45.2	6.50	7.06
SC065	7	8	0.61	11.03	24.7	19.27	25.88
SC065	8	9	0.93	14.19	37.9	11.67	13.67
SC065	9	10	0.96	15.30	46.6	5.91	6.74
SC065	10	11	0.68	10.94	38.1	11.98	14.74
SC065	13	14	0.50	8.32	17.9	25.12	30.37
SC065	14	15	0.70	12.43	27.9	18.15	21.82
SC065	17	18	0.84	13.44	45	7.01	9.07
SC065	18	19	0.59	9.62	32.9	11.66	22.89
SC066	0	1	0.57	4.82	26.3	15.32	31.87
SC066	1	2	0.75	11.29	32.2	12.47	21.11
SC066	2	3	0.68	5.27	25.9	16.76	29.95
SC066	6	7	0.75	9.51	30	14.77	23.96
SC066	7	8	0.57	8.74	28	16.72	24.81
SC066	8	9	0.59	10.11	33.2	14.24	17.01
SC066	9	10	0.71	11.71	39.1	9.99	11.47
SC066	10	11	0.77	11.21	38.9	11.58	12.60
SC066	11	12	0.79	11.13	40.1	11.13	12.26
SC066	12	13	0.87	11.14	39.5	11.62	12.49
SC066	13	14	0.71	13.78	33.4	14.00	15.64
SC066	14	15	0.59	9.61	25.9	19.46	23.32
SC066	16	17	0.79	15.85	32	13.77	17.13
SC066	17	18	0.61	10.59	28.6	17.68	21.35
SC066	21	22	0.54	9.12	25.3	20.78	25.03
SC066	24	25	0.75	12.96	38.8	11.28	13.26
SC066	25	26	0.82	14.49	44.2	7.93	9.30
SC066	26	27	0.73	14.08	37.9	11.60	13.95
SC066	27	28	0.91	17.68	42.7	7.73	8.88
SC066	34	35	0.61	10.14	32.2	15.89	19.08
SC066	35	36	1.00	17.51	38.4	9.88	11.66
SC066	36	37	0.96	16.43	39.8	8.88	11.38
SC066	37	38	0.70	11.71	29.4	16.23	21.60
SC066	38	39	0.91	15.50	41.2	7.56	10.80
SC066	42	43	0.57	9.31	30.7	13.24	22.67
SC066	46	47	0.73	11.86	37.4	9.52	16.43
SC067	1	2	0.68	14.49	41.8	9.63	7.47
SC067	2	3	0.64	16.08	35.6	16.57	3.98
SC067	3	4	0.93	27.52	38	5.12	4.09
SC067	4	5	0.82	29.19	36.3	5.36	4.43
SC067	5	6	0.66	29.69	28.4	7.46	7.81
SC067	6	7	0.79	19.52	27.8	10.73	11.53

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC067	7	8	0.75	24.52	26	13.03	9.54
SC067	8	9	0.77	26.35	20.7	16.53	15.91
SC067	9	10	0.68	9.76	10.4	29.09	31.66
SC067	10	11	0.89	23.52	18.2	19.83	17.03
SC067	11	12	0.66	19.18	18.4	21.35	21.60
SC067	12	13	0.62	16.85	18.7	20.40	22.46
SC067	19	20	0.54	10.74	30.8	15.55	18.40
SC067	21	22	0.52	10.29	33	14.75	18.42
SC067	36	37	0.50	8.67	31.3	8.41	25.03
SC067	37	38	0.59	10.37	34.2	7.48	22.25
SC067	38	39	0.59	10.51	37	6.65	19.76
SC067	39	40	0.57	9.64	31.6	6.01	24.60
SC067	40	41	0.55	9.34	32.2	8.84	23.96
SC067	41	42	0.52	8.77	30	6.88	26.10
SC067	42	43	0.54	9.21	32.6	8.61	24.17
SC067	44	45	0.52	8.32	29.6	15.32	23.96
SC067	45	46	0.55	9.26	29.8	15.85	23.10
SC067	46	47	0.66	11.19	37.4	10.73	16.36
SC067	49	50	0.55	9.46	30.2	13.90	22.67
SC068	0	1	0.64	11.84	29.4	13.19	25.45
SC068	1	2	0.68	11.81	30.9	12.75	24.17
SC068	2	3	0.77	12.71	33.7	11.84	20.17
SC068	3	4	0.64	12.04	30.6	12.49	11.08
SC068	4	5	0.93	16.85	43.9	8.48	4.21
SC068	5	6	0.87	16.85	40.3	10.14	4.68
SC068	6	7	0.84	17.85	36.5	14.07	4.68
SC068	7	8	0.66	14.19	25.6	22.29	11.57
SC068	10	11	0.52	9.27	11	28.34	32.94
SC068	18	19	0.52	9.94	19.2	22.86	27.59
SC069	3	4	0.62	8.86	25.00	17.04	25.03
SC069	4	5	0.77	10.84	30.00	14.32	19.19
SC069	5	6	0.59	8.67	26.30	18.89	24.60
SC069	16	17	0.59	9.61	24.70	20.40	23.96
SC069	17	18	<b>1.07</b>	15.00	41.50	9.10	9.65
SC069	18	19	<b>1.18</b>	15.38	49.00	4.89	4.43
SC069	19	20	0.80	10.93	32.40	15.47	18.55
SC069	20	21	0.91	12.01	40.40	10.75	12.21
SC069	21	22	0.77	10.12	52.10	4.14	4.47
SC070	1	2	0.54	8.72	25.20	11.20	35.51
SC070	13	14	0.59	9.16	31.90	12.49	16.13
SC070	14	15	0.91	14.39	40.70	9.03	10.95
SC070	15	16	0.64	10.71	27.80	17.27	23.10

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC070	21	22	0.52	7.64	27.80	17.72	24.17
SC070	26	27	0.98	14.08	47.30	6.46	5.73
SC070	27	28	0.75	11.09	45.60	7.57	8.66
SC070	29	30	0.50	8.01	20.50	21.53	29.73
SC070	30	31	0.50	8.22	21.80	20.97	28.88
SC070	33	34	0.71	10.59	32.50	12.49	20.38
SC070	35	36	0.59	9.46	26.90	16.43	23.96
SC070	45	46	0.70	10.12	33.20	12.07	18.52
SC070	46	47	1.00	13.09	45.10	5.25	8.34
SC070	47	48	0.79	11.41	38.10	10.64	14.74
SC070	48	49	0.61	8.92	29.70	13.03	22.46
SC070	49	50	1.00	13.66	48.70	4.78	5.63
SC071	12	13	0.61	9.66	19.50	23.42	28.66
SC071	13	14	0.50	8.66	20.10	23.42	28.88
SC071	14	15	0.54	8.54	22.70	22.10	27.17
SC071	22	23	0.50	7.32	26.50	19.46	25.03
SC071	23	24	0.77	13.24	38.70	11.37	13.26
SC071	38	39	0.62	10.07	30.80	14.51	20.60
SC071	39	40	0.55	8.84	31.20	12.11	18.89
SC071	49	50	0.84	12.49	41.40	7.23	12.06
SC072	2	3	0.54	9.56	31.80	15.23	18.82
SC072	13	14	0.80	13.26	37.50	11.94	14.44
SC072	18	19	0.80	13.34	39.00	9.07	14.31
SC073	1	2	0.77	9.97	25.5	19.27	23.32
SC073	3	4	0.73	11.96	27.7	17.61	21.60
SC073	4	5	1.00	17.01	41.7	8.18	9.37
SC073	5	6	0.61	7.91	25	20.21	25.03
SC073	6	7	0.55	7.11	37.1	12.66	15.91
SC073	9	10	0.66	10.31	31	16.28	19.91
SC073	10	11	0.73	11.46	36.4	12.88	15.85
SC073	12	13	0.50	8.54	21.2	20.97	29.95
SC073	13	14	0.71	12.24	31.6	12.88	22.03
SC074	0	1	0.57	12.79	32.50	14.30	17.07
SC074	2	3	0.66	10.01	31.60	11.37	25.24
SC074	3	4	0.57	8.84	22.00	16.85	32.09
SC074	4	5	0.71	6.42	24.60	19.08	26.31
SC074	5	6	0.57	5.79	23.90	19.83	27.59
SC074	6	7	0.57	8.41	26.30	18.72	23.53
SC074	8	9	0.75	10.04	31.70	15.04	17.88
SC074	9	10	0.62	9.71	26.70	18.34	22.03
SC074	10	11	0.59	11.41	27.90	17.02	20.60
SC074	11	12	0.64	12.34	33.80	13.13	16.19

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC074	12	13	0.62	10.36	40.00	10.47	12.06
SC074	13	14	0.55	9.19	34.60	12.68	15.57
SC074	14	15	0.73	12.26	38.90	10.92	13.24
SC074	15	16	0.79	13.16	40.60	9.99	12.13
SC074	16	17	0.57	9.77	41.10	9.56	11.70
SC074	21	22	0.55	9.81	38.70	12.54	16.09
SC074	22	23	0.52	9.41	38.00	13.02	16.53
SC074	29	30	0.61	11.58	35.40	13.79	17.07
SC074	30	31	0.73	13.39	40.40	9.77	12.66
SC074	31	32	0.79	14.24	43.00	8.88	10.67
SC074	32	33	0.52	8.07	25.80	20.40	24.81
SC074	33	34	0.91	14.71	36.40	10.62	13.92
SC074	34	35	0.98	17.18	37.70	11.07	14.82
SC074	35	36	0.86	15.33	32.40	11.75	16.62
SC074	36	37	0.59	10.69	31.00	15.81	19.79
SC074	41	42	0.71	11.61	28.60	17.23	21.60
SC074	42	43	0.91	16.36	41.50	7.71	9.39
SC074	43	44	0.89	14.83	43.80	6.61	9.13
SC074	44	45	0.82	13.28	45.70	6.59	8.38
SC074	45	46	0.55	9.46	31.50	13.47	22.25
SC074	49	50	0.59	10.02	31.50	11.67	22.67
SC075	1	2	0.68	15.63	35.50	11.16	15.04
SC075	3	4	0.57	11.68	32.50	14.21	17.50
SC075	4	5	0.52	13.76	30.90	14.41	16.96
SC075	16	17	0.50	8.92	31.40	15.92	20.23
SC075	22	23	0.50	9.02	35.70	13.30	17.22
SC075	23	24	0.70	11.14	43.10	8.59	10.93
SC075	37	38	0.54	9.11	31.10	9.54	25.45
SC075	41	42	0.52	9.27	31.30	7.29	24.38
SC075	42	43	0.57	9.84	33.50	6.35	22.25
SC075	43	44	0.61	10.63	36.40	6.14	19.79
SC075	44	45	0.57	9.84	32.80	7.93	22.46
SC075	45	46	0.68	11.51	36.70	7.78	17.92
SC075	48	49	0.71	11.93	37.60	9.97	15.83
SC075	49	50	0.55	9.81	30.90	13.07	22.25
SC076	20	21	0.71	12.93	36.80	12.00	15.46
SC076	21	22	0.50	9.37	28.70	19.46	24.81
SC076	22	23	0.50	8.51	27.70	18.36	23.53
SC076	23	24	0.50	9.37	31.00	18.81	25.24
SC077	0	1	0.68	10.32	29.50	7.59	23.74
SC077	1	2	0.93	13.39	38.70	5.84	10.91
SC077	2	3	<b>1.12</b>	16.06	47.90	4.14	4.83



Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC077	3	4	0.61	10.66	22.80	19.08	23.96
SC077	4	5	0.98	13.53	38.90	10.77	12.41
SC077	5	6	0.61	10.63	23.70	20.02	24.17
SC077	6	7	<b>1.04</b>	13.08	40.10	10.39	11.81
SC077	7	8	<b>1.20</b>	15.65	47.50	4.85	5.58
SC077	8	9	<b>1.04</b>	14.08	47.10	4.59	5.48
SC077	9	10	1.00	13.51	49.90	3.93	4.94
SC077	10	11	0.62	8.32	41.00	8.52	15.66
SC078	4	5	0.59	9.22	27.90	15.45	25.03
SC078	8	9	0.91	13.43	45.60	6.93	7.21
SC078	10	11	0.50	7.12	24.50	18.23	25.24
SC078	14	15	0.71	11.74	34.30	11.58	15.68
SC078	15	16	0.71	11.78	34.30	12.30	16.00
SC078	16	17	0.68	10.83	33.10	14.39	18.76
SC078	17	18	0.52	8.27	24.00	19.27	25.67
SC078	29	30	0.80	12.39	38.40	11.56	13.78
SC078	30	31	1.00	15.75	48.10	4.82	3.81
SC078	31	32	<b>1.02</b>	16.23	47.00	5.91	5.20
SC078	32	33	0.75	12.19	38.60	11.71	13.90
SC078	33	34	0.57	9.24	29.30	14.66	23.10
SC078	34	35	0.73	12.08	38.10	9.39	14.80
SC078	35	36	<b>1.04</b>	16.15	48.00	4.80	5.15
SC079	2	3	0.59	9.22	19.20	20.78	28.23
SC079	3	4	0.57	9.46	18.20	22.48	30.80
SC079	5	6	0.62	10.19	20.50	21.91	27.59
SC079	6	7	0.64	10.41	24.30	19.27	24.38
SC079	8	9	0.54	8.44	30.80	16.08	19.79
SC079	9	10	0.52	8.11	34.00	13.36	16.64
SC079	15	16	<b>1.05</b>	16.85	42.30	6.97	8.62
SC079	17	18	0.54	9.37	18.10	24.37	29.30
SC079	18	19	0.61	9.77	25.70	19.46	23.53
SC079	24	25	0.50	8.16	24.20	20.78	25.88
SC079	26	27	0.70	10.73	33.40	12.79	18.37
SC079	38	39	0.87	12.81	40.60	7.69	12.15
SC079	43	44	0.75	11.46	36.50	10.75	16.71
SC079	44	45	0.68	10.29	33.00	12.58	19.64
SC080	12	13	0.73	12.53	38.10	5.93	17.39
SC080	40	41	0.73	11.39	35.00	10.48	17.65
SC080	42	43	0.68	10.54	32.40	12.35	19.29
SC080	43	44	0.64	9.82	31.20	14.49	20.60
SC080	45	46	0.57	9.14	29.50	14.47	23.32

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC081	0	1	0.84	13.49	38.90	8.31	13.22
SC081	1	2	0.52	9.57	21.80	17.40	25.03
SC081	2	3	0.87	16.53	39.80	7.93	10.95
SC081	3	4	0.50	7.89	30.60	15.57	21.60
SC081	4	5	0.73	13.36	34.70	11.47	18.91
SC081	5	6	0.52	9.39	22.50	18.70	30.16
SC081	6	7	0.61	9.67	25.40	17.68	27.59
SC081	9	10	0.62	9.82	34.30	11.09	21.82
SC081	30	31	0.73	11.74	37.60	7.42	16.26
SC082	0	1	0.52	9.51	28.10	10.90	31.44
SC082	1	2	0.62	9.89	37.30	8.12	21.60
SC082	3	4	0.64	10.89	38.00	11.16	16.17
SC082	4	5	0.54	9.51	33.40	14.26	20.45
SC082	5	6	0.61	11.53	36.20	12.01	17.99
SC082	11	12	0.52	10.14	30.80	15.32	22.67
SC082	17	18	0.64	11.71	33.70	13.26	18.20
SC082	18	19	0.84	14.80	39.40	9.80	12.66
SC082	19	20	0.66	12.23	31.80	15.58	18.78
SC082	24	25	0.73	12.36	25.90	18.34	23.32
SC082	25	26	1.00	16.40	35.40	10.65	14.50
SC082	26	27	0.79	13.23	36.80	10.45	15.23
SC082	27	28	0.86	14.16	40.80	8.03	12.21
SC082	28	29	0.62	10.06	28.30	15.87	23.74
SC082	29	30	0.95	15.28	41.80	7.14	10.91
SC082	31	32	0.59	10.26	33.10	10.94	21.39
SC082	34	35	0.54	8.81	28.60	13.28	25.45
SC082	36	37	0.64	10.14	32.70	11.16	19.34
SC083	1	2	0.54	7.62	26.90	6.59	24.60
SC083	17	18	0.57	10.07	33.60	8.69	23.74
SC083	18	19	0.54	9.41	33.70	9.48	22.46
SC083	19	20	0.54	9.51	33.50	8.71	22.89
SC083	20	21	0.54	9.76	32.60	8.69	23.96
SC083	21	22	0.64	11.18	36.50	6.82	20.47
SC083	23	24	0.64	10.96	38.70	5.89	18.18
SC083	24	25	0.50	8.64	29.70	9.33	27.17
SC083	26	27	0.54	8.84	35.80	7.44	21.11
SC083	27	28	0.59	10.51	37.00	8.01	19.14
SC083	31	32	0.57	10.07	31.10	12.71	23.10
SC083	39	40	0.52	9.67	31.50	12.15	21.11
SC083	40	41	0.73	12.76	41.00	7.74	12.06
SC083	47	48	0.79	13.31	41.60	8.42	11.23
SC083	48	49	0.79	13.21	42.50	6.84	10.33
SC083	49	50	0.68	11.18	36.60	9.99	16.51

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC084	22	23	0.61	11.84	28.10	16.17	22.46
SC084	23	24	0.52	8.56	27.40	13.17	30.59
SC087	1	2	0.52	7.97	27.4	9.63	34.65
SC087	6	7	0.79	12.39	37.1	9.37	16.41
SC087	19	20	0.70	11.06	37.5	9.35	16.26
SC087	20	21	0.89	14.04	44.7	6.16	7.89
SC087	21	22	1.00	15.35	46.6	5.01	5.78
SC087	22	23	0.87	13.41	43.9	7.06	10.20
SC087	23	24	0.86	13.36	43.7	7.05	9.99
SC087	24	25	0.66	10.32	34.1	11.60	19.29
SC087	25	26	0.61	9.61	32.2	12.26	21.39
SC087	26	27	<b>1.04</b>	14.04	48.9	4.97	5.30
SC088	2	3	0.54	8.01	27.6	9.88	32.51
SC088	19	20	0.79	11.61	38.8	9.52	15.44
SC088	30	31	0.79	11.19	40	7.91	14.44
SC088	31	32	0.52	7.69	26.9	15.36	26.95
SC088	34	35	0.77	11.58	39.2	9.86	14.37
SC089	0	1	0.64	8.97	32.7	10.03	22.03
SC089	5	6	0.50	8.66	29.8	7.06	30.16
SC089	20	21	0.54	9.76	29	12.11	22.67
SC089	37	38	0.80	11.83	39.6	8.65	13.52
SC090	9	10	0.54	8.77	30.2	9.14	25.67
SC091	8	9	0.52	8.57	29.3	13.77	25.88
SC091	9	10	0.86	13.78	43.7	7.35	11.19
SC091	10	11	0.95	15.06	46.6	5.42	7.72
SC091	11	12	0.77	12.19	40.3	7.25	14.33
SC091	12	13	0.91	14.41	45.7	5.70	8.53
SC091	16	17	0.52	8.19	27.8	13.56	26.52
SC091	19	20	0.68	11.14	34.9	10.86	16.98
SC092	4	5	0.50	9.01	31.4	7.80	25.45
SC092	7	8	0.54	10.32	33	6.44	24.38
SC092	16	17	0.61	10.58	33.8	7.42	21.82
SC092	19	20	0.57	9.97	32.2	11.24	22.03
SC092	20	21	0.54	9.41	30.1	13.36	23.10
SC092	26	27	0.73	12.21	38.6	7.61	13.20
SC092	27	28	0.70	11.81	38.9	8.69	13.35
SC093	7	8	0.54	7.69	27.6	16.40	23.96
SC093	8	9	0.55	8.16	27.4	10.98	31.23
SC094	5	6	0.52	8.51	27.7	14.02	26.52
SC094	7	8	0.55	8.92	27.2	15.28	26.31
SC094	8	9	0.79	12.31	37.6	9.01	16.21
SC094	9	10	0.98	15.00	47.5	5.12	6.35

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC094	10	11	0.91	11.98	41.2	7.12	12.79
SC094	11	12	0.59	8.99	30.3	11.56	22.67
SC094	12	13	0.50	8.04	26.9	13.75	26.10
SC094	13	14	0.87	12.61	41.9	8.18	12.38
SC094	14	15	0.82	11.54	39.1	7.86	15.27
SC094	15	16	0.62	8.59	32.9	8.73	23.10
SC095	15	16	0.86	14.03	45.2	5.97	7.72
SC095	19	20	0.54	8.26	28.8	13.53	24.60
SC095	32	33	0.70	10.79	36.3	10.56	16.47
SC095	33	34	0.89	15.21	47.7	4.84	4.51
SC095	34	35	<b>1.02</b>	15.96	50.2	4.12	2.42
SC095	35	36	0.91	14.56	46.6	5.36	6.44
SC095	36	37	0.70	11.49	38.3	9.27	13.54
SC095	37	38	0.89	13.69	44.6	5.82	6.27
SC095	38	39	0.84	12.04	41.7	6.44	12.47
SC096	2	3	0.57	9.49	28.9	10.43	22.46
SC096	4	5	0.59	9.79	28.1	11.69	25.88
SC096	5	6	0.80	11.99	35.6	9.03	17.92
SC096	12	13	0.52	8.27	27	13.73	24.60
SC096	18	19	0.71	11.28	35.3	9.09	18.25
SC096	28	29	0.50	7.94	28.4	12.18	24.60
SC098	18	20	0.54	9.14	30.8	7.93	23.53
SC099	8	10	0.71	11.51	36.4	9.60	19.21
SC099	10	12	0.75	12.48	39.9	6.06	14.52
SC099	16	18	0.86	13.78	43.5	6.03	11.06
SC099	18	20	0.73	11.94	39	8.54	15.02
SC100	8	10	0.52	9.12	30.6	8.84	26.74
SC100	10	12	0.59	10.01	33.6	6.40	22.67
SC100	12	14	0.50	8.46	29.5	6.80	27.38
SC100	20	22	0.62	10.68	32.9	11.30	21.00
SC100	28	30	0.79	13.96	42.2	7.29	11.14
SC100	30	32	0.54	10.53	30	10.75	20.68
SC102	12	14	0.54	8.46	26.1	15.55	28.45
SC102	22	24	0.82	12.26	40.4	8.16	12.38
SC102	24	26	0.61	9.44	33	12.62	19.83
SC102	26	28	0.91	12.58	42.8	7.78	10.03
SC103	6	8	0.54	8.74	27.9	13.53	26.52
SC103	12	14	0.61	9.59	30.6	12.39	23.53
SC103	28	30	0.52	7.96	26.8	14.49	26.74
SC104	12	14	0.59	9.51	31	12.54	20.75
SC104	18	20	0.59	9.66	33.5	11.66	20.02
SC104	36	38	0.55	8.66	28.6	12.98	23.96

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC105	12	14	0.50	8.64	25.6	14.36	26.31
SC105	34	36	0.54	8.67	27.1	14.00	25.03
SC106	36	38	0.50	8.04	25	13.07	29.73
SC107	22	24	0.61	10.07	33.5	8.18	20.92
SC108	4	6	0.73	12.79	39.4	7.84	15.74
SC108	14	16	0.73	11.34	40.7	7.59	14.33
SC108	16	18	0.54	8.66	30	11.52	28.45
SC108	20	22	0.84	13.39	42.8	7.12	11.94
SC109	18	20	0.61	10.06	33.2	8.07	23.10
SC109	20	22	0.61	10.32	34.7	7.91	21.05
SC109	22	24	0.57	9.74	32.8	8.82	22.67
SC109	34	36	0.70	12.36	38.2	8.50	14.14
SC110	16	18	0.59	11.84	31.7	10.22	25.24
SC111	4	6	0.54	8.64	24.8	15.34	28.45
SC111	16	18	0.71	10.63	34.8	11.98	18.29
SC111	22	24	0.61	9.49	30	14.05	22.67
SC111	36	38	0.96	14.34	48.2	4.65	4.06
SC111	38	40	0.68	10.48	36.3	10.77	15.25
SC111	40	41	0.80	12.99	42.7	8.08	9.58
SC112	14	16	0.54	8.46	30.7	15.34	19.76
SC112	16	18	0.59	9.47	29.1	16.32	22.25
SC113	28	30	0.61	10.17	31	14.21	21.11
SC113	30	32	0.54	8.64	30.5	15.34	22.25
SC113	34	36	0.57	9.69	29.6	14.04	23.10
SC113	44	46	0.54	8.41	27.9	14.89	25.67
SC116	6	8	0.59	10.94	34.9	10.54	20.66
SC116	8	10	0.57	10.56	36.6	9.88	18.89
SC116	14	16	0.54	8.97	27.6	13.81	26.52
SC116	16	18	0.54	8.56	31.6	12.39	23.10
SC116	20	22	0.75	12.24	41.5	7.27	14.03
SC116	22	24	0.62	10.66	34.9	10.37	19.49
SC117	10	12	0.50	8.89	32.8	9.50	23.74
SC117	12	14	0.57	9.89	34.4	8.88	22.25
SC117	14	16	0.61	10.43	34.1	8.33	22.46
SC117	16	18	0.52	8.91	33.4	7.48	24.38
SC117	30	32	0.79	13.94	42.9	6.99	10.27
SC117	40	41	0.84	14.26	45.3	6.71	7.34
SC118	40	42	0.57	9.69	33.4	6.95	21.82
SC118	42	44	0.54	9.12	30.6	7.76	23.53
SC119	38	40	0.50	8.91	24.5	13.03	29.95
SC120	2	4	0.50	7.57	26	14.66	25.88
SC120	14	16	0.68	10.36	34.8	10.01	18.74

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC120	16	18	0.98	13.73	47.5	4.80	6.48
SC120	18	20	0.75	10.56	37.7	9.18	16.34
SC120	20	22	0.55	8.76	29.4	11.90	25.45
SC120	22	24	<b>1.09</b>	14.11	49.4	4.85	4.77
SC121	12	14	0.64	10.24	29.4	13.02	18.67
SC121	24	26	0.75	10.91	36.9	10.45	16.62
SC122	16	18	0.52	8.34	23.1	21.35	26.95
SC122	18	20	0.71	11.86	37.3	10.71	14.99
SC122	20	22	0.55	8.81	26.9	18.15	23.96
SC122	28	30	0.52	8.34	26.5	15.17	27.81
SC122	40	42	0.54	8.37	28.4	14.64	24.38
SC123	14	16	0.55	9.11	29.4	10.18	25.67
SC124	0	2	0.55	9.66	31	9.14	26.31
SC124	2	4	0.70	11.53	35	9.14	16.19
SC124	4	6	0.57	10.01	32.3	11.28	18.67
SC124	10	12	0.59	9.71	32.9	11.77	22.25
SC124	36	38	0.55	8.96	29.1	11.01	25.24
SC125	10	12	0.68	12.29	37.1	10.20	17.43
SC125	18	20	0.71	11.73	37.8	9.88	16.24
SC125	20	22	0.66	10.88	37.6	9.77	17.41
SC125	22	24	0.61	10.02	35.4	10.90	19.32
SC126	0	2	0.50	8.04	22.7	7.91	23.74
SC126	4	6	0.50	8.61	26.7	19.46	24.38
SC126	6	8	0.62	12.04	27.7	17.68	21.82
SC126	16	18	0.73	12.56	35.8	12.96	17.07
SC126	18	20	0.55	9.67	33.3	12.26	21.82
SC126	26	28	0.50	9.57	30.1	12.71	24.38
SC126	34	36	0.64	11.29	37.3	9.71	15.10
SC126	36	38	0.75	12.79	41.3	7.82	11.34
SC126	38	40	0.55	9.22	30.5	12.81	22.25
SC127	18	20	0.55	9.52	27.7	13.45	27.81
SC127	22	24	0.64	10.98	42.4	9.77	12.58
SC127	24	26	0.71	12.81	43.4	8.41	11.02
SC127	26	28	0.55	10.29	41.7	8.61	13.73
SC127	28	30	0.54	10.06	38.8	10.71	16.49
SC127	32	34	0.50	9.29	27.2	18.46	24.60
SC127	40	42	0.70	12.49	39	8.41	15.10
SC127	44	46	0.55	9.67	30.3	12.03	23.32
SC128	40	42	0.52	9.14	31	9.52	24.81
SC128	46	48	0.50	8.51	29	8.92	25.03
SC129	38	40	0.57	10.64	18.1	13.22	40.21
SC130	4	6	0.98	13.81	48.3	5.50	6.46

Hole ID	From	To	V <sub>2</sub> O <sub>5</sub> %	TiO <sub>2</sub> %	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %
SC130	6	8	0.71	10.02	36.7	11.41	17.09
SC130	8	10	0.98	14.13	46	5.87	7.61
SC131	10	12	0.52	8.19	28.1	13.58	26.31
SC131	12	14	0.52	7.76	27.3	15.49	26.10
SC131	16	18	0.57	9.02	30.9	13.28	21.82
SC131	26	28	0.70	10.09	37.2	10.58	16.06
SC131	28	30	0.86	11.96	42.8	8.08	10.33
SC131	30	32	0.80	11.06	40.7	9.05	12.41
SC131	32	34	0.64	9.22	35.8	6.35	14.76
SC132	0	2	0.50	7.91	25.7	8.76	35.08
SC132	24	26	0.57	8.56	32.2	14.05	20.60
SC132	36	38	0.62	9.44	32	12.64	20.81
SC134	6	8	0.64	10.78	34.5	11.07	20.43
SC134	36	38	0.52	9.22	27.5	7.86	31.02
SC135	28	30	0.55	9.01	32.2	8.82	22.46
SC136	0	2	0.79	10.34	26.7	9.73	31.23
SC136	2	4	0.86	13.11	34.2	9.52	15.29
SC136	4	6	0.50	7.26	28.6	11.13	26.52
SC136	8	10	0.52	7.92	27.6	13.47	26.74
SC136	40	42	0.57	9.36	32.3	9.75	22.89
SC137	0	2	0.57	9.29	34.1	9.43	26.10
SC137	2	4	0.71	11.93	32.1	10.98	23.32
SC137	4	6	0.73	12.38	31.2	13.54	20.41
SC137	6	8	0.59	8.14	21.3	21.53	26.95
SC137	12	14	0.52	8.69	21.1	22.67	26.95
SC137	16	18	0.89	15.00	35.9	10.05	16.47
SC137	18	20	0.57	10.22	33.5	14.17	18.97
SC137	24	26	0.93	14.78	33.4	13.03	15.53
SC137	26	28	0.86	13.99	42.2	8.50	10.46
SC137	28	30	0.59	9.69	34.1	10.99	21.22
SC137	40	42	0.54	8.82	29.8	10.03	24.17
SC138	16	18	0.52	9.22	37.9	9.77	18.37
SC138	18	20	0.59	10.22	38.2	7.31	18.82
SC138	20	22	0.59	9.86	39.7	6.38	18.18
SC138	22	24	0.64	10.56	40.6	8.82	14.46
SC138	24	26	0.55	9.91	39.1	8.65	16.66
SC138	28	30	0.55	10.16	33.4	14.34	18.16
SC138	36	38	0.84	15.45	41.2	8.54	9.97
SC138	44	46	0.84	14.46	43.8	6.93	9.05
SC138	46	48	0.84	13.81	45.4	6.44	8.28
SC139	40	42	0.54	9.32	33.4	7.48	22.25
SC139	42	44	0.55	9.61	32.7	6.71	21.82

# JORC Code, 2012 Edition – Table 1

## Youanmi Vanadium Project

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>In 2018 Venus Metals Corporation (VMC) drilled 139 RC holes for a total of 5,919m. Samples were collected for every meter with a representative split taken for analysis using a riffle splitter before bagging the residue and temporarily storing on site.</li> <li>There are a total of 199 holes for a total of 9,187m (including 11 historic diamond drill holes).</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Reverse Circulation drilling by Australian Gold Resources (AGR) during 1998-1999</li> <li>Most RC holes in the program were drilled vertically with a few at -60° dip.</li> <li>In 2010, 11 diamond holes were drilled</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>type, whether core is oriented and if so, by what method, etc).</i>	<p>using triple tube PQ3 and were drilled at dip varying -58 to -61 and azimuth varying between 0 and 5°N.</p> <ul style="list-style-type: none"> <li>RC drilling by VMC in 2018; RC holes drilled to fresh rock interface.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No recovery issues were reported in the historical reports.</li> <li>There is no apparent relationship between sample recovery and grade.</li> <li>Core recovery in diamond holes was generally good, with excellent recoveries in fresh rock and reasonable recoveries in weathered material.</li> <li>No recovery issues were reported in the VMC Drilling reports</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>For historical and recent drilling by Venus, sampling has been by Reverse Circulation drilling, collected every 1m through a cyclone and riffle splitter. For historical drilling, 4m composite samples were also collected via scoop and spear sampling from the residue bags.</li> <li>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.</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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).</li> <li>Blanks were inserted every 30<sup>th</sup> sample.</li> <li>A vanadium standard was inserted in each sample batch for holes YOUC19 to 40.</li> <li>Down hole geophysical logging was carried out in eleven holes.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>All Venus RC samples were analysed at SGS Australia Pty Ltd laboratories</li> <li>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.</li> <li>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.</li> <li>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.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>No independent verification of sampling and assaying has been reported.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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</li> <li>The VMC 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. Historical RC and DD holes within the resource area were re-surveyed using DGPS (vertical and horizontal accuracies c. 10cm).</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity</i></li> </ul>	<ul style="list-style-type: none"> <li>Within the resource area, historical 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</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<p>mineralisation in fresh rock and the dip of the stratigraphy.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Venus Infill RC drilling has been on an 80m by 40m pattern, with holes stopped just below the oxide/fresh interface.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Historic RC drilling is vertical; with the average dip of the magnetite rich units being approximately 30° to 50° the hole orientation with respect to the mineralisation dip is appropriate.</li> <li>• DD drilling is approximately at right angle to dip and 90° to strike.</li> <li>• Venus RC drilling is oriented at right angles respect to the mineralisation.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Details of sample security not given in historical reports.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No audits or review have been located.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• The Youanmi Project tenement E57/986 is a granted Exploration License jointly owned by Venus Metals Corporation Limited (90%) and a Prospector (10%).</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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. On the eastern side of the intrusion, the strike changes to a northerly trend and a westerly dip. The dip appears to become gradually shallower towards the inflection: from approximately 50° at a distance of 5km west of the bend to</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>30° adjacent to the inflection. A dip of only 10° was recorded in outcrop within the inflection 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 have been recognised in RC drilling near one of the northwest faults with an apparent displacement of 1½km. Faulting is more complex in the area of the inflection where a number of broadly northeast striking faults and narrow shears also occur.</p> <ul style="list-style-type: none"> <li>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 and melano gabbro are more common away from the vanadium target zone.</li> <li>The magnetite-bearing horizons appear to be more resistant to weathering and therefore the top of fresh rock is generally at a higher relative elevation than that in adjacent gabbro. However, in erosional areas where part of the regolith has been stripped, saprolite derived from magnetite-rich units has proved to be more resistant to erosion and often forms the top of breakaways. Depth to fresh rock (Top of Fresh Rock-TOFR) in the topographically higher ground is usually about 35m, but can be up to 55m.</li> </ul>
<p><i>Drill hole Information</i></p>	<ul style="list-style-type: none"> <li><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> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>For drill hole information refer to Appendix-1 of this announcement.</li> <li>All assay results for V<sub>2</sub>O<sub>5</sub> greater than 0.5% are listed in Appendix-2.</li> <li>Database information is summarised in Sections 1 and 3.</li> </ul>

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><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></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>All analytical results for V<sub>2</sub>O<sub>5</sub> greater than 0.5% are reported for one-metre and two-metre intervals (Appendix-2) without applying an upper cut-off.</li> <li>Analysis of two-metre intervals was done by combining and homogenizing sample material from two consecutive one-meter intervals at SGS Laboratories prior to analysis.</li> <li>For methods of data aggregations used in the estimation refer to Section 3 Estimation and Reporting of Mineral Resources.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>The vanadium mineralization dips at approximately 30° to the south. Drilling was at -60° to the north, approximately perpendicular to the mineralization.</li> <li>Downhole lengths and intervals have not been reported as the primary purpose of the drilling was to infill for resource calculation.</li> <li>Sections 1 and 3 describe details of drill holes and geometry.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Plans and typical sections are located in the Mineral Resource Estimation Report.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>All exploration results greater than 0.5% V<sub>2</sub>O<sub>5</sub> have been reported in Appendix-2. Of the 139 RC holes, only 10 holes did not intersect mineralization of greater than 0.5% V<sub>2</sub>O<sub>5</sub>.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>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 (&gt;5,000 nT) that the low relative signal to noise ratio allows data to be filtered to the 4th vertical derivative.</li> </ul>
Further work	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> </ul>	<ul style="list-style-type: none"> <li>Recent modelling and resource estimation will define further infill and extension drilling.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	

### 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
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>Review of printed logs versus the current database has been carried out; no issues have been reported.</li> <li>Data has been entered into Excel spreadsheets and subsequently imported into Micromine software for further validation, including: <ul style="list-style-type: none"> <li>Checks for duplicate collars.</li> <li>Checks for missing samples.</li> <li>Checks for down hole from-to interval consistency.</li> <li>Checks for overlapping samples.</li> <li>Checks for samples beyond hole depth.</li> <li>Checks for missing assays.</li> <li>Checks for down-hole information beyond hole depth.</li> <li>Checks for missing down-hole information.</li> <li>Checks for missing or erroneous collar survey.</li> </ul> </li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person (Mineral Resources) carried out a site visit on 30<sup>th</sup> July, 2014.</li> <li>Numerous RC and DD hole sites were located, with RC sample cutting piles still in place. Samples were taken from one drill hole.</li> <li>Outcrop and float were reviewed and the extent of the mineralised zone was clear at surface in parts of the deposit.</li> <li>Review of the site confirmed for the CP that a mineral resource is likely present.</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>The two major magnetite units are fairly well defined and continuous geologically, though there is internal grade variation.</li> <li>Grades tend to be higher at the footwall</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>grade and geology.</i>	and hanging wall, and lower in the center of the domains.
<i>Dimensions</i>	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>The area covered by the Mineral Resource extends approximately 5 km along strike by 500m laterally.</li> <li>There are two mineralised zones, varying between 30m and 50m in true thickness and dipping between 30° and 60° to the south.</li> <li>The mineralisation domains in the resource area have been interpreted to a depth of 180m below surface.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li><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></li> <li><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></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> <li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li><i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <li>Samples were composited to 1m to allow for a few parts of some holes where only 4m composite data was available.</li> <li>Statistical analysis was carried out to confirm the validity of mineralisation domains.</li> <li>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.</li> <li>Statistical and geostatistical analysis was carried out in GeoAccess 2018 software.</li> <li>Resource estimation was carried out in Micromine 2018 (V5) software.</li> <li>Ordinary kriging (OK) modelling was used with parameters based on drill hole spacing and variography.</li> <li>Search ellipse orientations for the estimation based on geological orientations and an unfolding methodology was used to account for variations in dip and strike.</li> <li>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.</li> <li>No top cuts were applied.</li> <li>A range of variables has been estimated, including:</li> </ul>

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		<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> <ul style="list-style-type: none"><li>• Block sizes were 20m (E-W) by 10m (N-S) by 2.5m (Elevation).</li><li>• Modelling results have been compared to the previously published resource estimate and have produced similar results.</li><li>• Validation of the final resource has been carried out in a number of ways, including:<ul style="list-style-type: none"><li>○ Drill Hole Section Comparison</li><li>○ Comparison by Mineralisation Zone</li><li>○ Swathe Plot Validation</li><li>○ Model versus Declustered Composites by Domain</li></ul></li><li>• All modes of validation have produced acceptable results.</li><li>• As there has been no mining to date, no reconciliation data is available.</li></ul>	V2O5%	TiO2%	Fe%	Al2O3%	As%	CaO%	Co%	Cr%	Cu%	K2O%	MgO%	MnO%	Na%	Ni%	P%	Pb%	S%	SiO2%	Zn%	LOI%	MAGSUS			
V2O5%	TiO2%	Fe%	Al2O3%																							
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S%	SiO2%	Zn%	LOI%																							
MAGSUS																										
Moisture	<ul style="list-style-type: none"><li>• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li></ul>	<ul style="list-style-type: none"><li>• Tonnages are estimated a dry basis.</li></ul>																								
Cut-off parameters	<ul style="list-style-type: none"><li>• The basis of the adopted cut-off grade(s) or quality parameters applied.</li></ul>	<ul style="list-style-type: none"><li>• The resource has been reported at 0.10 and 0.25 % V2O5 cutoffs. This has been determined from previous economic studies and is also typically used in similar Western Australian vanadium deposits.</li></ul>																								
Mining factors or assumptions	<ul style="list-style-type: none"><li>• 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.</li></ul>	<ul style="list-style-type: none"><li>• Mining is assumed to be by conventional open-pit mining methods.</li><li>• There is no allowance in the Mineral Resource Estimate for dilution or mining losses.</li></ul>																								
Metallurgical factors or assumptions	<ul style="list-style-type: none"><li>• 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</li></ul>	<ul style="list-style-type: none"><li>• 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.</li><li>• Composite samples from two drill holes were processed by magnetic separation</li></ul>																								

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	<i>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>	and roast/leach methods with recoveries of 61% in oxide and 83% in fresh material.
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>At this stage, environmental factors have not been considered.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Bulk density is based on over 6,800 downhole density log measurements.</li> <li>Base of oxidation logging has been used to define two density domains, with the following bulk densities applied: <ul style="list-style-type: none"> <li>Oxide 2.63 t/m<sup>3</sup></li> <li>Fresh 2.76 t/m<sup>3</sup></li> </ul> </li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>Geological continuity.</li> <li>Data quality.</li> <li>Drill hole spacing.</li> <li>Modelling technique.</li> </ul> </li> <li>Estimation properties including search strategy, number of informing data, kriging variance and other geostatistical properties and average distance of data from blocks.</li> <li>The Competent Person endorses the final results and classification.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>There have been no external reviews of the Mineral Resource Estimate.</li> </ul>
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> <li><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></li> <li><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></li> <li><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>Relative accuracy and confidence has been assessed during the validation process by review of model versus data and variability statistics of individual block estimates.</li> <li>A subjective relative risk analysis assessment has been carried out, with the overall risk level generally being considered Moderate.</li> <li>The resource estimate is considered to reflect local estimation of grade.</li> <li>No production data is yet available for comparison.</li> </ul>