## **VENUS METALS**



"Venus Metals Corporation holds a significant and wide-ranging portfolio of Australian gold, copper, base hals, lithium, titanium. Inadium, and REE Oploration projects in Western Australia, in dition to owning various yalties and being a Destantial shareholder of X listed gold developer x Resources Limited."

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COMPANY SECRETARY Patrick Tan **ASX ANNOUNCEMENT** 



## COPPER HILLS PROJECT SIGNIFICANT GRAVITY RESPONSES SEMI-COINCIDENT WITH CIRCULAR MAGNETIC/AEM ANOMALIES IDENTIFIED

Venus Metals Corporation Limited ("Venus" or the "Company") is pleased to announce the results of reconnaissance ground gravity surveys conducted over several circular magnetic features and Tempest AEM anomalies identified in a recent review of geophysical data for Venus' Copper Hills Project in the southern section of the Paterson Orogen of Western Australia (Figure 1; refer ASX release 27 May 2024).

- Recent ground gravity surveys have defined three significant responses with one semi-coincident with the circular magnetic Anomaly 2 (CHMAG\_2), another approximately 500m x 300m in size associated with magnetic trend Anomaly 3 (CHMAG\_3) and one semi-coincident with historical Airborne EM anomaly (CHAEM\_04).
- 3D inversion modelling returns discrete bodies conforming to the gravity responses indicating relatively shallow depths (150m).
- The targets are considered prospective for Cu-Au and base metals mineralisation with known copper occurrences located within the tenement (refer ASX release 21 August 2024).
- Follow up ground electrical surveys (IP) are planned to test for the potential presence of sulphides before drill testing.



Figure 1.Tenement location shown on GSWA regional aeromagnetic image.





#### **Project Background**

The Copper Hills Project (E45/6437) is located in the highly prospective Paterson Orogen, host to the world-class Telfer Au-Cu Mine (Figure 1). The northern section of the Paterson Orogen has attracted considerable exploration attention following significant new discoveries including the Winu Cu-Au deposit (608 Mt @ 0.4% Cu, 0.3 g/t Au; 2022) and the Havieron Au-Cu deposit (<u>92 Mt@ 1.9g/t Au; 2022</u>). The Copper Hills tenement is located in the relatively under-explored southern sector of the Orogen which in addition to Cu-Au is also considered to be prospective for uranium.

Historical exploration has identified numerous potential prospect areas in the northern part of the tenement, including the historical PM Prospect (Copper Hills) with reported secondary copper minerals occurring over a semi-continuous strike length of more than two kilometres at surface (Wamex report A42764; refer details in ASX release 21 August 2024).

A review of the project geophysics completed by Core Geophysics outlined several prospective areas including several circular/ovoid magnetic and AEM anomalies (Figure 2) within the southeast of the project which was considered under explored (refer ASX release 27 May 2024).



Figure 2. Copper Hills Project gravity survey locations including magnetic and historical AEM target anomalies over regional aeromagnetic imagery.



#### **Recent Gravity Surveys**

Reconnaissance ground gravity surveys were commissioned over several anomalies of interest as a relatively cost effective and rapid way to determine the likelihood of mafic rock types being associated with these features which would increase the prospectivity. The gravity survey was carried out by Atlas Geophysics comprising four survey blocks ranging from 2.5 km<sup>2</sup> to 4.2 km<sup>2</sup> (Figure 2). The data were collected on 400m spaced lines oriented north south with 100m station spacings, with a small area of infill completed in the south east block for a total of 464 stations.

The gravity results have **confirmed several anomalous responses over the target areas of interest up to 0.4mgal** (Figure 3) and are discussed further below.



Figure 3. Gravity anomalous responses over the target areas of interest.



#### Magnetic Anomaly 1 target (CHMAG\_01)

This target was covered by the Central Gravity Block which was defined as an ovoid shaped magnetic ring with an extent of 1.3km, interpreted to represent a potential mafic intrusive with magnetic aureole (100m below recent cover). The gravity results did not confirm the presence of an associated higher density response indicative of a mafic intrusive or plug. However, localised elevated gravity responses to 0.15mgal were evident on the far west of the magnetic aureole which correspond to the strongest magnetic response and are interpreted to be due to increased magnetic mineral content, Figure 4. The magnetic feature may represent a tight fold rather than an intrusive.



Figure 4. Central Block gravity survey location, target magnetic anomaly over bouguer gravity.



#### Magnetic Anomaly 2 target (CHMAG\_02)

This target was covered by the North East Gravity Block which was defined as a circular magnetic feature approximately 900m in diameter and previous 3D modelling (CORE 2024b) suggested a shallow depth (50m) to the magnetic ring with depth extent for several hundreds of metres. The **gravity results highlighted a residual gravity response to 0.4mgal approximately 400m in size, semi-coincident with the circular magnetic feature** (Figure 5). Subsequent 3D inversion modelling defines a body located in the southern portion of the magnetic ring at an estimated depth of 150m below surface (Figure 6). The tenor of the gravity response is considered within lower ranges for mafic rocks.







Figure 6. North East gravity survey 3D model result. Looking down through high pass filtered gravity image (left) and looking north (right).



#### Magnetic Anomaly 3 target (CHMAG\_03)

This target was defined as a north west trending magnetic anomaly extending over 2.5km and covered by the South East Gravity Block. The anomaly was interpreted as a potential mafic/ultramafic that may be prospective for Cu-Au or base metal mineralisation. **The gravity results have identified a response coincident with magnetic anomaly along its length with a discrete 0.35mgal anomaly approximately 500m in diameter located at the eastern end** (Figure 7). Gravity modelling defines a discrete ovoid shaped body approximately 400m in length with considerable depth extent (500m). Modelled around 150m depth (Figure 8), this is considered a significant response to follow up.







Figure 8. South East gravity survey 3D model result. Looking down through high pass filtered gravity image (left) and looking north (right).



#### AEM Anomaly Target 4 (CHAEM\_04-06)

Consisting of three individual anomalies located within a few kilometres, these targets are apparent in the 2008 South Paterson Tempest (flown under the Australian Government's Onshore Energy Security Initiative by Geoscience Australia) as discrete responses in the 60-100m and 100-150m conductivity depth slices returning a maximum conductivity of 45Sm and covered by the Western Gravity Block (Figure 9). Considered prospective for possible Cu-Au or base metal mineralisation, gravity surveying was undertaken to determine if they were associated with mafic or ultramafic rocks which would provide an elevated gravity response.



Figure 9. Copper Hills Project West gravity survey over AEM target anomalies.

The gravity survey defined a discrete (200m), residual gravity response (0.2mgal) to be semicoincident with CHAEM\_04 which displays the highest conductivity of the three AEM anomalies (Figure 10). More subtle residual gravity responses are closely associated with CHAEM\_05 and CHAEM\_06 and may reflect the smaller size of the associated Tempest responses. 3D gravity inversion modelling defines discrete pod like models approximately 200m in length 50m below surface with 250m depth extent predominately associated with CHAEM\_04 and CHAEM\_05 (Figure 11). The tenor of the gravity may reflect a pod of mafic rocks that comprise variable disseminated sulphides.





Figure 10. AEM target over high pass filtered bouguer gravity anomaly image



Figure 11. West gravity survey 3D model result. Looking down through high pass filtered gravity image (left) and looking north (right).



# The semi-coincident AEM and gravity anomaly CHAEM\_04 is considered the most significant and follow up ground EM surveying and subsequent drill testing are planned

In addition, 438 soils and 12 rock chip were collected in magnetic anomaly target areas 1-3 (Figure 12) for geochemical studies, with assays pending.



Figure 12. Location of surface sampling at Copper Hills Project

References:

Roach, I. C. ed. 2010. Geological and energy implications of the Paterson Province airborne electromagnetic (AEM) survey, Western Australia. Geoscience Australia Record 2010/12, 318 pp.



This announcement is authorised by the Board of Venus Metals Corporation Limited.

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#### Competent Person's Statement

The information in this announcement that relates to geophysical (gravity) data interpretation and modelling is based on information compiled by Mr M. Cooper who is a member of The Australian Institute of Geoscientists. Mr Cooper is Principal Geophysicist of Core Geophysics Pty Ltd who are consultants to Venus Metals Corporation Limited. Mr Cooper has sufficient experience which is relevant to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Cooper consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Venus Metals Corporation Limited planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward-looking statements. Although Venus Metals Corporation Ltd believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

# JORC Code, 2012 Edition – Table 1

### **Section 1 Sampling Techniques and Data**

Criteria	Commentary		
Sampling techniques	<ul> <li>Reconnaissance ground gravity survey was conducted over the area as defined in Figures 2 and 3.</li> <li>The survey was commissioned by Venus Metals Corporation and completed by Atlas Geophysics Pty Ltd.</li> <li>A total of 464 stations were collected including base and repeats with the specifications summarised below.</li> </ul>		
	LineLineStationSurveySpacingDirectionSpacingStations		
	400m N/S         400m N/S         100m         464           Copper Hills SE         (200m         000-180         100m         464           N/S Infill)         N/S Infill)         100m         464		
	Other details of sampling techniques is not applicable		
Drilling techniques	No drilling activity undertaken		
Drill sample recovery	No drill samples collected		
Logging	Geophysical survey and hence no logging		
Sub-sampling techniques and sample preparation	<ul> <li>The gravity survey was achieved using a two person crew. Measurements were taken with a Scintrex CG-5 Autograv meter which has an accuracy of 0.01mgal.</li> </ul>		
Quality of assay data and laboratory tests	No Assays carried out for this survey		
Verification of sampling and assaying	All gravity data was transferred to Atlas office personnel on a daily basis for verification.		
Location of data points	<ul> <li>All data has been collected in GDA94 MGA Zone 51 grid system. Data points were located using CHC170 GNSS receivers for the base and rover operating via RTK through a robust radio network. Accuracy of the positioning is better than 5cm in both horizontal and vertical.</li> </ul>		
Data spacing and distribution	• The line spacing was 200-400m with stations 100m apart. The data density is considered appropriate to the purpose of		

Criteria	Commentary
	the survey.
Orientation of data in relation to geological structure	The survey lines were collected in north-south orientations to best define geological formations.
Sample security	Not applicable for geophysical survey
Audits or reviews	The data were independently verified by Mathew Cooper of Core Geophysics.

# Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	The Copper Hills exploration tenement E45/6437 is 100% owned by Redscope Enterprises Pty Ltd (a fully owned subsidiary of Venus Metals Corporation Limited) and it falls within Martu Native Title claim area.
Exploration done by other parties	Historically the tenement was explored for gold/ base metals/PGE and Uranium by various explorers.
Geology	The Copper Hills Project Area is located in the remote southern section of the Palaeo- to Neoproterozoic Paterson Orogen in Western Australia. The area predominantly covers Palaeoproterozoic metasediments of the Tabletop Terrane within the Rudall Metamorphics and is in close proximity to the Camel-Tabletop Fault Zone, a major crustal-scale structure that has been interpreted as the collisional boundary between the Tabletop Terrane and the western Talbot and Connaughton Terranes of the Rudall Complex. The Tabletop Terrane comprises a poorly exposed sequence of mafic schist, amphibolites, and meta sedimentary rocks including dolomites. The Paterson Orogen contains the Kintyre uranium deposits, the Nifty base metal mine and the Telfer gold mine.
	The main attraction for historical platinum exploration were the PM veins at the Copper Hills prospects which showed exotic occurrence of copper carbonate with extremely high assays of silver, PGEs, and gold. Most recently the interest in those deposits has been renewed as copper targets after regional mapping by government geologist showed fault-related copper anomalies to be relatively common in the area and spatially related to the area of the Camel-Tabletop Fault Zone. It has been suggested that the structurally controlled and unconformity associated copper mineralisation may have been at least partly contemporaneous with a reactivation of the Camel-Tabletop Fault Zone at about 800 Ma, forming a 3-10 km-wide graben structure that filled with sedimentary rocks of the Officer Basin ("Copper and associated polymetallic mineralization along the Camel–Tabletop Fault Zone in the Paterson Orogen, Western Australia" GSWA Annual Review 1999-2000, Bagas and Lubieniecki, 2000).

Criteria	Commentary
Drill hole Information	No Drilling.
Data aggregation methods	Not applicable
Relationship between mineralisation widths and intercept lengths	Not applicable.
Diagrams	Location of the tenement and gravity survey results are presented in Figures 1-10
Balanced reporting	Not applicable
Other substantive exploration data	Geophysical 3D inversion modelling results are given in this ASX release.
Further work	Planning for further sampling, ground geophysical surveys followed by exploration drilling