

24 May 2023

## **Moving Loop Electromagnetic Survey Commences Over High Priority Targets within Greater Carlow Project**

### **Highlights:**

- Ground based Moving Loop Electromagnetic (MLEM) survey's have commenced over priority targets within the Greater Carlow Project.
- Approximately 260 survey stations have been planned, in five survey areas using 200m spaced TX loops and 100m spaced stations for a total of 27 line kilometres of coverage.
- MLEM surveys are expected to take approximately three weeks to collect with surveys being undertaken over the Europa, Titan, Carlow North, and Marillion North targets, and around the Carlow Castle Mineral Resource.
- Survey results and interpretation are expected towards the end of the June quarter.

Artemis Resources is pleased to announce that Southern Geoscience Consultants (SGC) have commenced a ground based MLEM program (Figure 1) over high priority exploration targets within the Greater Carlow project area of exploration licence E47/1797. The MLEM surveys are high powered reconnaissance surveys designed to detect under cover conductive bodies including mineralisation containing sulphides textures from stringer to semi-massive, and massive i.e., sulphide textures seen at the Carlow Castle gold-copper-cobalt deposit.

MLEM as a geophysical exploration tool was chosen as the preferred method of geophysics following the success of the July 2022 MLEM survey in identifying the Marillion 11,000S EM target. This survey was the first time a high-powered deep penetrating EM survey had been completed by the Company at Carlow Castle, producing a drill ready target in the first survey. As such the Company believes that additional drill ready targets can be produced from this round of MLEM surveys.

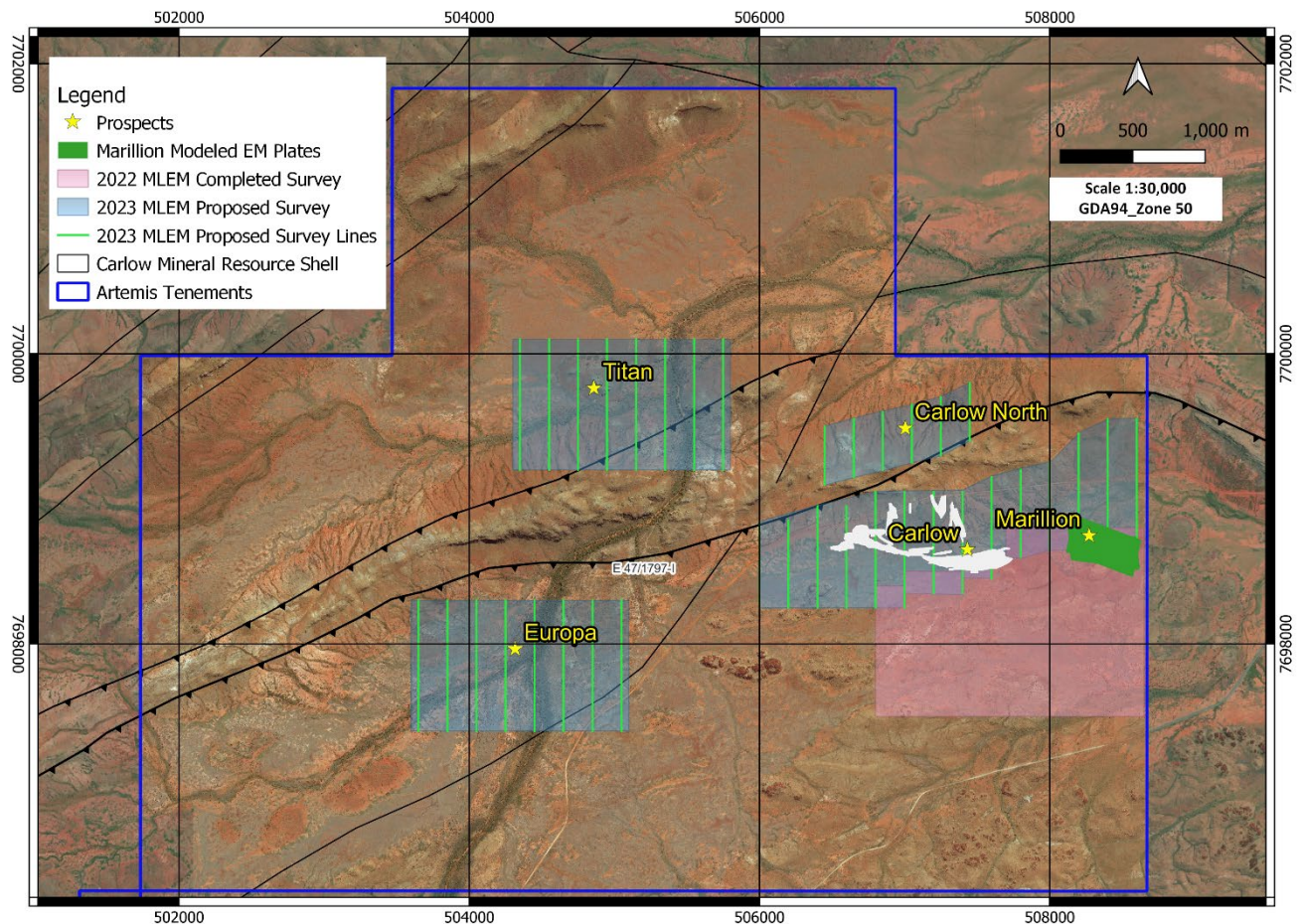


Figure 1: Proposed 2023 MLEM survey with survey lines and the 2020 MLEM survey which identified Marillion.

## Survey Areas

### Europa

The Europa target is located approximately 1.7 km south-west along strike of the Carlow Castle deposit. It is situated within a structurally bound gravity high on the southern side of the Regal Thrust within the prospective Roebourne Complex. Its structural and gravity signature are of a similar nature to the Carlow Castle deposit. With no surface exposure, MLEM has been identified as the preferred exploration technique in defining new conductors that may represent sulphide mineralisation.

### Titan

The Titan target is situated 1.8 km north-west of Carlow Castle and represents a coincident gold and arsenic anomaly running along a series of contacts between chert and mafic schists (refer ASX announcement 4/04/2023). The area of interest is significantly deformed via a thrust fault splay from the Regal Thrust and has limited exposure with quaternary sediments covering most of the bedrock. The MLEM survey has been designed to cover all of the gold and arsenic anomaly as well as a subtle bulls-eye gravity high which is situated immediately south of the main gold in soil anomaly.

### ***Carlow North***

Carlow North contains a series of north-west trending structures that have been interpreted as being extensions of the structures that host the Crosscut deposit at Carlow Castle. Field reconnaissance has identified gossanous outcrop along the structure which traverse through chert hills immediately north of Carlow and into basalts and schists of the Nickol River Formation. It is hoped the MLEM program will be able to define new north-south trending mineral shoots within linking structures as at the Crosscut deposit.

### ***Marillion North***

The Marillion North MLEM survey will tie into the 2022 MLEM survey by providing extension stations to the original north-south survey lines. Following consultation with the SGC, the original MLEM survey lines are being extended between 600 m to 900 m to the north to provide additional control to the Marillion EM target, and to test for conductors over the elevated copper in soil anomaly identified by the Ultrafine Fraction (UFF) soils program completed in the first quarter of 2023 (refer ASX announcement 4/04/2023).

### ***Carlow Castle Extensions***

Carlow Castle mineralisation is predominantly defined within an east-west trending shear zone along with additional loads in cross-cutting structures. Mineralisation forms within sheared and sulphidic quartz veins as well as semi-massive to massive sulphide zones, all of which are amiable to EM surveys. Artemis plan to tie into the 2022 MLEM survey and complete north-south MLEM lines across the entire ore body in an attempt to define extensions to known mineralisation, and to define new loads down dip / plunge or along strike. Following the success of identifying a significant conductor at Marillion, immediately east along strike of Carlow Castle, it is hoped that additional surveying will identify new drill targets for follow up.

This announcement was approved for release by the Board.

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## 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 projects – the Greater Carlow 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)

## Competent Person's Statement

*The information in this report that relates to exploration results was prepared by Mr Luke Meter, a Competent Person who is a member of the Australasian Institute of Geoscientists (MAIG) and Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Meter is employed by Artemis Resources as Exploration Manager. Mr Meter 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 Meter 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

- 09/05/2023 Greater Carlow Exploration Update and JORC Exploration Target for the Carlow Castle Deposit
- 09/05/2023 Corporate Strategy Update Pilbara Gold-Copper Focused Explorer & Developer
- 04/04/2023 Soil Program Confirms Titan Gold Prospect
- 14/11/2022 Greater Carlow Regional Growth Plan – High Priority Targets
- 13/10/2023 New High-Grade Au-Cu-Co Resource at Greater Carlow