

28 February 2024

## NEW TARGET IDENTIFIED AT PATERSON GOLD PROJECT

### Highlights:

- Independent technical review identifies new priority target - *Apollo North* - identified by gravity anomaly
- Review identified that Hole 22PTMRD011 intercepted the same lithotypes and similar mineralisation as Havieron and are considered to be typical of a 'near-miss' at Havieron.
- Project located adjacent to Newmont/ Greatland Gold tier 1 discovery Havieron deposit containing over 6.5m oz Au
- Options being considered to advance project including joint ventures and third party funding

Artemis Resources Limited ('Artemis' or the 'Company') (ASX/AIM: **ARV**) is pleased to report that a detailed strategic review of the Company's 100% owned Paterson Gold Project in Western Australia is currently underway with the aim of establishing a development pathway that extracts maximum value for shareholders.

Previous drilling at the Paterson Project delivered the following significant intercepts:

- Within drill hole 22PTMRD011 include;
  - **2.42m @ 0.85g/t Au** and **2.86% Cu** from 752.58m, including;
  - 0.87m @ 0.36g/t Au and **4.99% Cu** from 752.58m; **1m @ 1.73g/t Au** and **2.58% Cu** from 754m; and **1m @ 0.61g/t Au** and **3.28% Cu** from 904m<sup>1</sup>
- Within drill hole 22PTMRD010 include;
  - 5m @ 0.32g/t Au and 0.81% Cu from 639m, including;
  - **1m @ 0.39g/t Au** and **2.99% Cu** from 639m<sup>1</sup>

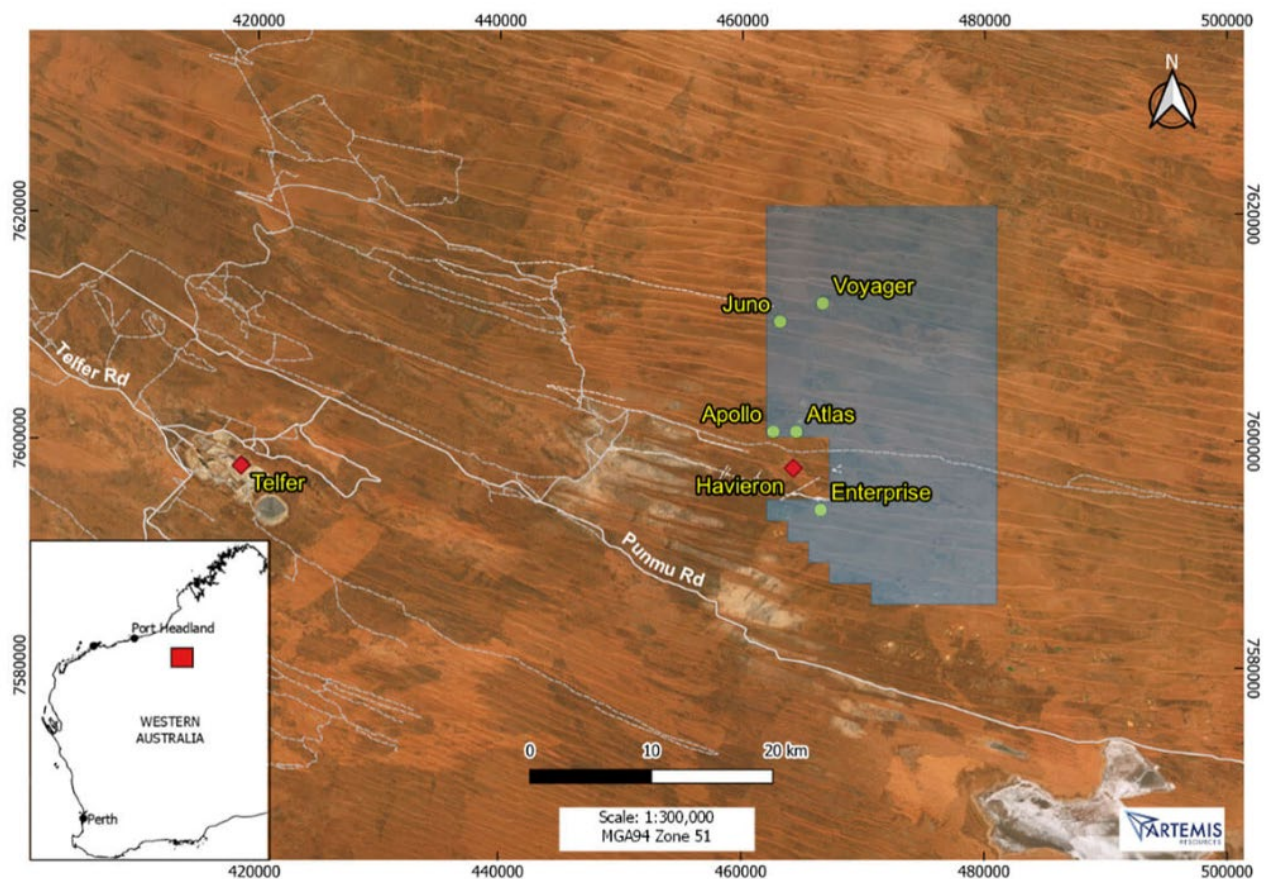
<sup>1</sup>Artemis Resources Ltd, ASX Announcement, 12 December 2022

**Executive Director George Ventouras commented:** *“The Patersons Project is a unique greenfields exploration opportunity. With the drilling and reconnaissance work previously undertaken, the project is ripe for additional work to unlock further potential mineralisation. While exploring at depth requires additional resources and capital, as can be seen from the nearby Havieron discovery, the upside may be considerable.*

*I am excited by the potential that the Paterson Project holds and we are looking forward to advancing the project with a partner”.*

**Paterson Gold Project Background**

The Paterson Gold Project is a 100% Company owned tenement covering 605 km<sup>2</sup>. It surrounds the 6.5 Moz AuEq Havieron Copper-Gold discovery<sup>2</sup> held by Newcrest Mining (ASX:NCM) and Greatland Gold (LON: GGP) and is located only ~42kms from the Telfer copper/gold mine (owned by Newcrest/Newmont).



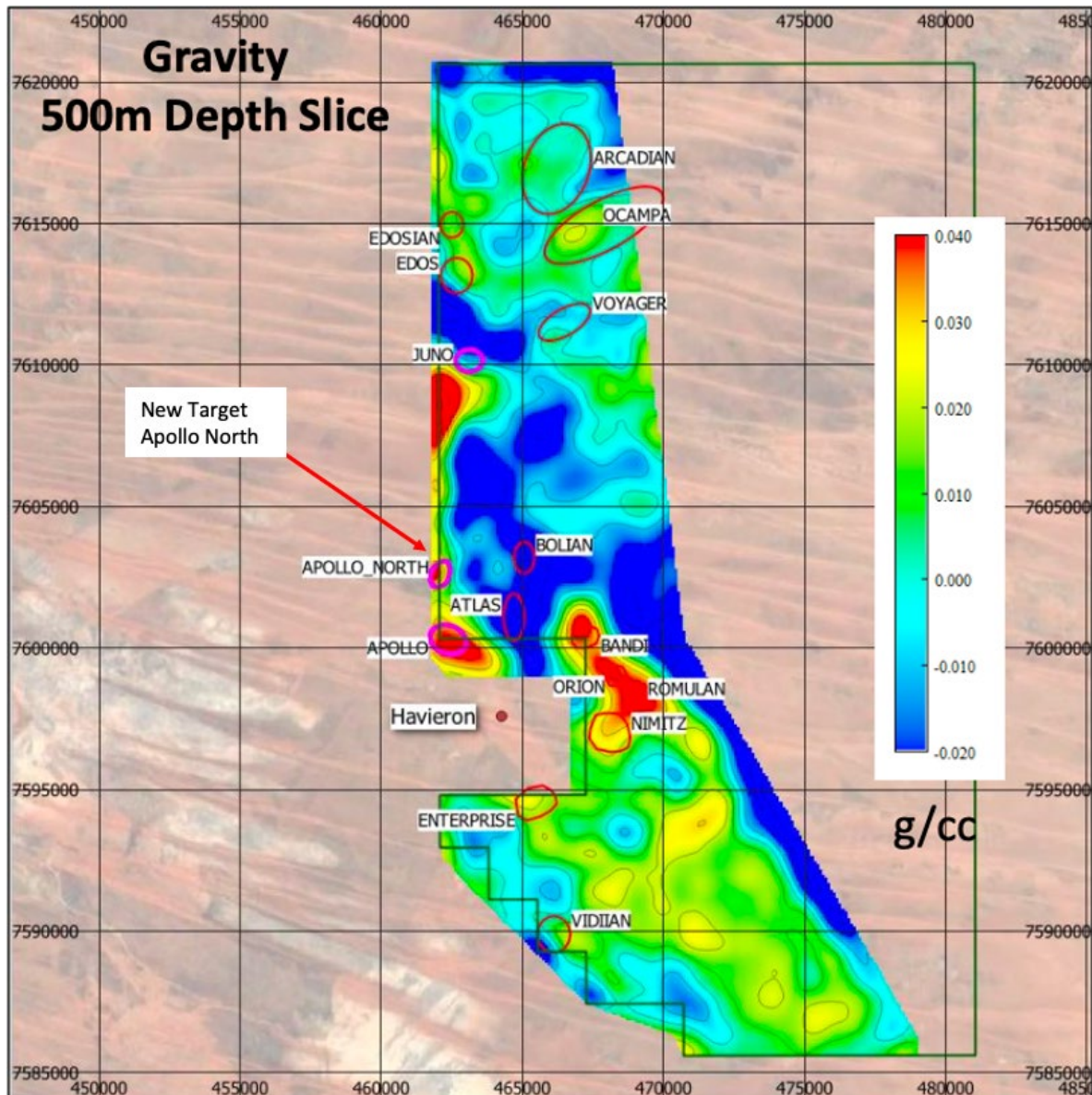
**Figure 1. Artemis Resources’ Paterson Project**

The Project is located approximately 450 km east of Port Hedland in the Great Sandy Desert, with the project being accessed via a series of well-maintained tracks from the Telfer Mine Site Gate House which is only 50km to the west.

<sup>2</sup>Newcrest Mining Ltd, ASX Announcement, 10 December 2020

**Apollo North – New Prospect**

A new priority target has been identified by a single station gravity anomaly. Located ~2.5km from the Apollo Prospect, this target is situated within the prospective structural corridor, with a discrete gravity anomaly present. The depth of cover is unknown but represents a walk up target that warrants further exploration activity.



**Figure 2. Paterson targets on gravity survey**

**Apollo Prospect**

Identified as a potentially significant ~1.5km north-west trending magnetic anomaly representing an interpreted splay fault that has been intruded by a dolerite intrusion. Recent drilling has revealed multi-phase breccias and veining that host polymetallic systems. Drilling at hole 22PTMRD011 also intercepted the **same lithotypes and similar mineralisation** as Havieron and are considered to be typical of a ‘near-miss’ at Havieron.



Large intercepts (up to 90m) of pervasive veining and multi-phase crackle breccias have been encountered either side of the dolerite intrusion, often with significant amounts of pyrite, chalcopyrite and pyrrhotite.



Figure 3: Drill hole 22PTMRD011 from 754.7 – 755.1 displaying sulphide mineralisation including chalcopyrite and pyrite within a carbonate breccia.

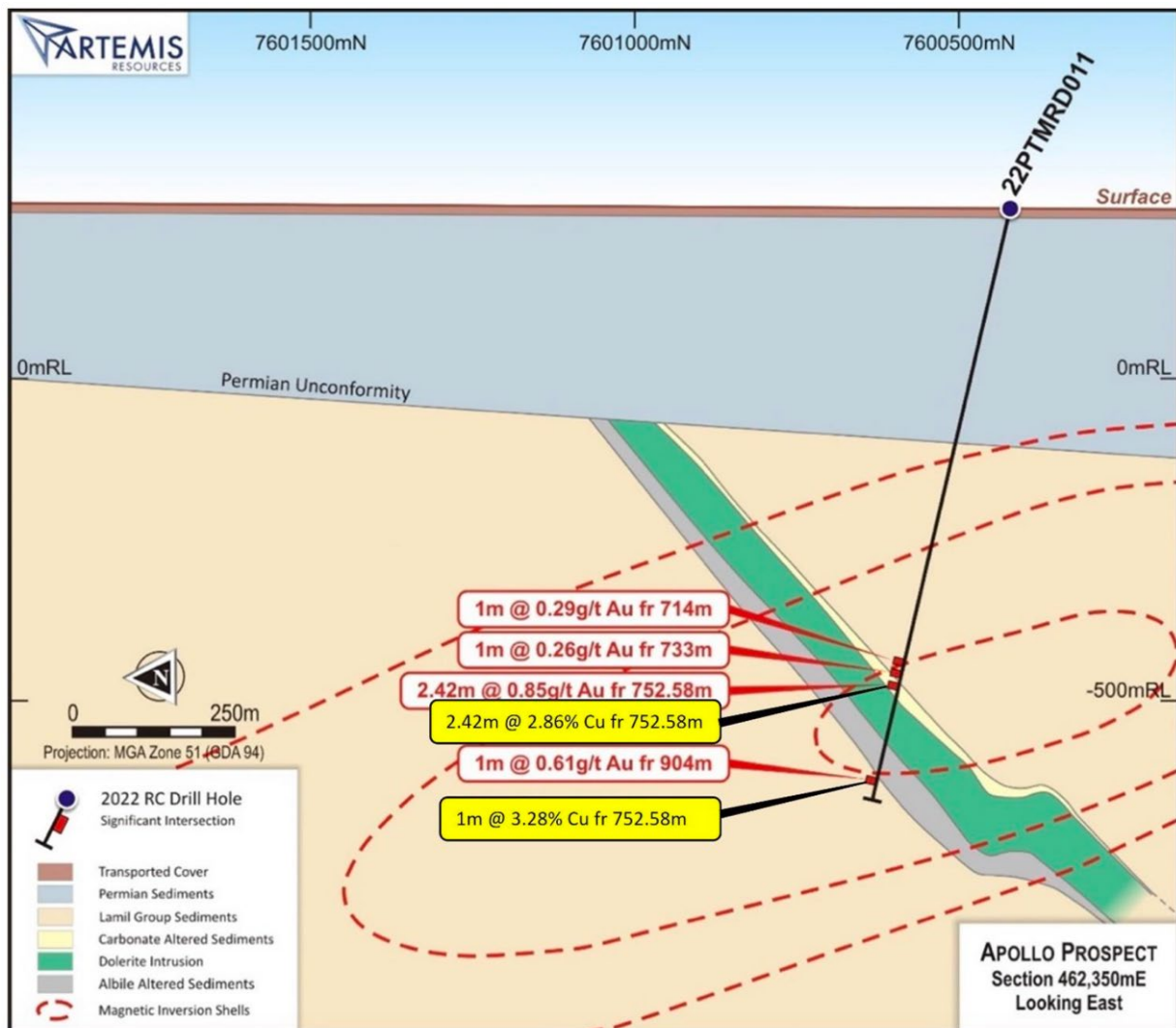


Figure 4. Drill hole 22PTMRD011 with significant intercepts

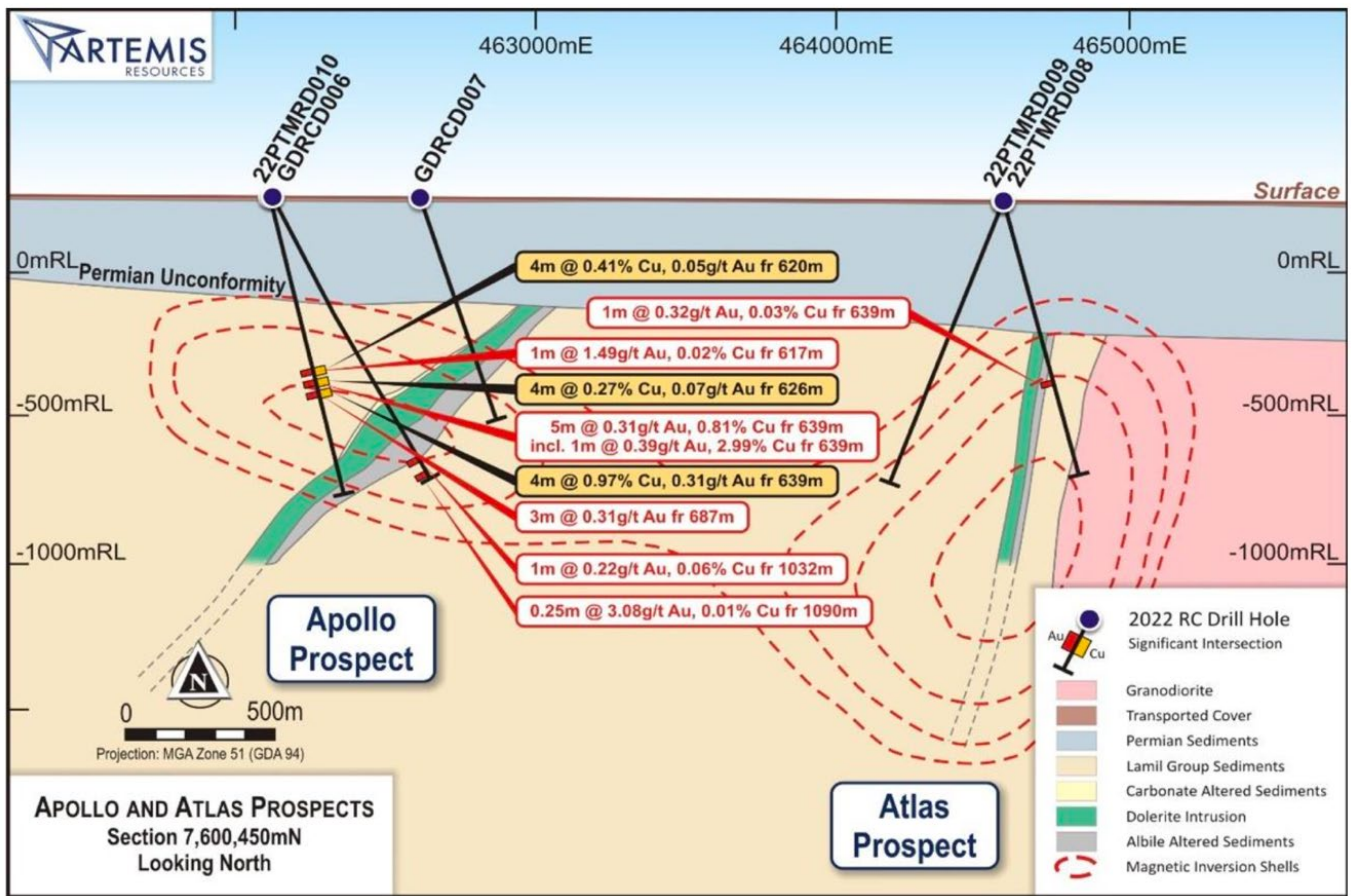


Figure 5. Drill hole 22PTMRD010 with significant intercepts

### Juno and Voyager

Juno is a target which displays as a discrete magnetic feature on the edge of the north-south trending Havieron Fault zone. It has a gravity high offset to the south-west of the magnetic anomaly. Voyager is a northeast trending magnetic anomaly which may be part of the structural lineament on which Juno occurs. Heritage surveys and programs of works have been approved for Juno and Voyager.

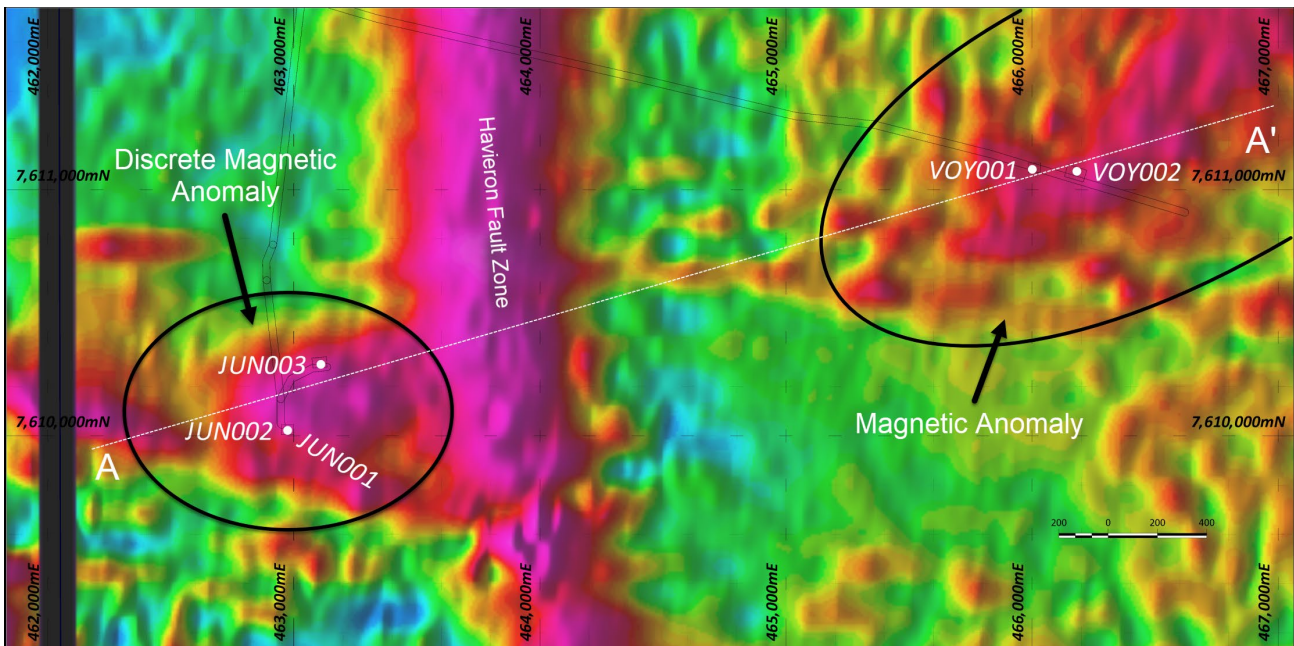


Figure 6: Magnetic anomalies at Juno and Voyager

### The Location

The Paterson Central Gold-Copper Project is located within the Yaneena Basin of the Paterson Province, which hosts large scale mineral deposits, such as the World class Telfer gold-copper mine, recently discovered Winu copper-gold deposit, Nifty copper mine, and the Havieron gold and copper deposit. The Company’s Paterson Central project surrounds and is adjacent to the Havieron gold – copper deposit on three sides and covers the same continuous geological domain.

The geology of the project area consists of Canning Basin sediments, primarily Permian siltstones, which overlie Proterozoic meta-sedimentary basement rocks which form the main host rocks to large mineral deposits in the region. The sedimentary cover is 300m thick in the western part of the project area and is interpreted to deepen to over 800m in the east. The Havieron gold and copper deposit is associated with a strong magnetic anomaly and sits under about 450m of sedimentary cover. Mineralisation at Havieron extends over deep intervals to at least 600m below the base of sedimentary cover, where the mineralisation starts, and it continues to remain open at depth.

While difficult to explore due to the depth of cover and the remote location, the Paterson ground remains highly prospective.



This announcement was approved for release by the Board.

For Further information contact:

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### **About Artemis Resources**

Artemis Resources (ASX/AIM: ARV; FRA: ATY; US: ARTTF) is a gold, copper and lithium focused resources company with projects in Western Australia. The Mt Marie Lithium Project, the Osborne Lithium JV (Artemis 49%; GreenTech Metals (ASX:GRE) 51%) and the Carlow Castle gold-copper-cobalt project in the West Pilbara; and the Paterson Central project in the Paterson Province (located adjacent to Greatland Gold / Newcrest's recent gold-copper discovery at Havieron).

Artemis also owns the Radio Hill processing plant, located only 35km from Karratha.

For more information, please visit [www.artemisresources.com.au](http://www.artemisresources.com.au)

### **Competent Person's Statement**

*The information in this report that relates to exploration results was prepared by Mr Oliver Hirst, a Competent Person who is a member of the Australasian Institute of Geoscientists (MAIG) and Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Hirst is an advisor to Artemis Resources. Mr Hirst has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 Hirst consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

### **Forward Looking Statements**

*This announcement contains or may contain certain 'forward-looking statements' and comments about future events, including in relation to Artemis Resources business, plans and strategies and expected trends in the industry in which Artemis Resources currently operates. Forward-looking statements involve inherent risks, assumptions and uncertainties, both general and specific, and there is a risk that such predictions, forecasts, projections and other forward-looking statements will not be achieved. Forward looking statements are based on Artemis Resources good faith assumptions as to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. A number of important factors could cause Artemis Resources actual results to differ materially from the plans, objectives, expectations, estimates, targets and intentions expressed in such forward-looking statements, and many of these factors are beyond Artemis Resources control. Forward-looking statements may prove to be incorrect, and circumstances may change, and the contents of this announcement may become outdated as a result. Artemis Resources does not give any assurance that the assumptions will prove to be correct. Readers should note that any past performance is given for illustrative purposes only and should not be relied on as (and is not) an indication of the Company's views on its future financial performance or condition. Past performance of the Company cannot be relied on as an indicator of (and provides no guidance as to) future performance including future share price performance. Except as required by law or regulation, Artemis Resources undertakes no obligation to provide any additional or updated information whether as a result of new information, future events or results or otherwise. Nothing in this announcement should be construed as either an offer to sell or a solicitation to buy or sell Artemis.*

## JORC Code, 2012 Edition – Table 1 report template

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<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>Ground gravity surveying</li> <li>The gravity survey detects density contrasts/more dense rock types potentially related to alteration or a mineralised system. Sampling will be required to confirm the presence of alteration/mineralisation. None of the targets identified in the survey have been sampled.</li> </ul>
<b>Drilling techniques</b>	<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 type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable as no drilling was undertaken</li> </ul>
<b>Drill sample recovery</b>	<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>Not applicable as no drilling was undertaken</li> </ul>
<b>Logging</b>	<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>Not applicable as no drilling was undertaken</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<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> </ul>	<ul style="list-style-type: none"> <li>No drilling is being reported.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	
<b>Quality of assay data and laboratory tests</b>	<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> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No assays are being reported</li> <li>400x 400m spaced ground gravity stations</li> <li>Gravity data were acquired concurrently with GNSS data using a single Scintrex CG-5 gravity meter.</li> <li>Each loop contained a minimum of two repeated readings so that an interlocking network of closed loops was formed.</li> <li>A total of 57 repeat readings representing 3.34% of the survey were acquired for quality control purposes.</li> <li>Repeat readings were evenly distributed, where possible, on a time-basis throughout each of the gravity loops.</li> <li>One CG-5 Autograv Gravity Meter (Serial Number: 40241, SF: 1.00000)</li> <li>One CHC Nav i70+ GNSS Base Receiver</li> <li>One CHC Nav i70+ GNSS Rover Receiver</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling is being reported</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>GNSS raw data was used and processed by GrafNav v8.70 post processing software.</li> <li>GrafNav was used to transform the GNSS-derived WGS84 coordinates to GDA94 coordinates for each gravity station location.</li> <li>MGA coordinates were then derived by projecting the GDA94 geodetic coordinates with a Universal Transverse Mercator (UTM) transform using the appropriate zone.</li> <li>GrafNav produced GDA94 ellipsoidal heights for each gravity station location; and elevations above the Australian Height Datum (AHD) were modelled using the AUSGEOID09 geoid model, with separations (N values) added to GDA94 ellipsoidal heights.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>400x 400m spaced ground gravity stations</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>	<ul style="list-style-type: none"> <li>No drill data is being reported</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>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.</li> </ul>	
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>No sampling being reported</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No sampling being reported</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Gravity Survey by Artemis was carried out on E45/5276 – 100% owned by Artemis Resources Ltd. <ul style="list-style-type: none"> <li>This tenement is in good standing, free of any impediments.</li> </ul> </li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Majority of the exploration for gold was completed by Newcrest and its predecessor Newmont, within the area encompassing E45/2418, 45 km to the east of Telfer gold mine known locally as Anketell, commenced in 1986 and progressed in three main phases to 1996. <ul style="list-style-type: none"> <li>1986-1989: Originally part of Newmont's Canning tenement group, surface geochemical sampling (mainly BLEG) and RAB and RC drilling were undertaken in the Anketell area following the recognition of a suite of distinctive and intriguing aeromagnetic anomalies. Results from this work were not encouraging and the tenements were surrendered.</li> <li>1991-1992: New tenement coverage was obtained by Newcrest following detailed interpretation of the aeromagnetics and recognition that the earlier work had not, in fact, tested the magnetic anomalies because of thick Phanerozoic cover. Diamond drilling was used to test several of the anomalies, with mineralization of potential economic significance being intersected in two holes at the Havieron Prospect. Unfortunately, the Proterozoic-hosted mineralization is concealed beneath +400m of post-mineral cover, and no further work was done in this period.</li> <li>1995: The project was again revived, with a program of diamond drill testing of additional magnetic targets in the northern parts of the Anketell area without success, and at the Havieron Prospect with only minor success.</li> <li>1997: No exploration was undertaken on M45/605. The tenement was included in a package of Telfer tenements on offer for farm-out.</li> <li>1998-2001: The Havieron tenement M45/605 was included as part of the Normandy/Newcrest Crofton JV. No further field work was undertaken during this time and Normandy withdrew from the</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>JV on 10<sup>th</sup> January, 2001. The Mining Lease was subsequently surrendered by Newcrest Mining Limited on the 19<sup>th</sup> March, 2001.</p> <ul style="list-style-type: none"> <li>2003: The area was reapplied for by Newcrest Mining Limited on the 4<sup>th</sup> May, 2002 and subsequently granted by DOIR on May 8, 2003 as the Terringa Project (E45/2418) with an area of 19,600ha (196km<sup>2</sup>). The tenement has subsequently been renamed Havieron to reflect the location of the original AMAG anomaly.</li> <li>2004: Exploration conducted on E45/2418 comprised the drilling of one (1) diamond drillhole (HACO301) for a total of 717.9m — 102m of RC and 615.9m of core. A maximum intercept of 1m @ 180 ppb from 503m dhd was recorded.</li> <li>2005: Nine core samples from HAC0301 were submitted to Mason Geoscience Pty Ltd for thin section petrological analysis.</li> <li>2006: An aeromagnetic survey was conducted across the entire tenement.</li> <li>2007: No exploration conducted on surrendered ground.</li> <li>2008: A 4 hole air core program was carried out to test a aeromagnetic anomaly.</li> <li>2013 – 2015, Potash exploration by Reward Minerals concluded that the area was not prospective for potash occurrences.</li> <li>2014 - Ming Gold explored on E45/3598. Work included reinterpretation of the geophysical data (magnetics, gravity and EM) along with core inspection at Havieron. Due to significant depth of cover the Proterozoic basement was not reached for several targets and in other cases it is interpreted that the drilling potentially missed the anomalies.</li> <li>2018 – Tenement E45/5276 acquired by Armada Mining, subsidiary of Artemis Resources. Armada completed low detection soil sampling (MMI and Ionic leach). Three deep diamond holes were drilled in the Nimitz Prospect only 2.5km to the east of Havieron area for a total of 3,012m. Drilling programs are on-going.</li> </ul>
<p><b>Geology</b></p>	<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>This program has yet to define the type and style of mineralisation that is being targeted.</li> <li>However, based on other styles of mineralisation located nearby, as in the Havieron Deposit, the types of mineralisation likely to be discovered include IOCG, porphyry-style mineralisation, breccia hosted Au-Cu and skarns.</li> <li>Style of mineralisation is currently unknown but inferred to be related to Iron Oxide Copper Gold (IOCG).</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• 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:               <ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• No drilling is being reported.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• No drilling is being reported.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• 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').</li> </ul>	<ul style="list-style-type: none"> <li>• No drilling is being reported.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate plans are shown in the text.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• All results are reported.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration data is contained in previous AM reports.</li> </ul>

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