

18 May 2020

ASX : ARV

ATY : FRANKFURT

ARTTF : OTCQB

## GOLD FOCUSED

ARTEMIS HAS CONSOLIDATED A MAJOR LAND HOLDING IN THE WEST PILBARA AROUND THE 100% OWNED RADIO HILL PROCESSING PLANT AND INFRASTRUCTURE, STRATEGICALLY LOCATED 30 KM FROM THE CITY OF KARRATHA, THE POWERHOUSE OF THE PILBARA.

ARTEMIS ALSO HAS ~605 KM<sup>2</sup> IN THE PATERSONS RANGE WITH GOLD AND COPPER TARGETS 40KM FROM THE TELFER GOLD MINE AND SURROUNDING THE HAVIERON DISCOVERY BEING DRILLED BY NEWCREST.

## WANT TO KNOW MORE ABOUT ARTEMIS?

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## PATERSON CENTRAL GEOCHEMISTRY PROGRAM UNDERWAY

### HIGHLIGHTS

- Geochemistry program to test targets at Artemis's 100%-owned Paterson Central project, which is next to the world-class Havieron gold-copper discovery.
- Paterson Central targets are anomalies surrounding and proximal to Havieron as identified from gravity and magnetic surveys.
- Geochemistry program will help to identify maiden drill targets, with results expected in 4-5 weeks.
- Artemis planning to commence a maiden drill campaign at Paterson Central in July.

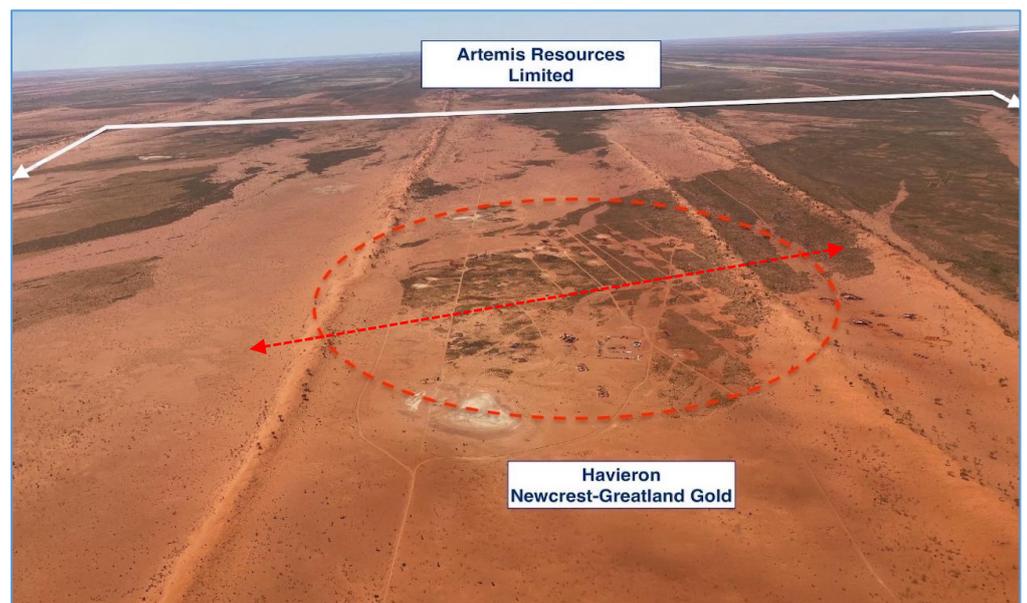
### Artemis Resources Executive Director, Alastair Clayton, commented:

*"Our 100%-owned Paterson Central Project, in Western Australia's East Pilbara, is a rare opportunity to explore virgin ground surrounding and proximal to Havieron, which some analysts are already labelling a Tier 1 gold-copper discovery."*

*"Artemis is pursuing this highly prospective greenfields opportunity on a 100% basis to provide shareholders maximum leverage to exploration success. Havieron has a pre-resource implied valuation of more than A\$1.5B so, despite the obvious exploration risks involved in drilling through approximately 400m of cover, we can clearly see the rewards on offer at Paterson Central are potentially enormous."*

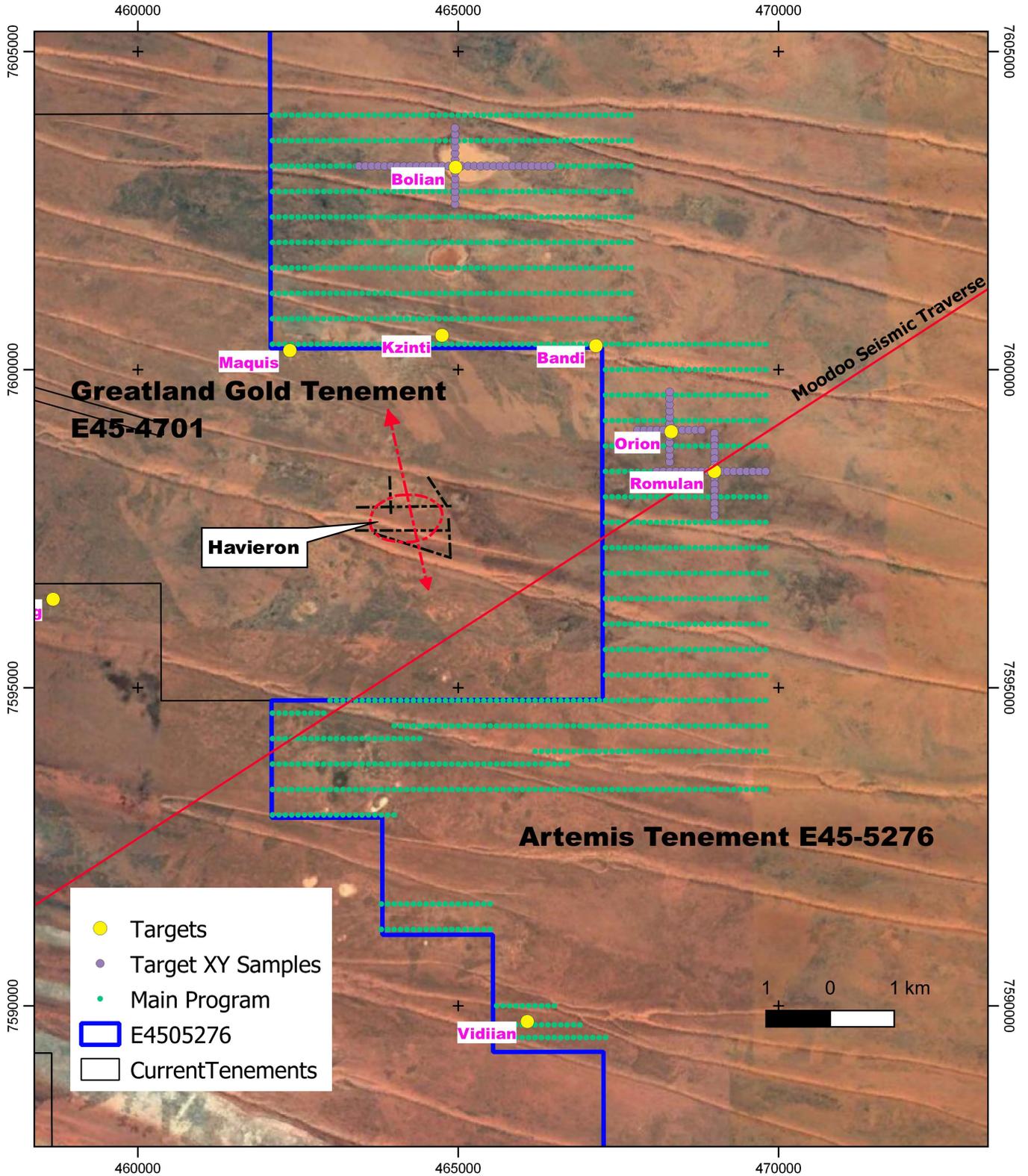
*"Our geological model contends that mineralisation in and around Paterson Central is not just associated with the discrete Havieron intrusion "bullseye". It is our belief that multiple mineralising events have been channelled into locally folded meta-sedimentary rocks via regional fault and splay structures that are indicated via geophysics and seismic data to continue through Artemis's Paterson Central ground."*

*"We are watching with interest the on-going results from the nine-rig drilling campaign being carried out by Newcrest Mining (ASX: NCM) and Greatland Gold (LON: GGP) at Havieron for indications of potential multiple deposits, and will adjust our Paterson Central drill program design accordingly."*



**Figure 1:** Artemis Resources' Paterson Central tenement E45/5276 with Newcrest-funded drilling (highlighted red oval) in foreground and interpreted axial plane of folding (red arrow).

West Australian gold explorer **Artemis Resources Limited** (“Artemis” or “the Company”) (ASX: ARV; Frankfurt: ATY; US OTCQB: ARTTF) is pleased to provide an update on planned activities at its 100%-owned Paterson Central Project in the East Pilbara. Paterson Central, on tenement E45/5276, covers 605 km<sup>2</sup> and is located approximately 40km east of Newcrest Mining’s (ASX: NCM) multi-million-ounce Telfer Gold-Copper Mine and is contiguous to the Havieron gold and copper discovery (“Havieron”) made by Greatland Gold Plc (LON: GGP) and being worked over by Newcrest (Figures 1 & 2).



**Figure 2:** Artemis Resources’ Paterson Central tenement E45/5276 (formerly called Armada) that surrounds the Havieron discovery on three sides. Three Artemis targets – Kzinti, Bandi and Bolian – are immediately north of Havieron. Ranking of targets will change as more exploration information comes to hand. The proposed geochemistry program target areas are highlighted on the right-hand side.

Based on magnetic and gravity survey results, Artemis has identified 13 targets across Paterson Central. These targets vary in priority and will be assessed further as more exploration information comes to hand.

Reprocessing of the Moodoo NC87-13, a 1987 Seismic line (see ASX announcement dated 12 December 2019<sup>1</sup> and 21 February 2020) that coincidentally covered the Paterson Central tenement, has shown folding and complexity in the basement. This analysis is supported by drilling information released in Newcrest's December 2019 Quarterly report.

Artemis' geochemistry program has been designed to cover seven of the 13 targets identified to date. The seven targets surround the Havieron discovery.

### **PATERSON CENTRAL PROSPECT OVERVIEW**

Gravity and airborne magnetic surveys have identified 13 targets within a 22km radius of the Havieron discovery. Artemis has assessed these targets based on a combination of magnetic signature, density contrasts and structural character/complexity (**Figures 2 and 3**).

The Company conducted a detailed airborne magnetic survey (100m line spacing – MAGSPEC Dec 2018) and semi-regional helicopter supported gravity surveying (400x400m grid – ATLAS Feb 2019) over the western half of Paterson Central.

Greatland Gold, in its first announcement of drilling success at Havieron, reported that elevated geochemical responses were obtained proximal to targeted magnetic and gravity anomalies. Subsequent to this, Greatland Gold has also reported surface geochemical responses over several other geophysical targets.

Greatland Gold says it has been using a technique called MMI (Mobile Metal Ions) geochemistry, which is described as an ultra-low-level partial extraction method. This means the solution used (cyanide) does not digest the entire sample. The intent of this and other partial extraction techniques is to extract those anions and cations that are loosely electrochemically bonded from passing solutions onto other minerals such as iron oxides, manganese oxides or clays.

Research shows that sulphidic orebodies give off gaseous emanations carrying ultra-low levels of trace elements within them. These gases will percolate to the surface from major depths and the trace elements are then absorbed onto the soil minerals. MMI and a similar technique, Ionic Leach, specifically targets these absorbed components.

### **PROPOSED GEOCHEMISTRY PROGRAM AT PATERSON CENTRAL**

A soil sampling program has been designed for the area and will be split into parts:

1. Over the known magnetic and gravity targets, a short set of X-Y traverses will be completed over three of the targets; and
2. The samples will be dispatched for analysis using both the MMI and Ionic Leach techniques.

Greatland Gold has used a 200m x 200m square sampling grid in its work. Artemis' sample density will be of a similar density for the sample area (Figure 1).

As soil sampling is low-impact exploration, neither heritage nor government approval is required.

### **OUTCOMES**

The program could have two main outcomes:

1. Clear geochemical anomalies corresponding to any or all the geophysical anomalies would strongly enhance the prospectivity and profile of Artemis' tenement; and
2. Ambiguous or negative geochemical responses would continue the current perspective of the area because the soil program will be attempting to obtain signatures of mineralisation >400m below surface and therefore has a high risk of failure.

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<sup>1</sup> The Company is not aware of any new information or data that materially affects the information included in the 12 December 2019 announcement and, in the case of estimates of mineral resources or ore reserves, all material assumptions and technical parameters underpinning the estimates in the relevant announcement continue to apply and have not materially changed.

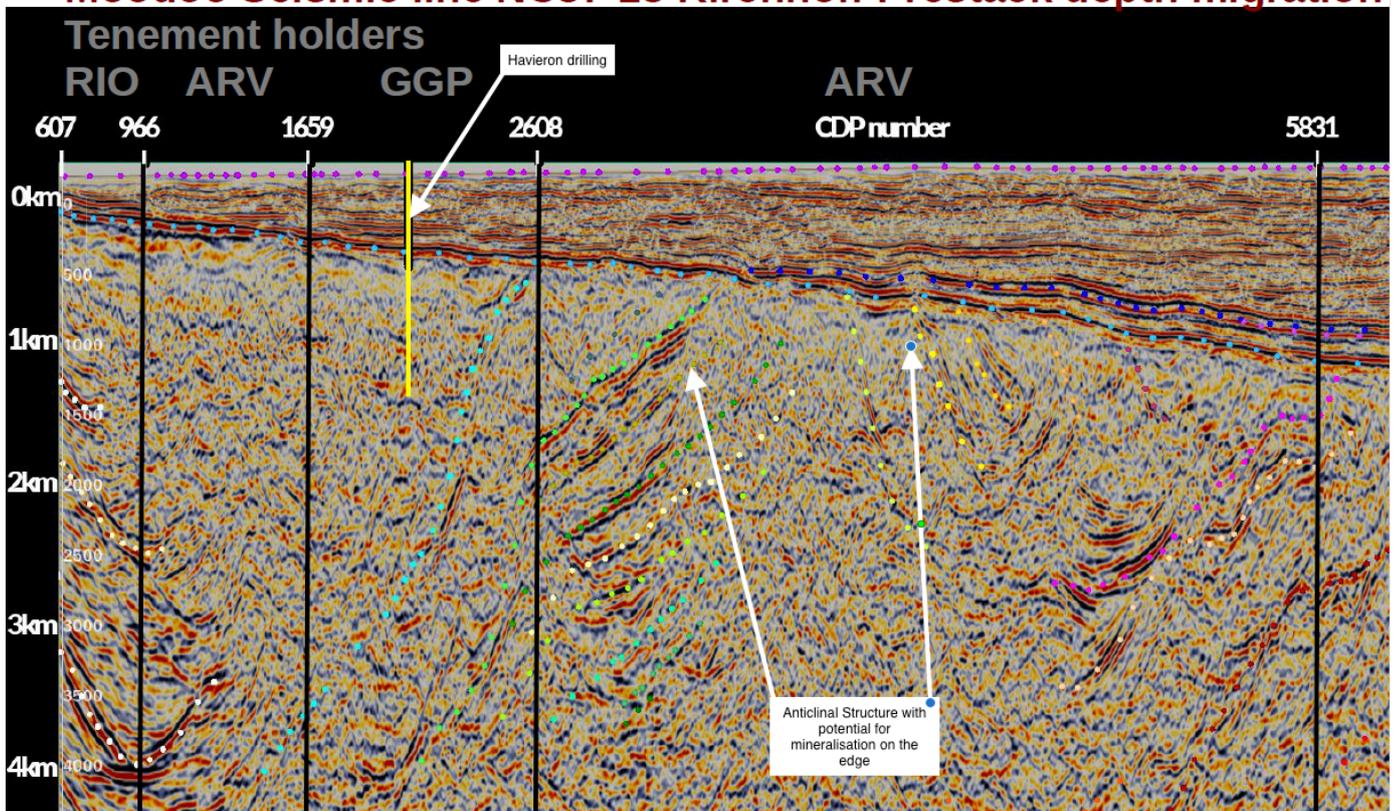
## MOODOO SEISMIC LINE

The Moodoo seismic line was surveyed in 1987 and processed and initially interpreted to determine the hydrocarbon prospectivity of the Mesozoic sediments overlying the Proterozoic Paterson Province geology. Since then there have been significant advances and improvements in processing techniques, which appreciably enhance and improve resolution of stratigraphy and, more importantly, structures. These include interpretation of thickness of cover, which can be integrated with the gravity data to improve modelling of targets. The Moodoo seismic line passed approximately 2.5km southeast of Haveron, covering an area that coincidentally overlaps with Paterson Central, to provide Artemis with an advantage over companies exploring nearby tenements.

The NC87-13 line transected what today are the Rio Tinto tenement, then Artemis', then Greatland Gold's and then back over Artemis' tenement. The processed results are shown in Figure 3 and show depth of cover and structural complexity within the basement. The NC87-13 line transected Rio Tinto (CDP: 607-966), Artemis (966-1659), Greatland Gold (1659-2608) and Artemis (2608-5831).

Results from reprocessing (**Figure 3**) are encouraging because they indicate folding within the basement that could be a site for trapping mineralised hydrothermal fluids.

### Moodoo Seismic line NC87-13 Kirchhoff Prestack depth migration



**Figure 3:** Reprocessed Moodoo Seismic line NC87-13 across Artemis' 100% owned Paterson Central project. The seismic data indicates folding within the basement and clearly defines the depth of Permian sediments.

This ASX announcement was approved by the Board.

#### COMPETENT PERSONS STATEMENT:

The information in this announcement that relates to Exploration Results is based on information compiled or reviewed by Edward Mead, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Mead is a Director of Artemis Resources Limited and is a consultant to the Company, and is employed by Doredala Pty Ltd. Mr Mead 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 Mead consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.