

## ASX Announcement

# Greater Carlow Regional Growth Plan High Priority Exploration Targets

## Highlights

- Two high priority, untested gold and copper targets called Marillion and Europa have been identified by the Company's Exploration Team and are being evaluated for drill testing in early 2023 (Figure 1).
- Over the past 18 months the Company has focused on resource and near resource activities at Greater Carlow and as such, there has been limited systematic exploration of the Company's ~220sqkm tenement package. (Figure 2).
- Following the recent publication of a new high-grade Inferred Mineral Resource of 704,000k oz Au Eq at 2.5 g/t Au eq at Greater Carlow (refer Appendix 1 and ASX Announcement dated 13 October 2022), identification of potential new targets to test on Artemis' 100% owned regional tenement packages is now underway.
- A follow-up exploration programme for the Chapman Cu-Ni-Au Prospect is also being considered by the Exploration Team.
- The 2023 work plan for the Greater Carlow Project will comprise two parts: Regional Growth and Resource Growth. Presented today are the early highlights of our Regional Growth Strategy.

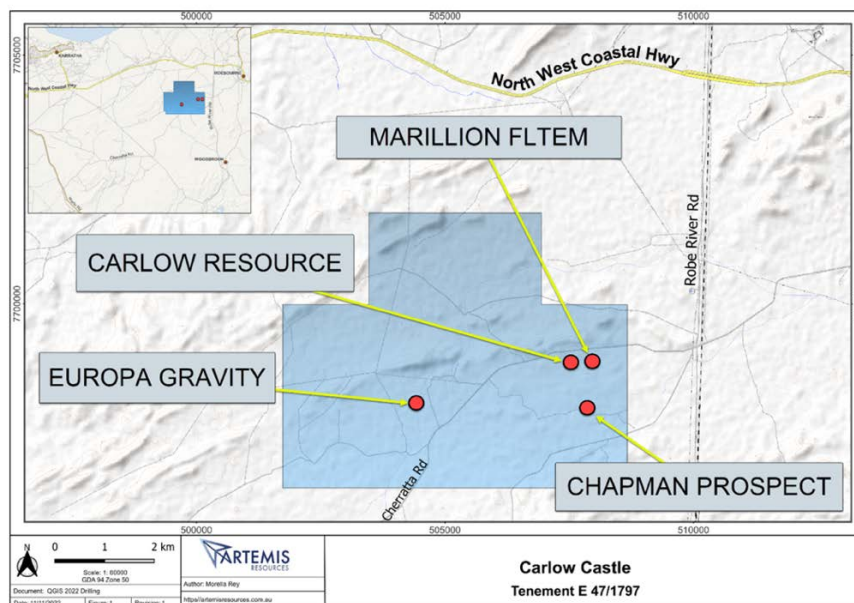


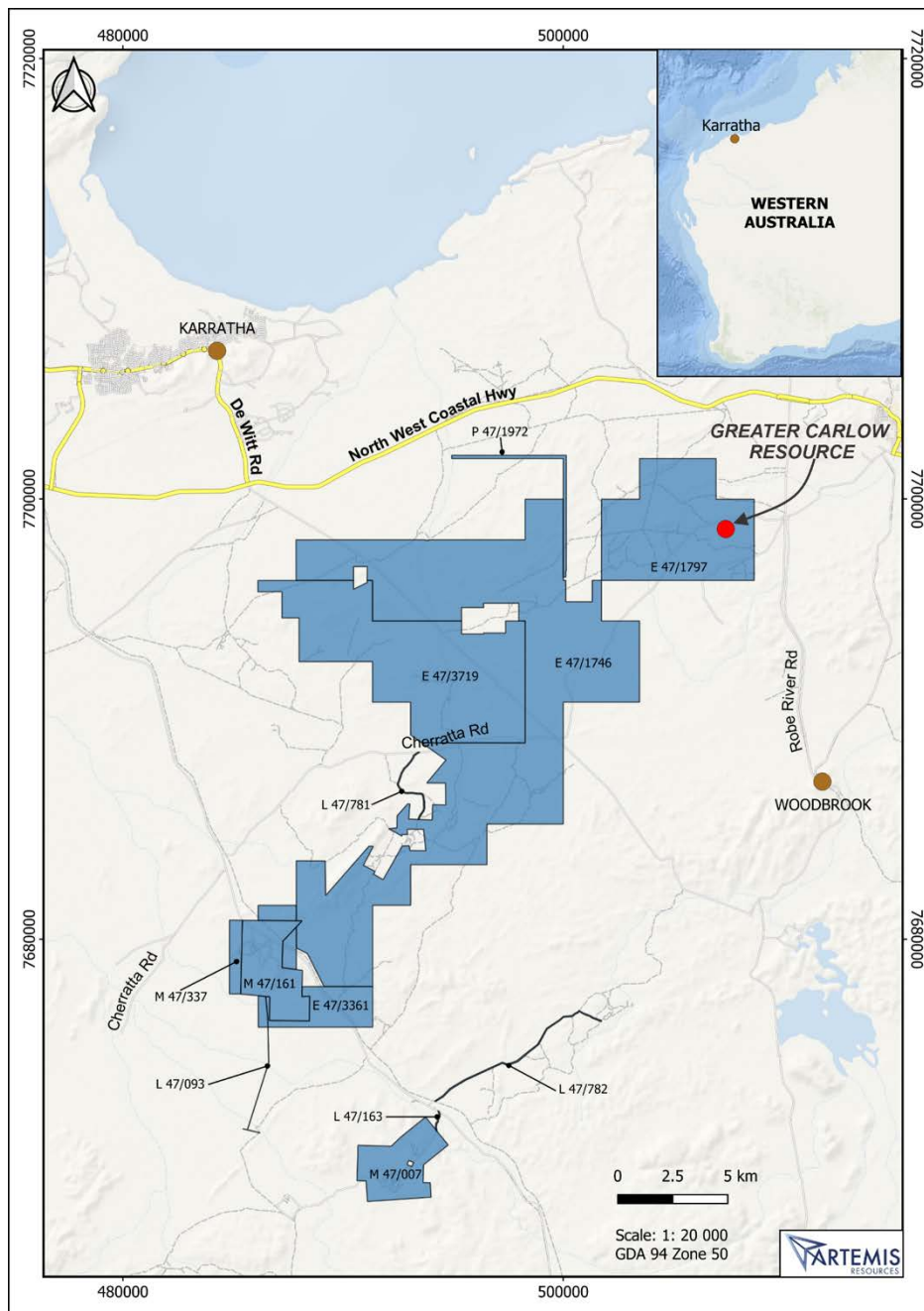
Figure 1: Greater Carlow high-priority regional targets

**Artemis Resources Limited** (“Artemis” or “the Company”) (ASX:ARV AIM:ARV, Frankfurt: ATY, US OTCQB: ARTTF) is pleased to announce the first results of regional target generation across its ~220sqkm, 100% owned tenement package.

**Alastair Clayton, Executive Director commented;** “Over the last 12 to 18 months our focus has been the delivery of a new, high-grade resource at Greater Carlow and as such the regional potential across our ~220sqkm has remained largely tapped.

Marillion and Europa are the highest priority greenfield targets developed thus far. A combination of new and existing databases were used to generate these targets and both targets have never been drilled.

We believe success on either of these targets could have the potential to substantially increase the overall size of resources available to the Greater Carlow Project.”

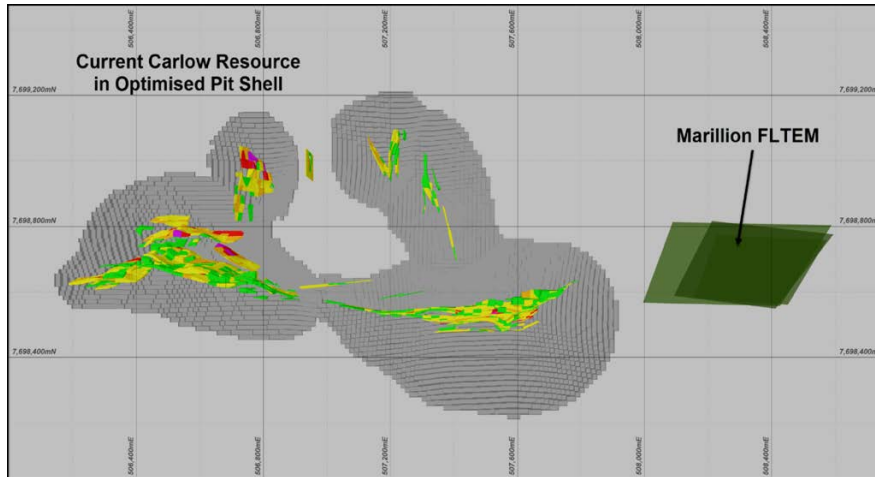


**Figure 2: Artemis West Pilbara tenements**

## Marillion Target

First identified in July 2022 as part of a moving loop electromagnetics (“MLTEM”) programme, Marillion is located approximately 500m to the East of the Greater Carlow resource. A follow-up down hole electromagnetic (“DHEM”) survey was then completed.

In October 2022 a fixed loop electromagnetic (“FLTEM”) survey was completed and identified a highly significant, >11,000s conductance with an area size of 500 to 600m in strike and 250 to 350m down dip extent, see Figure 3 and 4.

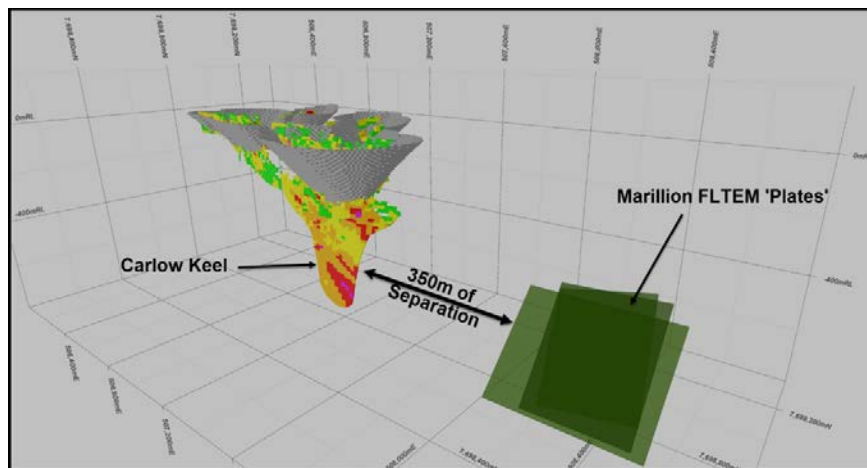


**Figure 3:** Plan view of the current Carlow resource in optimised pit shell and the location of the Marillion 11,000S FLTEM geophysical plates. Note the scale of the plates in relation to the length of the eastern block model of Carlow.

11,000s of conductance is considered to be a regionally exceptional tenor. Depth to the top of the anomaly is modelled at between 350 to 450m and the anomaly dips at 40° to the south-southwest.

Also of note is the potential relationship between the Marillion Target and the eastern portion of the Greater Carlow resource and the Carlow Keel Zone. Spatially there is approximately 350m distance between the two areas.

A RC and diamond drill programme is being developed for execution in early 2023.



**Figure 4:** 3D oblique view looking west showing the Carlow resource and spatial location of the Marillion ‘plates’

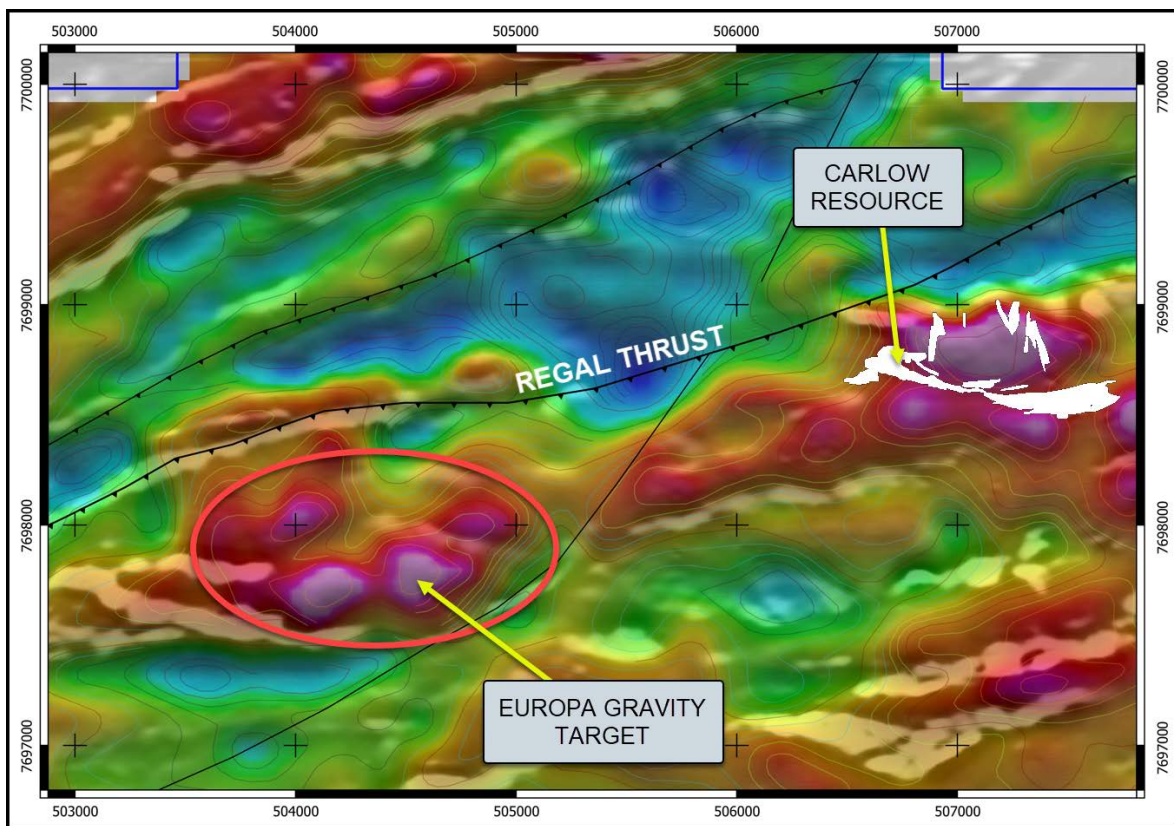


## Europa Target

The Europa Target is located approximately 1.75km west of the Greater Carlow resource and is a coincident gravity and magnetic anomaly within a structurally bound segment of the Roebourne Complex. This is the same geological setting that hosts the Greater Carlow resource (Figure 5).

Europa will be covered by the large regional Ultra Fine Fraction (“UFF”) sampling programme that is already underway. Despite showing no anomalism in the historic 2018 ionic leach database it is believed that geologically recent local drainage is the likely explanation.

Europa will be subject to an early 2023 heritage survey and prepared for a MLTEM survey and aircore drilling shortly thereafter should results of the UFF programme prove positive.



**Figure 5:** Plan view of gravity and magnetics showing proximity to Carlow Resource area (white).

## Appendix 1 – Inferred Mineral Resource Table

Table 1. Greater Carlow Inferred Mineral Resources by assumed mining method reported above a cut-off of 0.7 g/t Au Eq. within an optimised open pit shell and above a 2 g/t Au Eq. cut-off for underground using MSO shapes (current as at 13 October 2022). The entire resource is classified as an Inferred Mineral Resource in accordance with The JORC Code, 2012. All tonnes are dry metric tonnes. Figures may not compute due to rounding. Refer announcement dated 13 November 2022 for full details.

OP or UG	Au Eq. cut-off (g/t)	Tonnes (Mt)	Au Eq. (g/t)	Au (g/t)	Cu (%)	Co (%)	Au (oz)	Cu (t)	Co (t)
Open pit	0.7	7.25	2.4	1.3	0.73	0.09	296,000	53,000	6,500
Underground	2.0	1.49	3.1	1.6	0.72	0.12	78,000	11,000	1,800
<b>Total</b>	-	<b>8.74</b>	<b>2.5</b>	<b>1.3</b>	<b>0.73</b>	<b>0.09</b>	<b>374,000</b>	<b>64,000</b>	<b>8,000</b>

### COMPETENT PERSONS STATEMENT:

The information in this announcement that relates to Exploration Results and Exploration Targets is based on information compiled or reviewed by Mr. Steve Boda, who is a Member of the Australasian Institute Geoscientists. Mr. Boda is an employee of Artemis Resources Limited. Mr. Boda has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Boda consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to Mineral Resources is based on information compiled by Ms Janice Graham, MAusIMM MAIG, and Dr Simon Dominy, FAusIMM(CPGeo) FAIG(RPGeo) FGS(CGeol). Ms Graham is a full-time Principal Consultant of Snowden Optiro. Dr Dominy is a Non-Executive Director of Artemis Resources Ltd. Ms Graham and Dr Dominy have sufficient experience relevant to the styles of mineralisation and type of deposits under consideration and to the activity being undertaken to individually 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". Ms Graham and Dr Dominy consent to the inclusion in the report of the matters based on this information in the form and context in which it appears.

## About Artemis Resources

Artemis Resources (ASX/AIM: ARV; FRA: ATY; US: ARTTF) is a Perth-based exploration and development company, led by an experienced team that has a singular focus on delivering shareholder value from its Pilbara gold projects – the Greater Carlow Gold Project in the West Pilbara and the Paterson Central exploration project in the East Pilbara.

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

This announcement was approved for release by the Board

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