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16 April 2024

Artemis Resources Limited  
("Artemis" or the "Company")

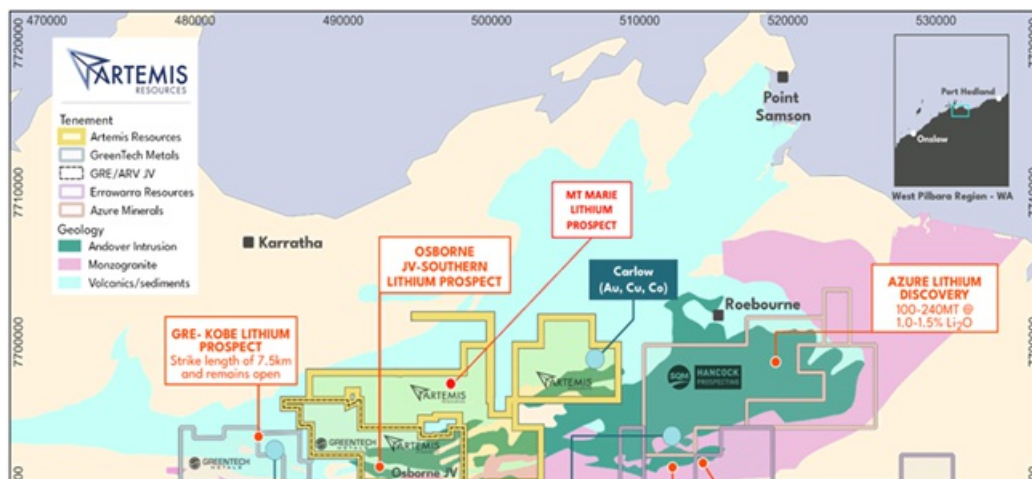
**GOLD REVIEW IDENTIFIES MULTIPLE TARGETS IN WEST PILBARA**  
**DRILL ASSAYS INCLUDE 5m @ 6.23% Cu, 3.01 g/t Au & 45.32 g/t Ag**  
**ROCK CHIP ASSAYS INCLUDE 23 g/t Au**

- Internal review of historical data uncovers gold and copper targets
- Multiple prospects identified across Carlow, Silica Hills and Osborne tenements
- Peak rock chip assay results hit 23 g/t Au at Orpheus prospect
- Peak drill intercepts includes 5m @ 6.23% Cu, 3.01 g/t Au & 45.32 g/t Ag at the Chapman prospect
- Priority targeting currently underway to expand gold exploration program, in addition to drilling at the Lulu Creek prospect

**Artemis Resources Limited** ('Artemis' or the 'Company') (ASX/AIM: ARV) provides this update to shareholders on its Karratha Gold Precinct exploration program.

The Karratha Gold Precinct covers an area of more than 200km<sup>2</sup> in the West Pilbara region of Western Australia. It is located ~20km from the main regional town of Karratha, which is only a 2-hour flight from Perth.

**Executive Director George Ventouras commented** "Through a recent internal review of Artemis historical tenement data, we have uncovered numerous prospects that display high prospectivity and compelling first pass results. Given the current gold price and market sentiment, we are very excited by the opportunity to explore these further. Given the Company's tenement locations and the dual streams of lithium and gold, we are confident that the pathway forward will be a positive development for the Company."

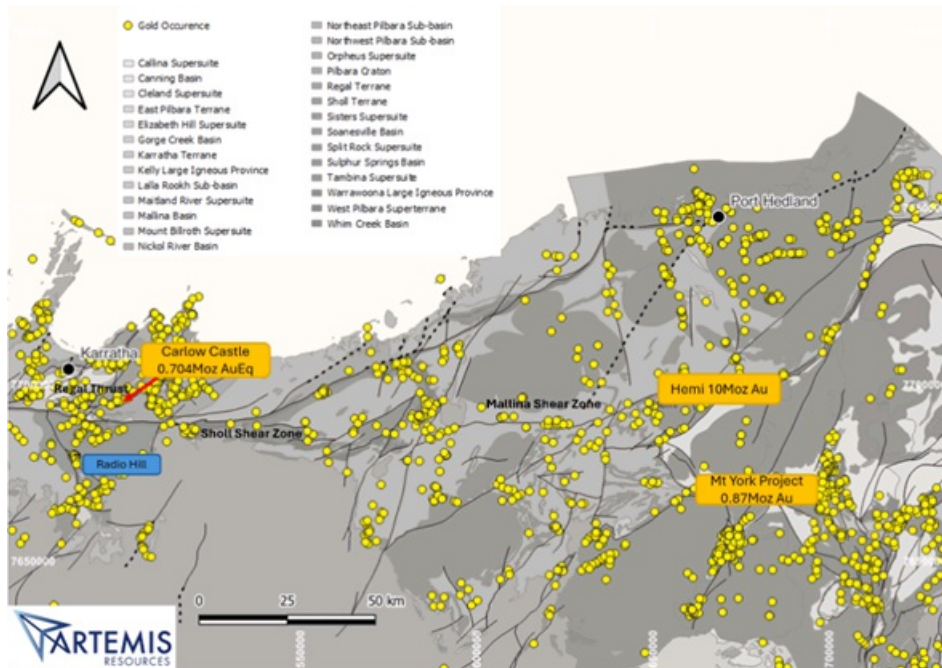




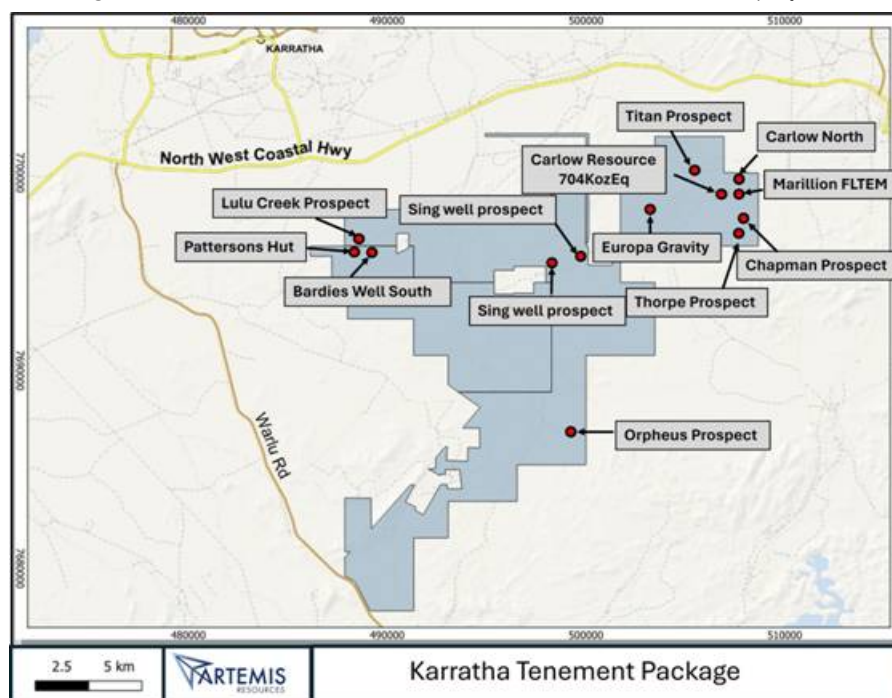
**Figure 1.** Artemis tenements in the West Pilbara

Through a recent project review, the Carlow, Silica Hills and Osborne tenements have all displayed multiple prospects which warrant further exploration activity. Many of these were discovered by Artemis during previous exploration programs and others were discovered by previous owners of the tenements.

These targets highlight the prospectivity of the region and the complexity of the geology to deliver the variety of commodities within the West Pilbara region.



**Figure 2** Artemis tenements in the West Pilbara in relation to other projects



**Figure 3.** Artemis tenements in the West Pilbara with prospects

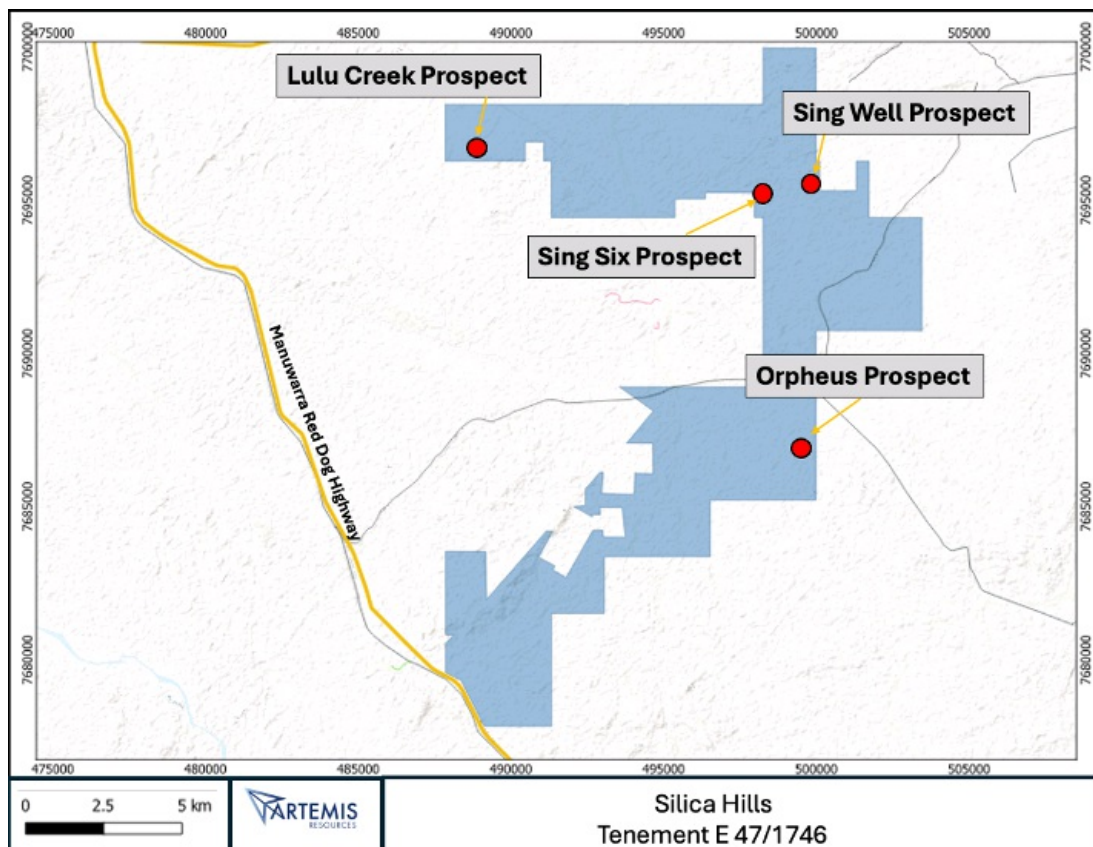


Figure 4. Silica Hills tenement prospects

## Silica Hills

**Orpheus** - Previous work undertaken by Dragon Mining and Legend Mining uncovered various positive rock chip assay results peaking with anomalous rock chips returning **23 g/t Au, 8,600 g/t Ag, 7% Cu and 6.9% Zn**<sup>1</sup>. Follow up work by Legend Mining Ltd identified a significant prospect comprised of a series of parallel east-northeasterly trending near vertical shear zones, between 1m and 20m wide associated with anomalous gold and silver results.

<sup>1</sup> Annual report, Dragon Mining NL December 1995

**Lulu Creek** - is potentially an "Intrusion-Related Gold System" (IRGS) which is a geological term used to describe a specific type of gold deposit formation. These systems are characterized by the presence of gold mineralization associated with intrusive igneous rocks, often within or adjacent to large-scale magmatic intrusions.

Intrusive Igneous Rocks are rocks that have formed from the cooling and solidification of magma beneath the Earth's surface with gold potentially present within these intrusive igneous rocks, either in the form of disseminations (small particles scattered throughout the rock) or concentrated in specific mineral veins or zones.

The formation of IRGS often involves hydrothermal fluids, which are hot, mineral-rich fluids that migrate through the Earth's crust. These fluids can transport gold and other minerals from deeper parts of the Earth's crust to shallower levels where they can precipitate and form deposits.

The presence of structural features such as faults, fractures, and shears can influence the localization of gold mineralization within the intrusive rocks and we believe that the Sholl Shear Zone and the Regal Thrust represent best localised features which can potentially host large scale gold deposits.

Previous drilling at Lulu Creek returned drill assays up to **4.89 g/t Au**<sup>2</sup> from 24m and the follow up drill program as noted in the Announcement on the 4<sup>th</sup> April 2024, will seek to extend these results.

**Sing Well** - gold grains found in rock chip samples. Rock chip sampling conducted by Legend Mining Ltd whilst wide spaced does indicate the prospectivity for mineralization within the shear structures between Sing Well and Sing Six.

**Sing Six** - Artemis drilled 14 Aircore holes in 2020 for 376m. Best drill result was **2m @ 0.97 g/t Au** from 9m (SSRC007)<sup>2</sup> the original program was cut short due to contractual obligations of the drill company and was not subsequently revisited to finish off the initial drill program, and so still remains an attractive target.



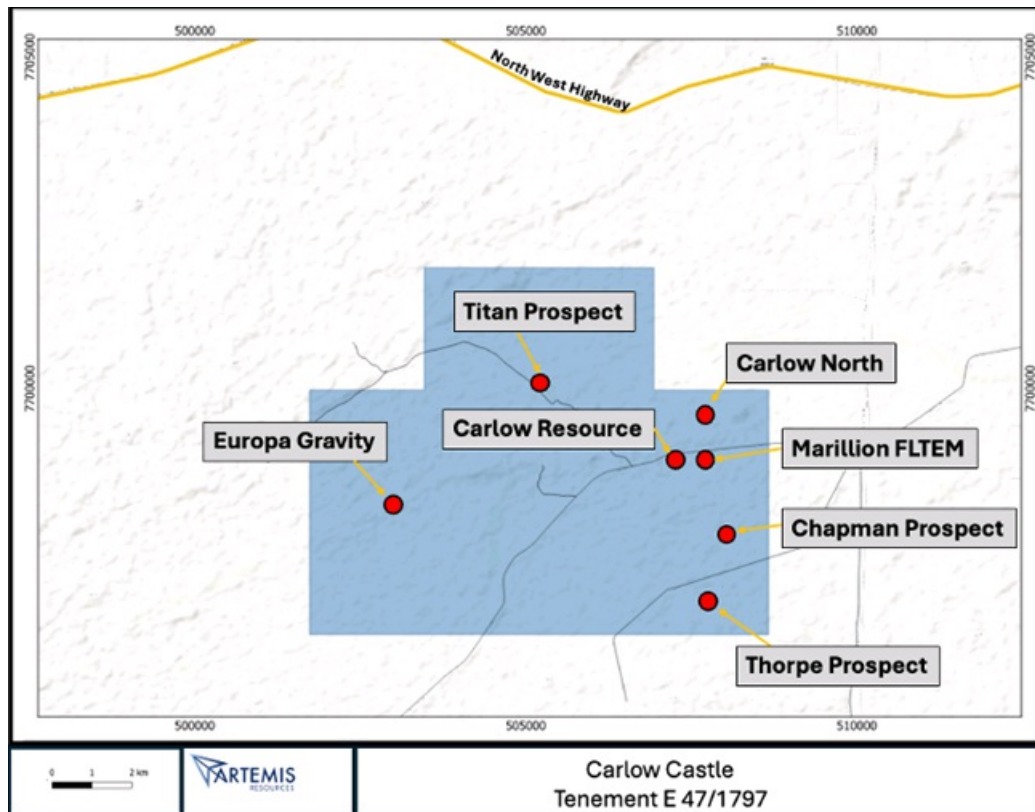


Figure 5. Carlow tenement prospects

## Carlow

**Chapman** - Wildcat hole hit **10m @ 3.4% Cu, 1.75 g/t Au & 24.65 g/t Ag**, from 116m, including **5m @ 6.23% Cu, 3.01 g/t Au, 45.32 g/t Ag from 117m<sup>3</sup>** targeting a series of VTEM plate anomalies, with significant sulphides (up to 15%) intercepted predominantly in pyrite and pyrrhotite.

**Marillion** - significant **>11,000s** conductance identified via a fixed loop EM survey with an area size of 500m to 600m strike and 250m to 350m down dip extent, depth to anomaly is 350m to 450m<sup>4</sup>.

**Europa** - Coincident gravity and magnetic target with similarities to the nearby Carlow resource.

<sup>3</sup> Announcement, Artemis Resources Ltd, 6 December 2021

<sup>4</sup> Announcement, Artemis Resources Ltd, 14 November 2022

**Titan** - Elevated gold in soils with assay results up to 101.3 ppb Au, elevated soil assays align with **1.25 g/t** gold rock sample collected from banded chert at the time of the soil sampling program<sup>5</sup>.

**Thorpe** - Historic workings proximal, which is currently thought to be a structural repeat of the Carlow host-sequence. Ultrafine soil sampling defines regional structures responsible for hosting mineralization and appears coincident with a regional magnetic trend<sup>3</sup>.

**Carlow North** - Anomaly identified north of Carlow, elevated copper in soils up to **258 ppm<sup>5</sup>** and is likely associated with the Au-Cu mineralisation identified by Novo Resource Corp at their Morto Largo prospect.

**Carlow** - The Carlow tenement contains the Company's current resource of **704,000 oz AuEq<sup>6</sup>** with potential to increase this resource through further methodical exploration. Given some of these targets are in close proximity to the main Carlow resource, they have the potential to represent an extension of the Carlow resource or a completely separate mineralised event.

<sup>5</sup> Announcement, Artemis Resources Ltd, 4 April 2023

<sup>6</sup> Announcement, Artemis Resources Ltd, 13 October 2022

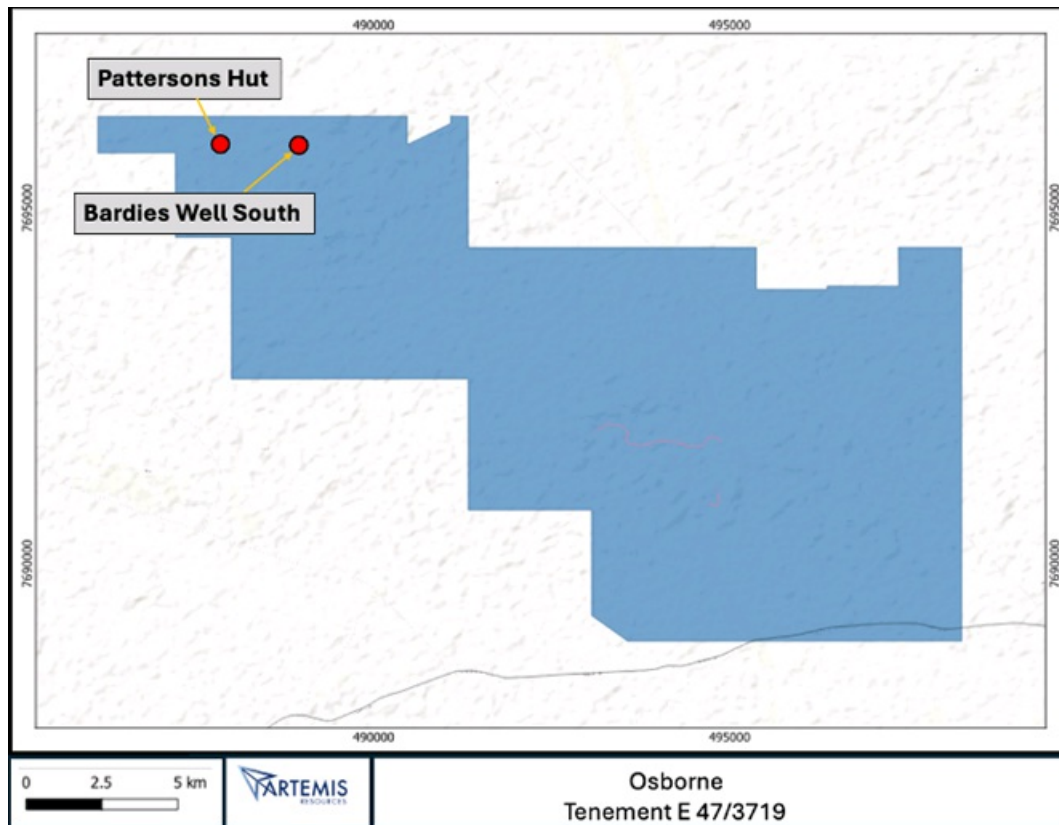


Figure 6. Osborne tenement prospects

## Osborne

**Patterson's Hut** - Anomalous gold result from quartz veins and gossanous rock chip up to **11.4 g/t Au<sup>7</sup>**, with anomalous soils up to 68ppb. Samples were collected within a wide zone of sheared talcose and cherty schists with multiple parallel striking quartz veins.

**Bardies Well South** - Anomalous gold in soil sampling results, an RC drill program over this area returned best results of **2m @ 1.62 g/t Au<sup>2</sup>** from thin, south dipping quartz veins.

<sup>7</sup> Announcement, Artemis Resources Ltd, 5 November 2018

The Company is looking forward to conducting further work on these prospects and will continue to update the market accordingly.

Work on the Artemis lithium projects also continues with further samples in the lab for assay and additional ground reconnaissance planned in the coming months.

This announcement was approved for release by the Board.

For Further information contact:

### Artemis Resources Ltd

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George Ventouras, Executive Director

**About Artemis Resources**

Artemis Resources (ASX/AIM: ARV; FRA: ATY; US: ARTIF) 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 Haverton).

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 Mining and Metallurgy (MAusIMM). Mr Hirst is a technical consultant 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.*

**Related ASX Announcements**

13/11/2023 Lulu Creek Awarded Exploration Incentive Scheme Funding  
24/08/2023 New Gold Targets at Lulu Creek JORC Tables Updated  
03/07/2023 Lulu Creek IP Survey Commences and Greater Carlow EM Update  
04/04/2023 Soil Program Confirms Titan Gold Prospect  
18/05/2023 Geological Review Confirms Gold Mineralised Intrusion at Lulu Creek  
14/11/2022 Greater Carlow Regional Growth Plan  
13/10/2022 New High-Grade Au-Cu-Co Resource at Greater Carlow  
13/09/2022 Chapman Prospect Large Copper Nickel System Identified  
18/09/2020 Carlow West and Singsix Drill Results  
18/09/2020 Diamond Drilling Underway at Carlow Castle  
06/12/2021 New Regional Discovery - High Grade Cu, Au, Ag Chapman Prospect  
16/09/2019 21 New SAM Targets at Carlow Castle West  
05/11/2018 Three New Gold Discoveries in the West Pilbara  
29/10/2018 Multiple New Cobalt Targets Defined in West Pilbara

**References**

Dragon Mining NL, Annual Report 1995.

Legend Mining LTD, Annual Report 15<sup>th</sup> Jan 2002- 31 January 31<sup>st</sup>, 2004.

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