

4 April 2024

- **KARRATHA GOLD PROJECT AREA PROSPECTIVE FOR INTRUSIVE RELATED GOLD SYSTEM (IRGS)**
- **LULU CREEK TO BE DRILL TESTED IN Q3 2024**
- **PROGRAM OF WORKS SUBMITTED AND APPROVED**
- **HERITAGE CLEARANCE APPLICATION UNDERWAY**

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

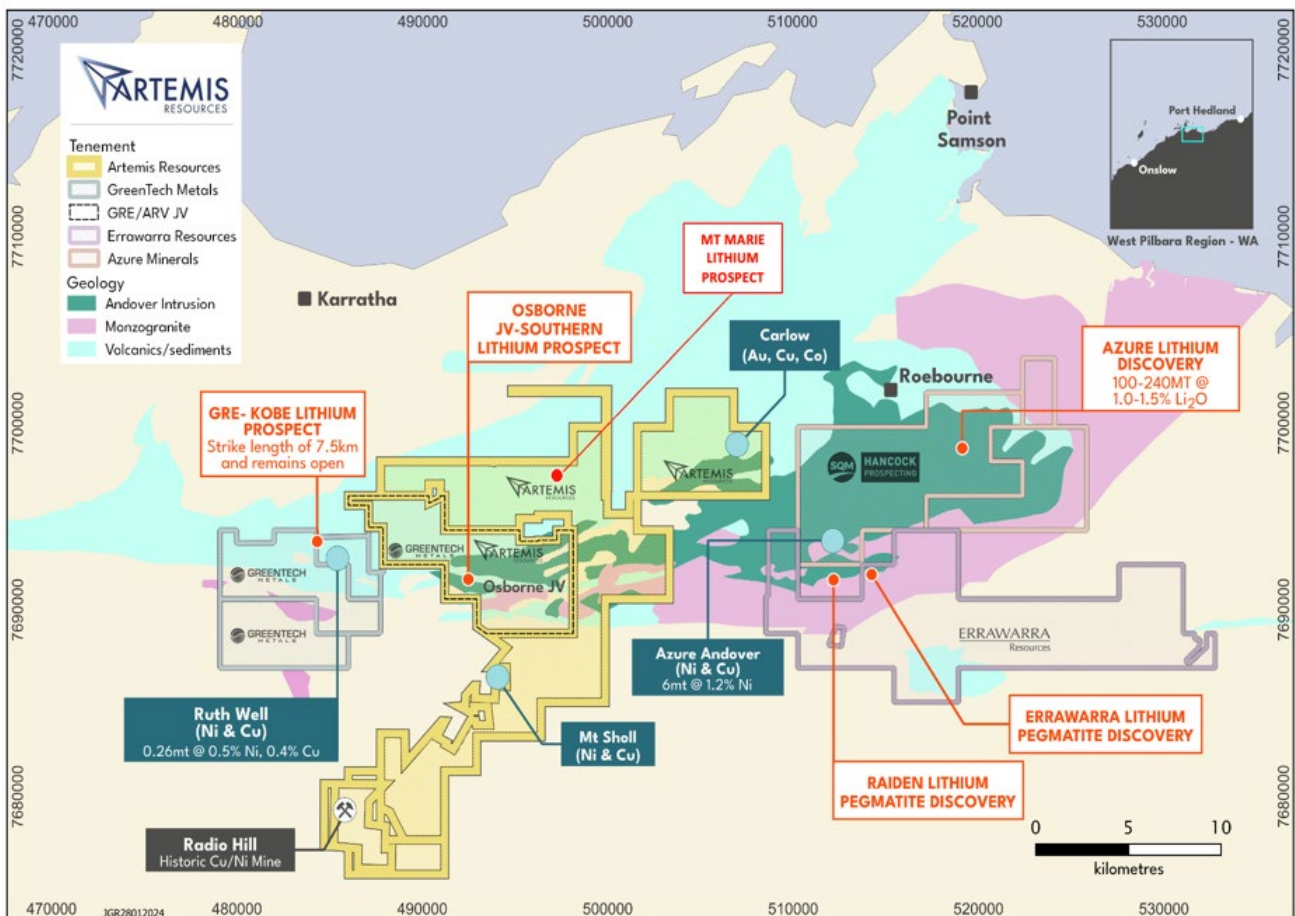


Figure 1. Artemis tenements in the West Pilbara

The Karratha Gold Precinct covers an area of more than 200km² 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.

The location is highly prospective for gold and other commodities including lithium, copper, nickel, cobalt and silver. Currently, Artemis has a JORC defined resource at its Carlow Castle prospect which contains a high-grade foundation resource of 704Koz AuEq at 2.5g/t AuEq¹.

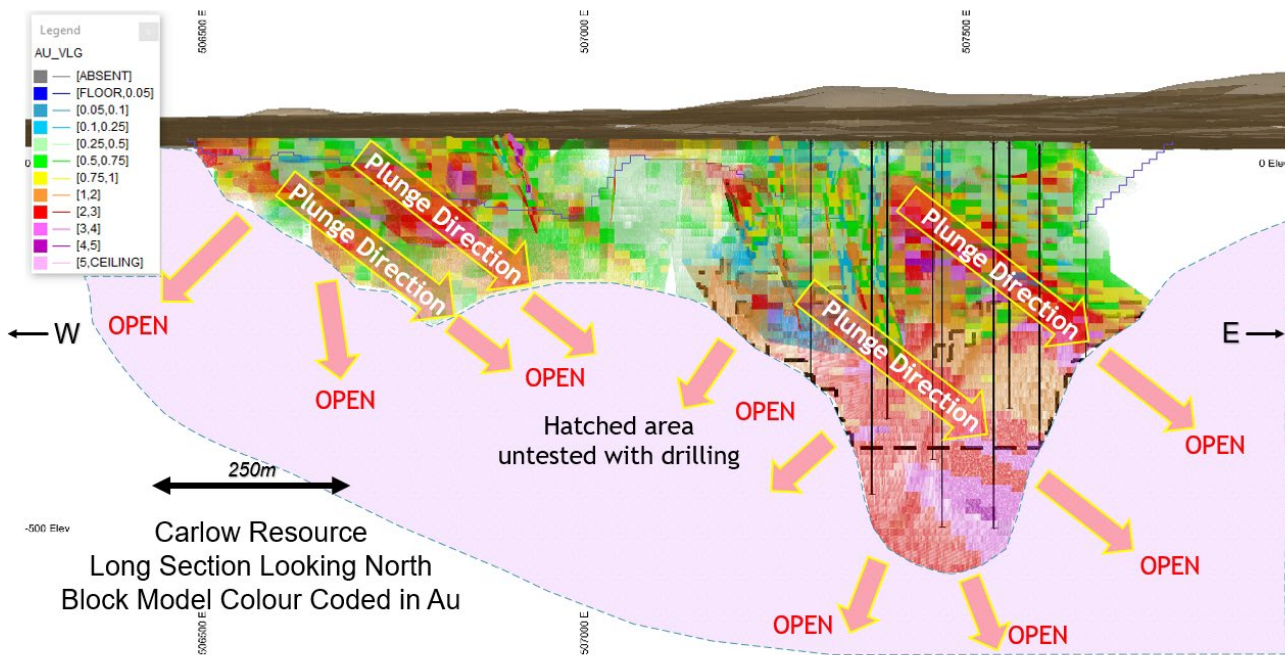


Figure 2. Carlow conceptual pit shell showing open in all directions

Carlow Project

The Carlow Project is situated within a series of shear zones along the margin of the Regal Thrust Fault within the basalt and sediments of the Roebourne Complex.

The Regal Thrust is a regionally significant south to south-west dipping structure with sinistral movement that folds around on itself over a distance greater than 90km.

Shear splays along the contact of the Regal Thrust within the Roebourne Complex are considered prospective for mineralisation, especially when intruded by Andover mafic/ultramafics.

¹ ASX Announcement, Artemis Resources Ltd, 13 October 2022.

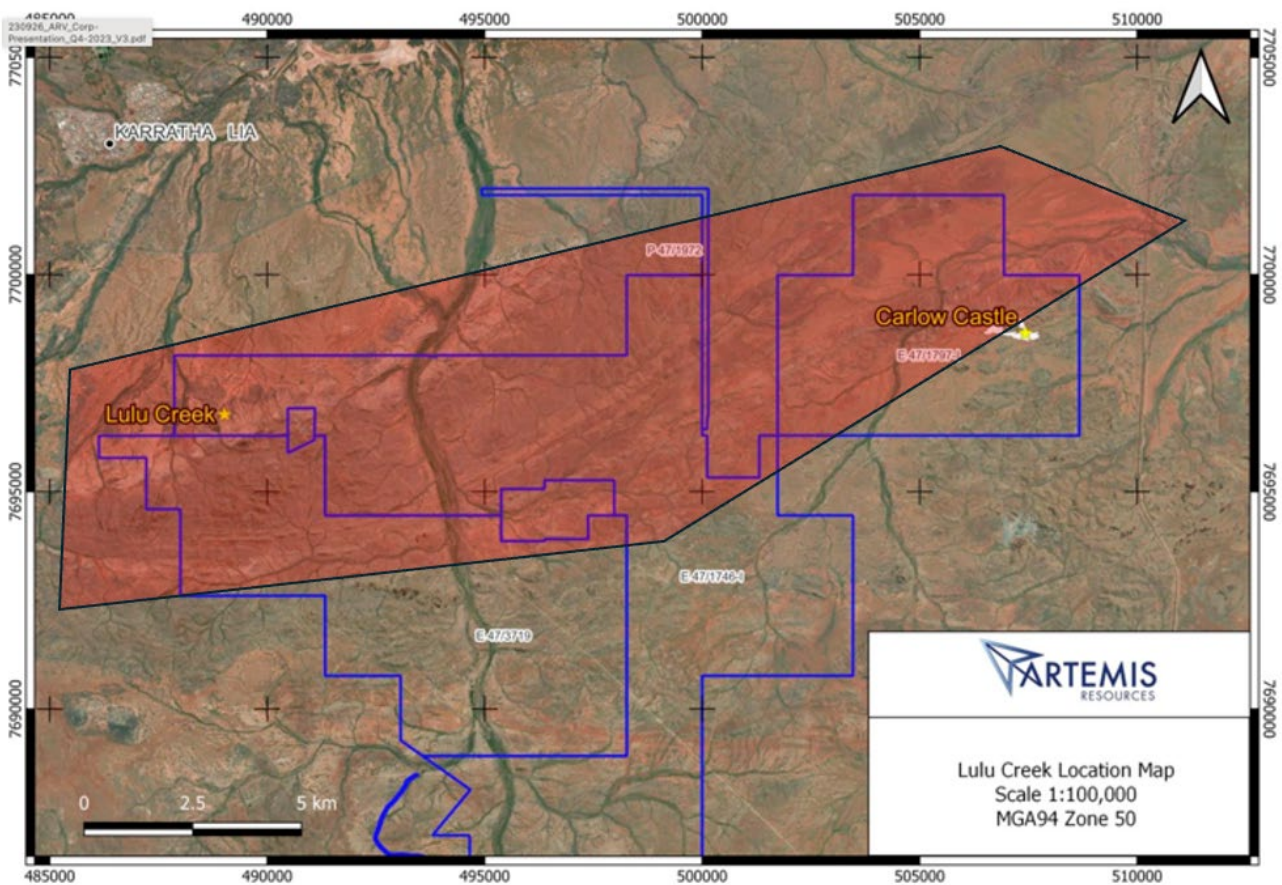


Figure 3. Karratha Gold Precinct with potential mineralised envelope shaded

Lulu Creek

Lulu Creek (formerly Carlow West) was previously drilled in 2020 where the drilling program involved an RC drill rig and targeted a discrete surface anomaly. This work was followed up in 2023 where an Induced Polarisation (IP) survey was completed² and resulted in the delineation of further targets at depth. This result, the subsequent targeting and the similarities to a Hemi style gold intrusive system were catalysts for the West Australian State Government awarding Artemis an Exploration Incentive Scheme (EIS) grant of \$82,500 to co-fund further drilling³.

Previous drilling at Lulu Creek provided encouraging results including;

- ✓ **2m at 1.62 g/t Au** from 34m within drill hole CWRC006
- ✓ **1m @ 4.89 g/t Au** and 13.7 g/t Ag from 24m in CWRC011
- ✓ **1m @ 1.15 g/t Au** from 9m in CWRC017⁴

² ASX Announcement, Artemis Resources Ltd, 23 August 2023.

³ ASX Announcement, Artemis Resources Ltd, 13 November 2023.

⁴ ASX Announcement, Artemis Resources Ltd, 18 September 2020.

At the time the Company drilled the Lulu Creek prospect, the significance of intrusion related gold in the Pilbara region was not fully understood. The gold system at Lulu Creek is reminiscent of **De Grey's Hemi deposit**, which has resulted in large gold projects being discovered in intrusive related gold systems (IRGS). The Hemi project resource currently sits at **255Mt @ 1.3 g/t Au for 10.5Moz⁵**.

The discovery of intrusion related gold systems are relatively new to the Pilbara region and shows a scale of mineralisation not previously encountered. Within these deposits, gold mineralisation is primarily situated within a sequence of intrusions, notably associated with stringer, and disseminated sulphide-rich zones.

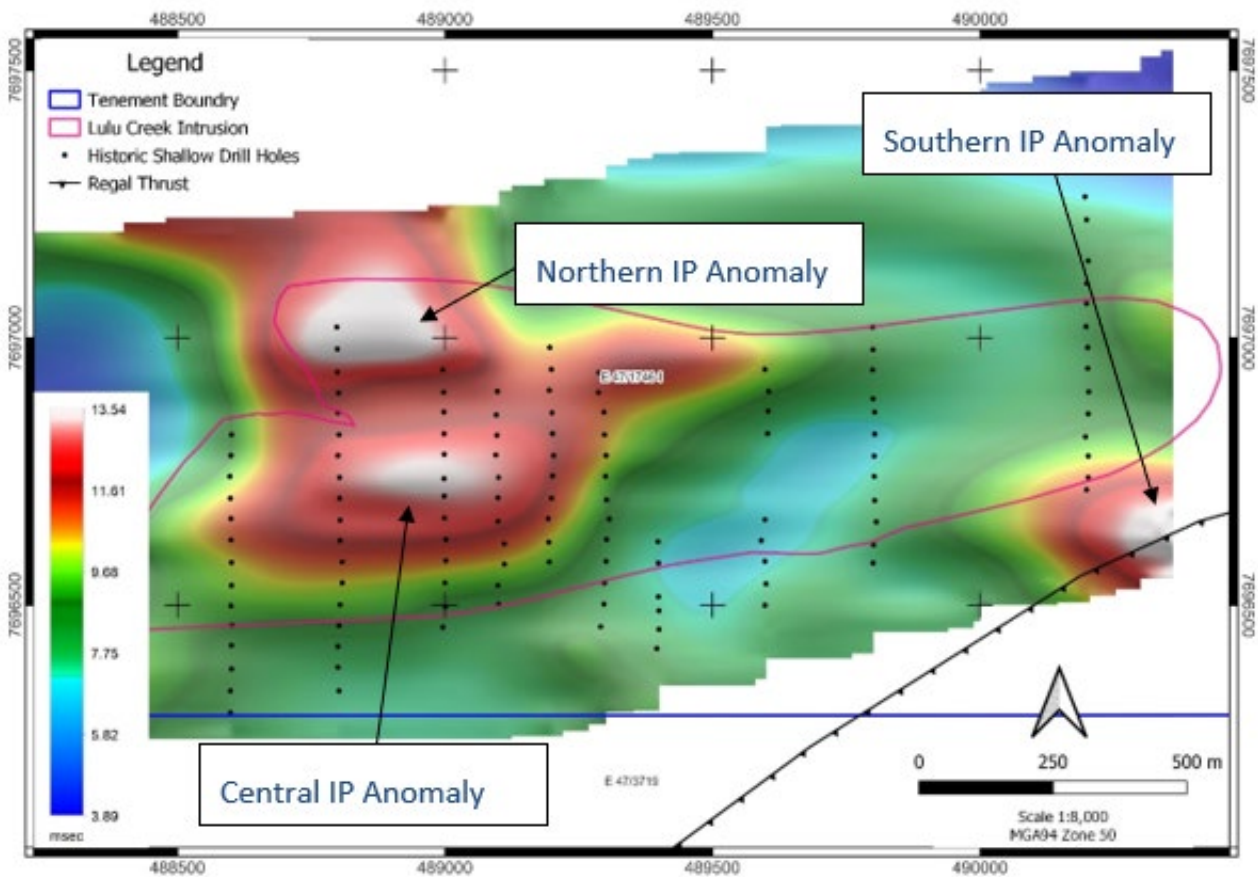


Figure 4. IP chargeability plan view -75 m below surface against Lulu Creek Intrusion outcrop outline in pink

The high value of these types of discoveries is driven by size, grade continuity and growth potential. The Karratha Gold Precinct has the potential to host large scale, multi-million ounce systems, due to the increased structural complexity of the region resulting from the close proximity of the Sholl Shear zone and the Regal Thrust.

⁵ ASX Announcement, De Grey Mining Ltd, 21 November 2023.

In addition to the IRGS style mineralisation at Lulu Creek, the Karratha Gold precinct contains several further prospects that were previously identified through a combination of soil sampling, fixed loop electro-magnetic survey (FLEM), drilling and gravity surveys. These targets include:

- ✓ Carlow (current JORC resource)
- ✓ Carlow North
- ✓ Marillion
- ✓ Titan
- ✓ Europa
- ✓ Chapman
- ✓ Sing Six
- ✓ Thorpe Prospect

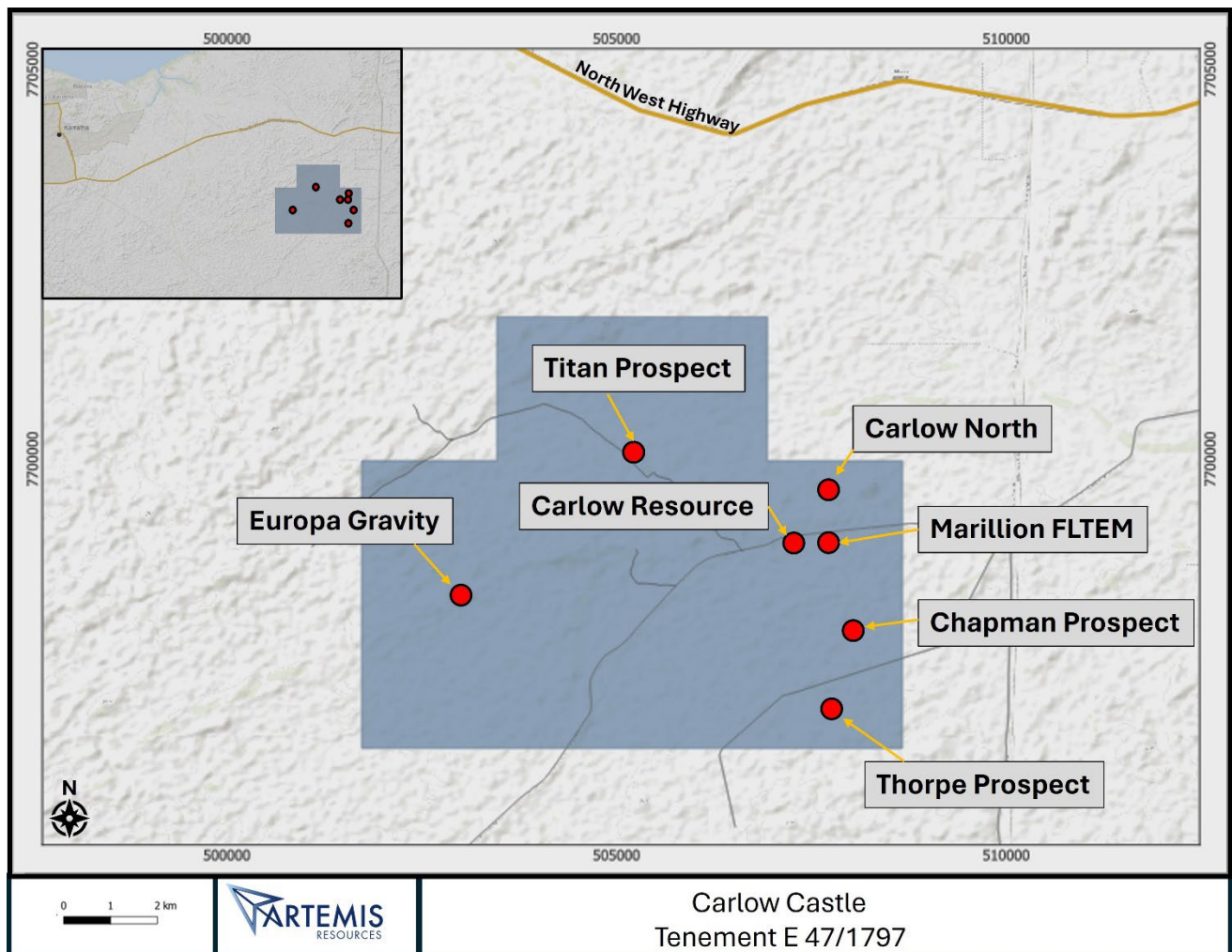


Figure 5. Carlow tenement with further prospects labelled

Artemis also retains the gold rights to the Osborne tenement (currently the subject of a lithium JV with Greentech Metals Ltd), which provides the Company with greater exposure to the regional faults and further prospective tenure to explore for gold mineralisation.

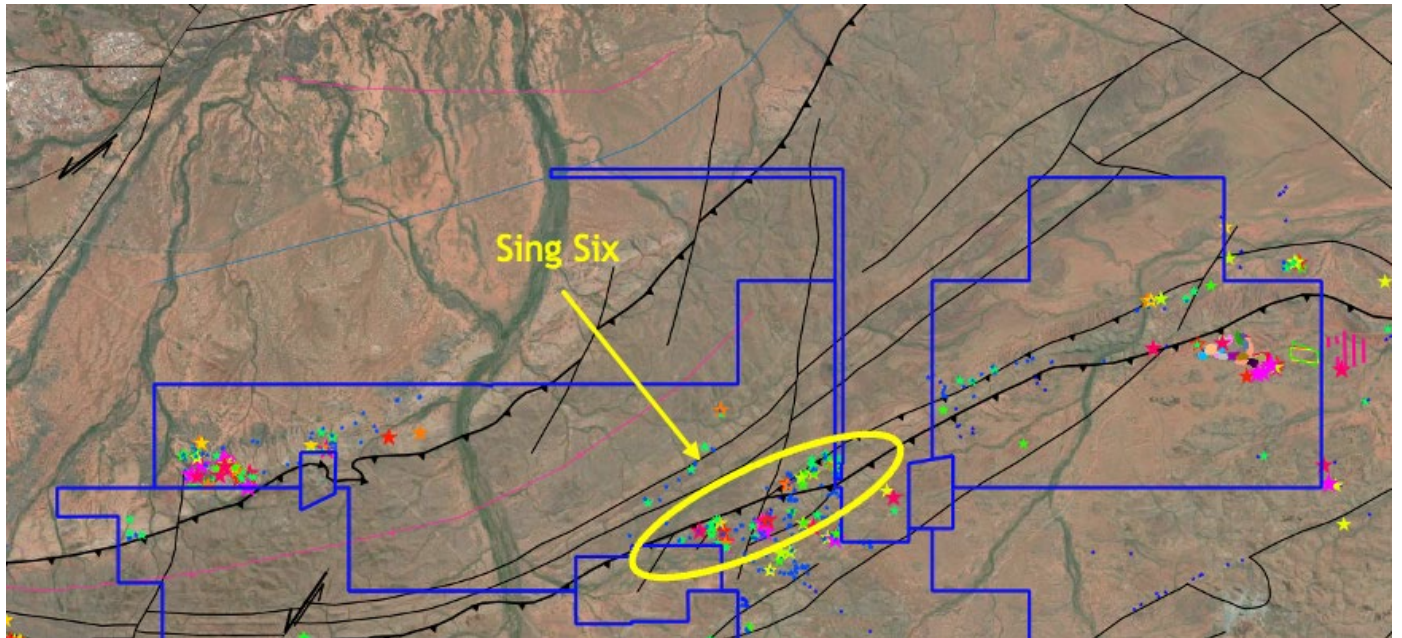


Figure 6. Sing Six prospect adjacent to the Regal Thrust

Programs of works to cover the Lulu Creek prospect have previously been submitted and approved and a heritage clearance application has been completed and submitted for approval. Once the heritage clearance has been completed, drilling can be scheduled and undertaken in conjunction with the EIS co-funded drilling grant.

The Company is looking forward to exploration activity on these prospects and will keep the market updated accordingly.

This announcement was approved for release by the Board.

For Further information contact:

Mr George Ventouras / Executive Director

info@artemisresources.com.au

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

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	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