

Quarterly Activities Report

For the period ending 31 December 2022

Highlights:

Carlow Mineral Resource Estimate

- New high-grade gold, copper and cobalt JORC Inferred Mineral Resource Estimate (MRE) produced by independent consultants Snowden Optiro.
- Inferred MRE stands at **704,000 oz Au Eq at 2.5 g/t Au Eq¹ from 8.74 Mt** combined open pit and underground resource.
- The Carlow deposits are open in multiple directions with infill and extensional drilling planned for Q1 2023.

Carlow Exploration

- Gravity and EM surveys identified the Marillion and Europa exploration targets on the Carlow tenement to be drill tested in 1H 2023.
- Ultrafine soil orientation program completed over Carlow priority areas including Europa Gravity Target as well as newly defined gold anomaly Titan.

Paterson

- 5,135m diamond drilling campaign successfully completed
- Mineralised breccia encountered at new 1.5 km long Apollo Copper -Gold Prospect located 2 km along strike of Newcrest Mining (ASX: NCM) and Greatland Gold's (AIM: GGP) 6.5 Moz Au Eq Havieron gold-copper deposit.
- Apollo's structural setting appears like the adjacent Havieron deposit; being a large NW trending regional splay fault that has been intruded by a dolerite sill or dyke.
- To date large intercepts (up to 90 m) of pervasive veining and multiphase crackle breccia have been encountered either side of the dolerite intrusion, often with significant amounts of visible pyrite, chalcopyrite and pyrrhotite.
- Sporadic gold and copper have been intercepted within the breccia, with peak gold values of 1.73 g/t Au and 4.99% Cu.

Corporate

- Non-Executive Director Dr Simon Dominy was appointed Technical Director of Artemis Resources on 22 November 2022. Dr Dominy has experience in mine development, resource estimation and developing orebody knowledge, and will form an integral role in the Executive team.
- Executive Director Mr Alastair Clayton and Non-Executive Director Edward Mead resigned as directors on 22 November 2022. Mr Clayton will remain with the company as an executive officer to assist with the transition until 17 March 2023.
- Artemis Resources sold 100% of its equity investment in Alien Metals (AIM: UFO) for approximately £1.15 Million GBP (~ \$2.0 Million AUD)

Cash balance of \$1.67m the end of the quarter and \$0.9m in investments.

Mineral Resource Update

Carlow Au-Cu-Co Project

Artemis Resource 100% owned gold copper, and cobalt Mineral Resource is situated in the premier mining jurisdiction of Western Australia's West Pilbara, 25 km from the regional city of Karratha. With well serviced infrastructure at its doorstep including power, roads and port access, the Carlow deposit is one of Australia's best serviced undeveloped polymetallic gold deposits with significant potential for resource upside.

The Carlow deposit is on granted exploration licence E47/1797 and is only ~35 km from Artemis resources 100% owned Radio Hill Processing Plant.

An updated high-grade inferred MRE was released by Artemis on 13 October 2022. The MRE, prepared in collaboration with independent consultants Snowden Optiro was produced utilising new wireframes and data produced by the 2022 drill program.

The new Inferred Mineral Resource was estimated to contain **704,000 oz Au Eq at 2.5 g/t Au Eq¹ from 8.74 Mt** from a combined open pit and underground source.

The estimation process completed included:

- Data verification – site visit for geological familiarisation, review of on-site processes, high level review of drillhole database, and review of sampling, assaying and QAQC.
- Resource estimation reporting – new mineralisation wireframes, data analysis, kriging neighbourhood optimisation, cut-off grade determinations, and block model reported considering reasonable prospects for eventual economic extraction (RPEEE) using Whittle for open pit and Datamine Movable Shape Optimiser (MSO) for underground resources.
- Classification – reported in accordance with The Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012)
- Internal peer review by Snowden Optiro.

The Mineral Resource for Carlow is presented in Tables 1 to 2 and Figures 1 – 2. All three deposits forming Carlow are open at depth, with Quod Est and Crosscut open along strike (Figures 1 and 2).

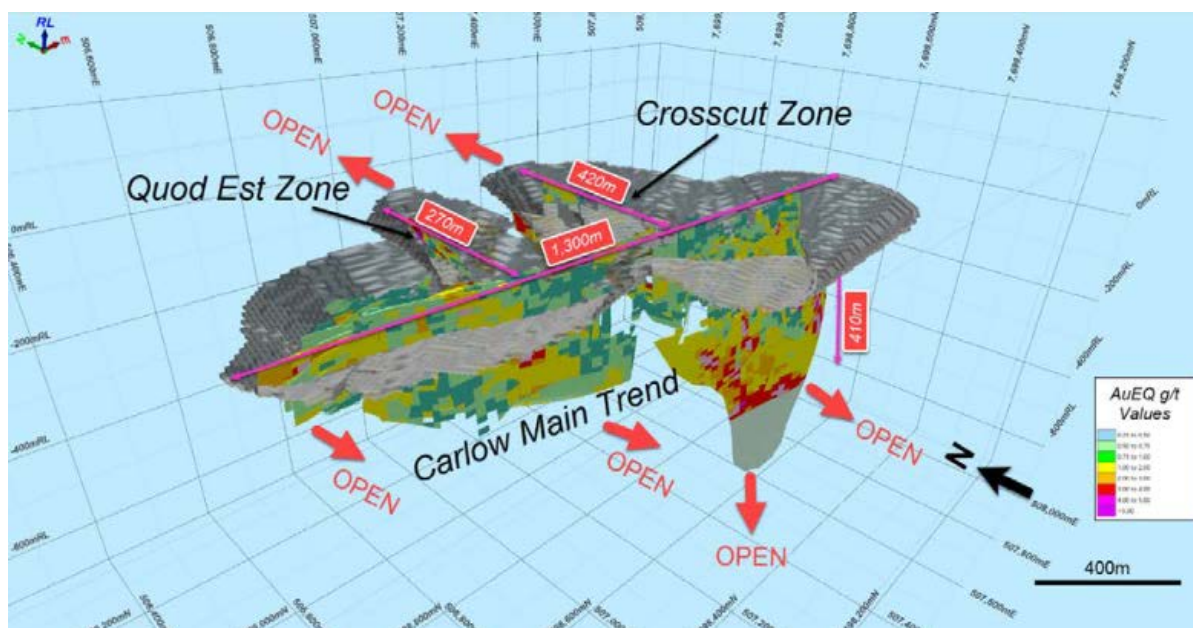


Figure 1: Oblique view of the Carlow resource block model showing potential continuations of known mineralisation.

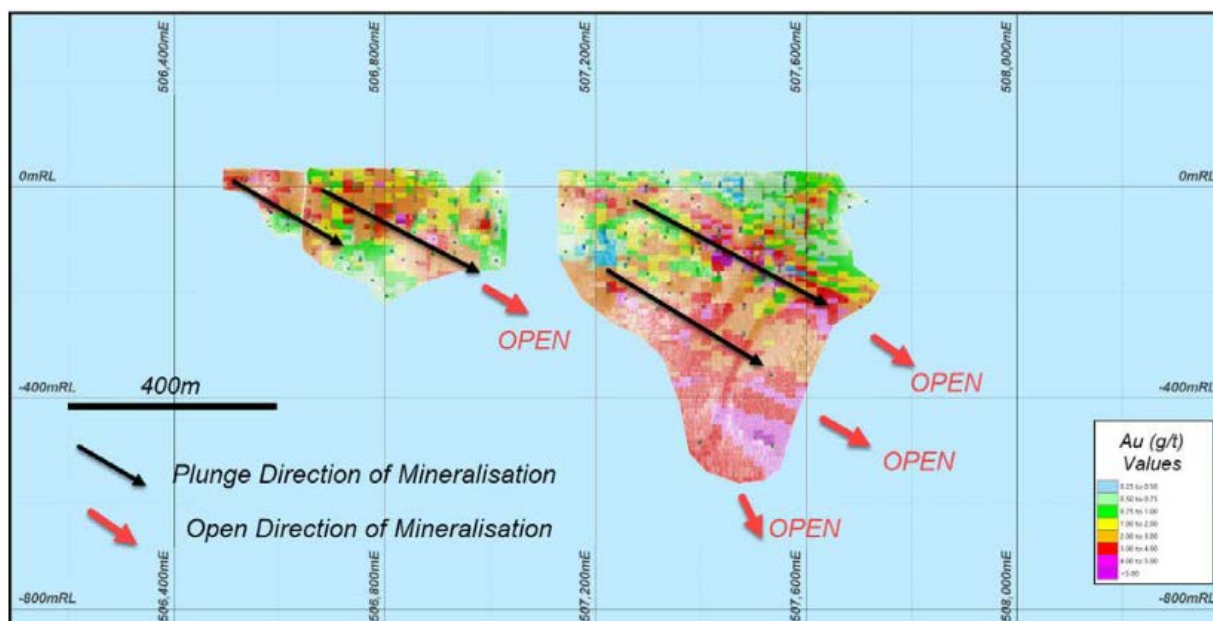


Figure 2: Long Section (looking north) model showing key domains and potential continuation of known mineralised zones.

Table 1: Carlow MRE by weathering state reported above a cut-off of 0.7 g/t Au Eq within an optimised open pit shell and above 2 g/t Au Eq cut-off for underground using MSO shapes (current as of 13 October 2022). The entire resource is classified as Inferred in accordance with the JORC Code, 2012. All tonnes are dry metric tonnes. Figures may not compute due to rounding.

Domain	Tonnes (Mt)	Au Eq (g/t)	Au (g/t)	Cu (%)	Co (%)	Au (oz)	Cu (t)	Co (t)
Oxide	1.29	1.5	0.8	0.59	0.07	34,000	8,000	1,000
Transition	1.49	2.0	1.2	0.84	0.09	56,000	13,000	1,000
Fresh	5.96	2.8	1.5	0.73	0.10	285,000	44,000	6,000
Total	8.74	2.5	1.3	0.73	0.09	374,000	64,000	8,000

Table 2: Carlow MRE reported by deposit above a cut-off of 0.7 g/t Au Eq within an optimised pit shell (current as of 13 October 2022). The entire resource is classified as Inferred in accordance with the JORC Code, 2012. All tonnes are dry metric tonnes. Figures may not compute due to rounding.

Deposit	Tonnes (Mt)	Au Eq (g/t)	Au (g/t)	Cu (%)	Co (%)	Au (oz)	Cu (t)	Co (t)
Main	6.33	2.4	1.3	0.70	0.08	271,000	44,300	5,100
Quod Est	0.19	3.2	1.5	0.85	0.24	9,000	1,600	450
Crosscut	0.73	2.2	0.7	0.99	0.09	16,000	7,300	650
Total	7.25	2.4	1.3	0.73	0.09	296,000	53,200	6,200

¹ Gold equivalent equations for the oxide, transition and fresh domains as derived for October 2022 Mineral Resource Estimate:

Oxide Au Eq. = Au(g/t) + Cu(%) x 0.86 + Co(%) x 2.31

Transitional Au Eq. = Au(g/t) + Cu(%) x 0.81 + Co(%) x 2.17

Fresh Au Eq. = Au(g/t) + Cu(%) x 1.31 + Co(%) x 3.96

Exploration Activities

Paterson Central Au-Cu Project

Exploration during Q4 2022 focused on the Apollo prospect after sulphide mineralisation associated with breccias was identified peripheral to, and within a dolerite intrusion following the extension of Q3 2022 diamond drill hole GDR006 (*refer ASX announcement dated 12 Dec 2022: Paterson Central – Mineralised Breccias Encountered at new ~1.5 km long Apollo Copper- Gold Target*).

The company completed two diamond drill holes during the December quarter to assist in defining the potential and orientation of the mineralised breccia (Table 3). A total of 1183.7 m was drilled from drill holes 22PTMRD010 and 22PTMRD011 defining a north-west trending splay fault intruded by a dolerite sill. The intrusion has been defined as a sill since its emplacement appears to be parallel to the regional bedding layers of the Lamil Formation sediments. Along with reprocessed geophysics received in September 2022, Artemis has been able to determine that the Apollo target is one part of a ~1.5 km long magnetic anomaly with a structural setting similar to that of the nearby Havieron deposit.

Table 3: Drill Collar Details for Q4 Paterson Central Drilling

Hole ID	Type	Easting (MGA94)	Northing (MGA94)	RL (m)	Dip	Azi MGA	EOH (m)
22PTMRD010	MD	462,120	7,600,420	262	-75	92.87	1052.1
22PTMRD011	MD	462,360	7,600,420	262	-76.14	353.78	940.0

Drill hole 22PTMRD011 was drilled to the north to drill test a perpendicular section of the Apollo magnetic signature as well as the dolerite intrusive (Figure 3). The drill hole intercepted approximately 121 m of brittle quartz -carbonate matrix supported breccia from 705 m within sediments. A dolerite was intersected from 784 m to 854 m, with the hanging wall contact showing fluidised breccia and sulphides in the matrix. Brittle brecciation then recommences near 903 m to 937 m where the hole ends at 940 m.

The hole returned the best results seen to date at the Central Paterson Project with mineralised breccia returning an intercept of **2.42 m @ 0.85g/t Au and 2.86% Cu from 752.58 m, including 0.87 m @ 0.36g/t Au and 4.99% Cu from 752.58 m and 1 m @ 1.73g/t Au and 2.58% Cu from 754 m** (Table 4 and Figures 4, 5 and 6).

Mineralisation formed within a section of massive- to semi-massive sulphide replacement within a brecciated quartz-carbonate vein hosted within sediments. An additional assay with similar tenor for gold and copper was also received down hole in a similar quartz-carbonate breccia with an intercept of **1 m @ 0.61g/t Au and 3.28% Cu from 904 m (Figures 4)**.

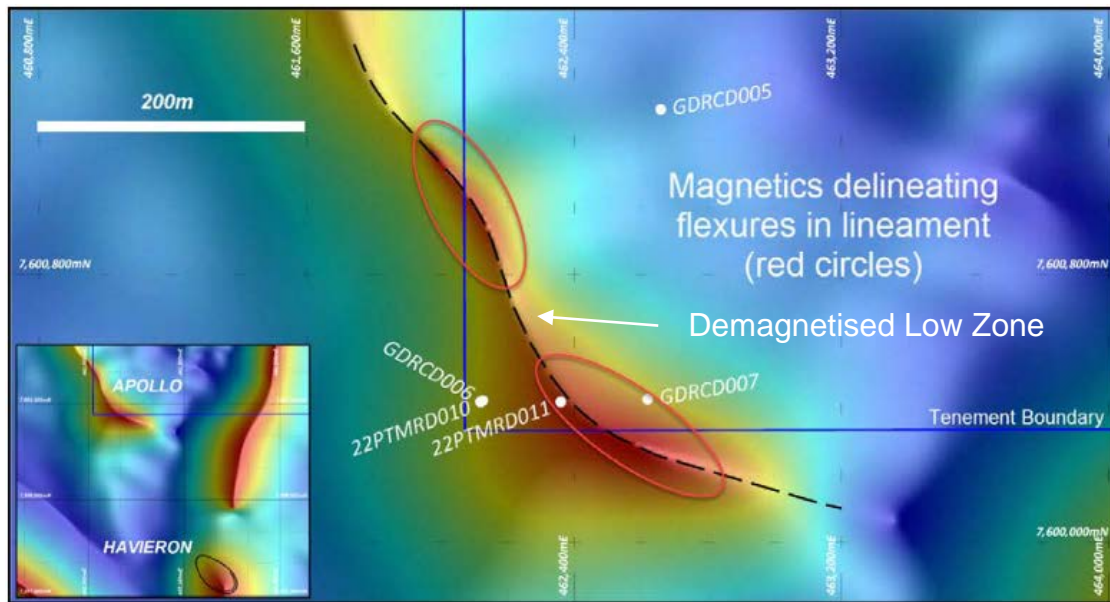


Figure 3: Reprocessed magnetics showing the ~1.5km long Apollo structure (highlighted in dashed line). Completed drill holes (white dots). Insert ; Apollo Location and anomaly size with respect to Havieron resource footprint (black outline).

Table 4: Significant Q4 Intercepts for 22PTMRD011

Intercepts >0.20 g/t Au			
Hole ID	From (m)	To (m)	Intercept
22PTMRD011	714	715	1.0m @ 0.29 g/t Au, 0.10 % Cu
22PTMRD011	733	734	1.0m @ 0.26 g/t Au, 0.65% Cu
22PTMRD011	752.58	755	2.42m @ 0.85g/t Au, 2.86 % Cu
Including	754	755	1.0m @ 1.73 g/t Au, 2.58% Cu
22PTMRD011	904	905	1.0 m @ 0.61 g/t Au, 3.28% Cu

Intercepts >0.25% Cu			
Hole ID	From (m)	T (m)o	Intercept
22PTMRD011	733	744	1.0 m @ 0.65% Cu, 0.26 g/t Au
22PTMRD011	747	748	1.0 m @ 0.46% Cu, 0.07 g/t Au
22PTMRD011	752.58	755	2.42 m @ 2.86% Cu, 0.85 g/t Au
including	752.58	753.45	0.87 m @ 4.99% Cu, 0.36 g/t Au
and	754	755	1.0 m @ 2.58% Cu, 1.73 g/t Au
22PTMRD011	904	905	1.0 m @ 3.28% Cu, 0.61 g/t Au

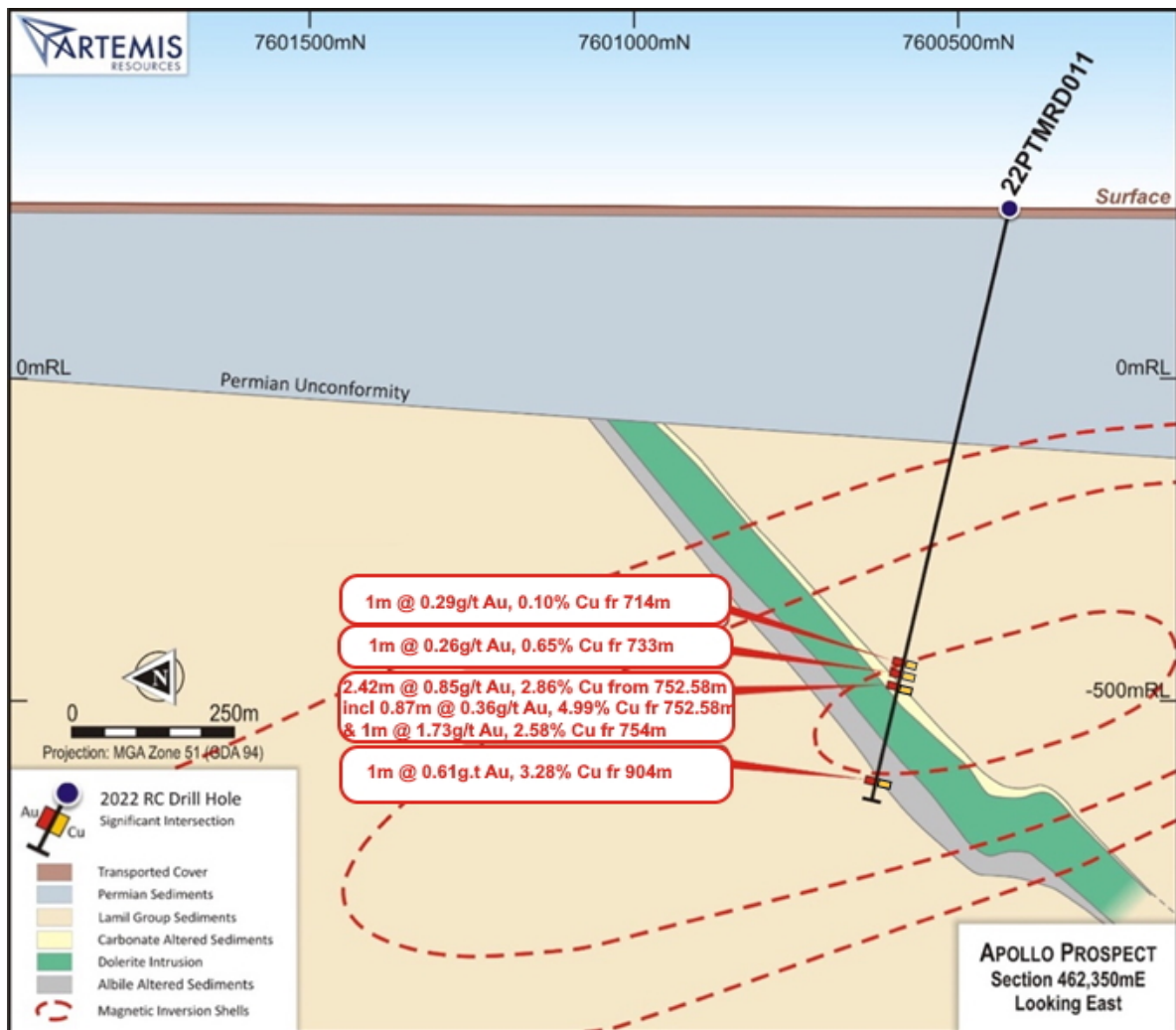


Figure 4: Section 462,350mE looking east showing drill hole trace gold and copper intersections on geology and magnetics highlighted in red dashed lines.



Figure 5: 22PTMRD011 from 750.07 – 754.61 m showing the typical quartz-carbonate breccia that dominates the hole from 705 – 826 m. Drilling had intersected a section of massive sulphide within brecciated quartz and carbonate matrix from 752.7 – 753.5 m. Sulphides here comprise of chalcopyrite-pyrite-pyrrhotite



Figure 6: Core showing massive to semi massive sulphide replacement of brecciated quartz-carbonate vein between 752.75 to 753.5 m. Assays from this interval contain a peak intercept of 0.87 m at 0.36 g/t Au and 4.99% Cu from 752.58 m

Drill Hole 22PTMRD010 was planned to further assess the magnetic anomaly and below the sulphide occurrence in GDRCD007 (Figures 7 and 8; Table 5). The hole intercepted sulphide mineralisation at around 530 m. This mineralisation was structurally hosted, within vein and breccia occurrences. Drilling encountered a dolerite intrusive at 966 m to 1,013 m and exited into strongly silicified sediments with patchy albite alteration. No further sulphide mineralisation was noted in the footwall of the intrusive. It is interesting to note that mineralisation in hole 22PTMRD010 occurred higher in the hole and not in the vicinity of the dolerite intrusive (Figures 7 and 8; Table 5).

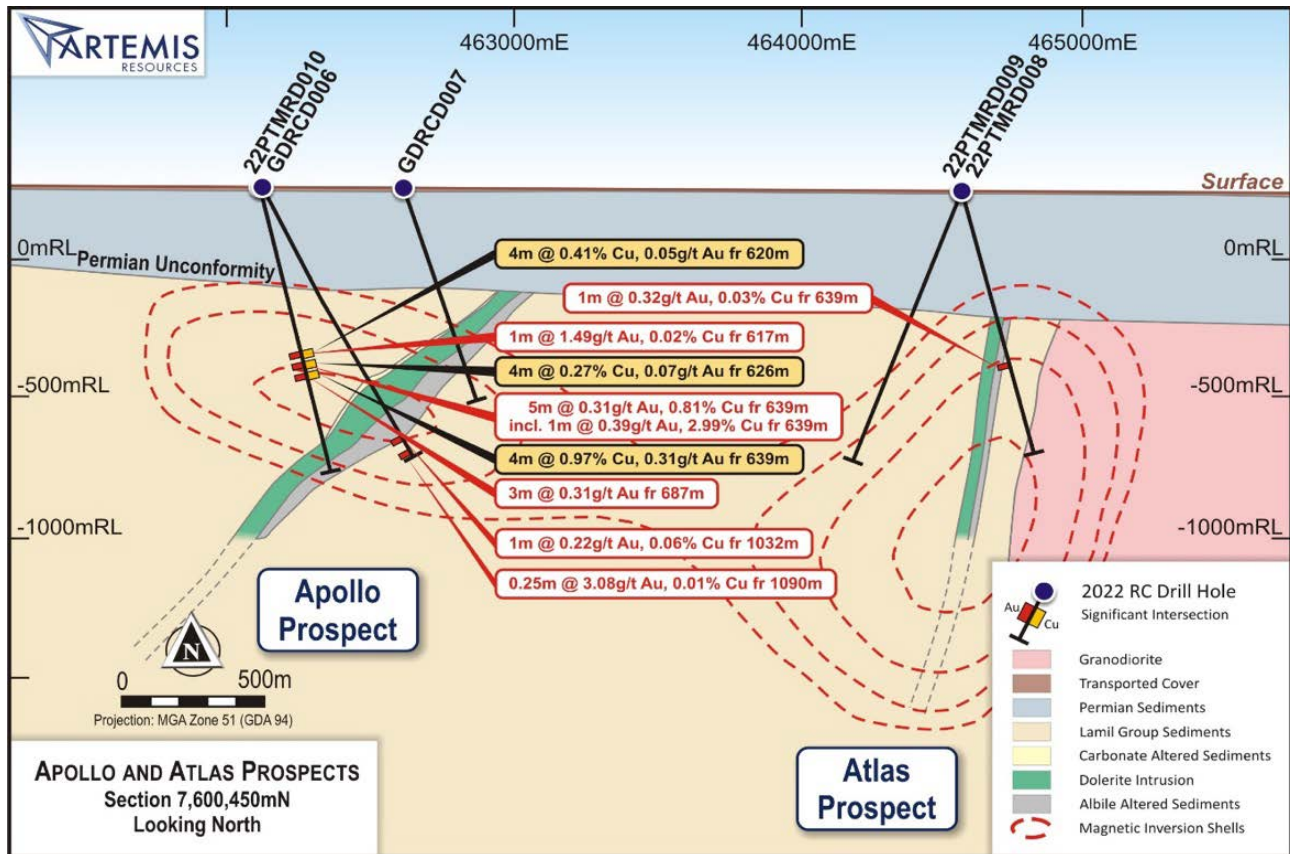


Figure 7: Section 7,600,450mN looking to the north showing drill traces with Au and Cu intersections on geology and magnetics highlighted in red dashed lines.



Figure 8: Hole 22PTMRD010 at 639.3 – 639.6 m showing brecciated veining with chalcopyrite and pyrite mineralisation

Table 5: Significant Q4 Intercepts for 22PTMRD010

<i>Intercepts >0.20 g/t Au</i>			
<i>Hole ID</i>	<i>From (m)</i>	<i>To (m)</i>	<i>Intercept</i>
22PTMRD010	617	618	1.0m @ 1.49g/t Au, 0.02% Cu
22PTMRD010	639	644	5.0m @ 0.31 g/t Au, 0.81 % Cu
Including	639	640	1.0m @ 0.39 g/t Au, 2.99% Cu
22PTMRD010	687	690	3.0m @ 0.31 g/t Au, 0.35% Cu
Including	687	688	1.0m @ 0.70 g/t Au, 0.66% Cu

Intercepts >0.25% Cu				
Hole ID		From (m)	To (m)	Intercept
22PTMRD010		620	624	4 m @ 0.41% Cu, 0.05 g/t Au
22PTMRD010	Includes	623	624	1 m @ 1.25% Cu, 0.15 g/t Au
22PTMRD010		626	630	4 m @ 0.27% Cu, 0.07 g/t Au
22PTMRD010	Includes	626	627	1 m @ 0.75% Cu, 0.18 g/t Au
22PTMRD010		639	643	4 m @ 0.97% Cu, 0.31 g/t Au
22PTMRD010	Includes	639	640	1 m @ 2.99% Cu, 0.39 g/t Au
22PTMRD010		668.78	670	1.22 m @ 0.28% Cu, 0.04 g/t Au
22PTMRD010		687	690	3 m @ 0.35% Cu, 0.31 g/t Au

Additional significant assays received from the Central Paterson Project during the December quarter are listed in Table 6 and are from diamond extension drill hole GDRCD006.

Table 6: Significant Q4 Intercepts for GDRCD006

<i>Intercepts >0.20 g/t Au</i>			
<i>Hole ID</i>	<i>From (m)</i>	<i>To (m)</i>	<i>Intercept</i>
GDRCD006	1032	1033	1 m @ 0.22 g/t Au, 0.07 % Cu
GDRCD006	1090.9	1091.1	0.3 m @ 3.08 g/t Au, 0.01 % Cu

Note: no significant copper assays were received from GDRCD006

Assay results received to date show sporadic gold and copper occurs within a suite of rocks that in many places are like those described at the nearby Haveron deposit². From examination of the exploration history at Haveron² it is evident that the discovery of large intercepts of multi-sulphide endowed, high-temperature crackle breccias and veining doesn't confirm the presence of gold. Furthermore, the exploration history² at Haveron indicates that holes with exceptionally large gram-

metre intercepts (HAD005) can be as little as 50 m from holes that return no significant results at all (HAD006).

The intrusion event and timing of the quartz-carbonate breccia is still in debate; however some initial interpretations show:

- Mineralisation does not appear to be related to the dolerite; however remobilisation of sulphides does occur along the sill margin.
- The mineralisation at Apollo is structurally controlled, i.e. coincident with veining and later-stage brecciation.
- There are at least two phases of breccias, a hydrothermal fluidised occurrence as noted near the contact of the dolerite and a tectonic event, as indicated by the presence of quartz-carbonate matrix support breccias, exhibiting angular clasts.
- The mineralisation noted in hole 22PTMRD010 occurs higher up and not near the dolerite.
- The source of the mineralisation at Apollo appears to be deeper to the NE and may be related to the magnetic flexure and the central de-magnetised zone as shown in Figure 3.

The challenge from here is to focus on determining where mineralised fluids, likely active along Apollo, have localised into potential economic mineralisation. To this end and as Artemis' next step, DHEM will be undertaken at Apollo to target conductors, potentially related to mineralisation.

DHEM surveys will be utilised at all of Artemis highly prospective targets at Paterson Central Project which will provide valuable data and enhanced exploration targeting.

² Ackerman, B., Finn, D., Baxter, C., Harris, A., Switzer, C., MacCorquodale, F., Wilson, A., Lisowiec, N., Williams, J., 2021. *Haverton Gold-Copper Deposit: Next Generation of Undercover Discoveries. NewGen Gold Conference Proceedings 2021, p.145 – 159*

Paterson Central Heritage Survey

Artemis completed a 7-day heritage survey with the Martu Traditional owners in October 2022. The survey was designed to clear access tracks from the established road network in the Central Paterson to the Juno and Enterprise prospects as well as clear areas for drill pads and a lay down area. Additionally, Artemis was also able to add additional drill pad clearances to the Apollo prospect to enable drill testing of the Apollo north-west magnetic trend.

At the time of this report preliminary clearance advice is outstanding.

Carlow Au-Cu-Co Project

During the December quarter the company completed a small ultrafine soil orientation program within the Greater Carlow Project area (Figure 9). Labwest in conjunction with the CSIRO have developed the Ultrafine geochemical analysis as a method of detecting anomalies against a normalised background by completing a full analytical digest via a -2 micron clay fraction. Ultrafine soil particles such as clays and iron oxides, have more surface area which can bind gold and other metals that move through the environment, enabling the ultrafine particles to effectively trap and hold geochemical signatures of bedrock covered by transported cover while removing the effect of spikey data.

The analysis method has been shown to be effective with cover up to 20 m which makes it an ideal

sample method for the Greater Carlow project.

Artemis objective for the orientation study is to collect geochemical data across prioritised areas of the Carlow trend within the GSWA mapped Roebourne Group and Nikol River Formation greenstone sequence. It is hoped that anomalies identified along the normalised background will form a trend for follow up via either additional ultrafine analysis or for walk up drill targets.

A total of 404 Ultrafine soil samples were collected across three areas within the Greater Carlow Project area on a nominal 80 m by 160 m spacing during late November and early December with a focus on the Europa Gravity anomaly (Figure 9; refer ASX announcement dated 14 November 2022: *Greater Carlow Regional Growth Plan High Priority Exploration Targets*) and a small gold anomaly identified by a 2018 ionic soils program 2 km north-west of the Carlow Resource called Titan.

Samples were submitted to Labwest in mid-December with analytical results expected to be received and processed in the coming weeks.

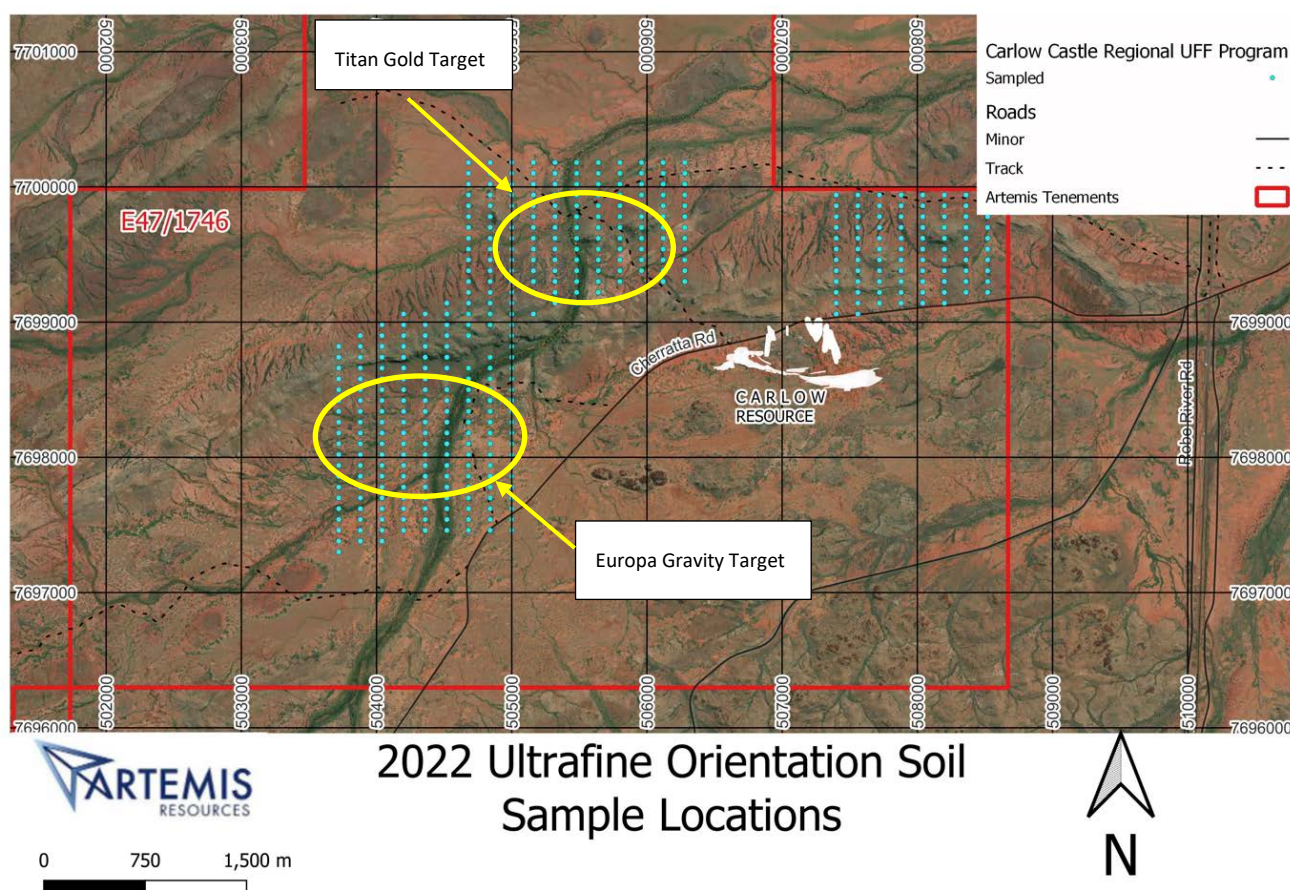


Figure 9: Ultrafine Soil Sample Location Map

Additional two the ultrafine soil program two rock chip samples were collected during the soils program from a banded chert outcrop with one sample returning an analysis of 1.255 g/t Au. Details of the rock chip samples collected at Titan are listed in Table 7.

Table 7: Titan gold prospect rock sample details

Sample Id	Easting (MGA94)	Northing (MGA94)	Au (g/t)	Description
TIT001	505196.6	7699701	0.003	Banded Chert / High Iron Oxide Content
TIT002	504927	7699709	1.255	Banded Chert. Highly Silicified

Carlow North Heritage Survey

Artemis Resources in conjunction with the Ngarluma Traditional owners completed a heritage survey immediately north of the Carlow Mineral Resource in August 2022 with a finalised clearance report received in November 2022.

The area cleared is displayed in Figure 10 and will permit Artemis to drill test the projected north-west structures that host the Crosscut deposit. Field reconnaissance has identified gossanous outcrop along the structure which traverse through the cataclasite hills immediately north of Carlow and into the flat terrain behind them. It is hoped drilling will be able to define new north-south mineral shoots within the defined Riedel shears.

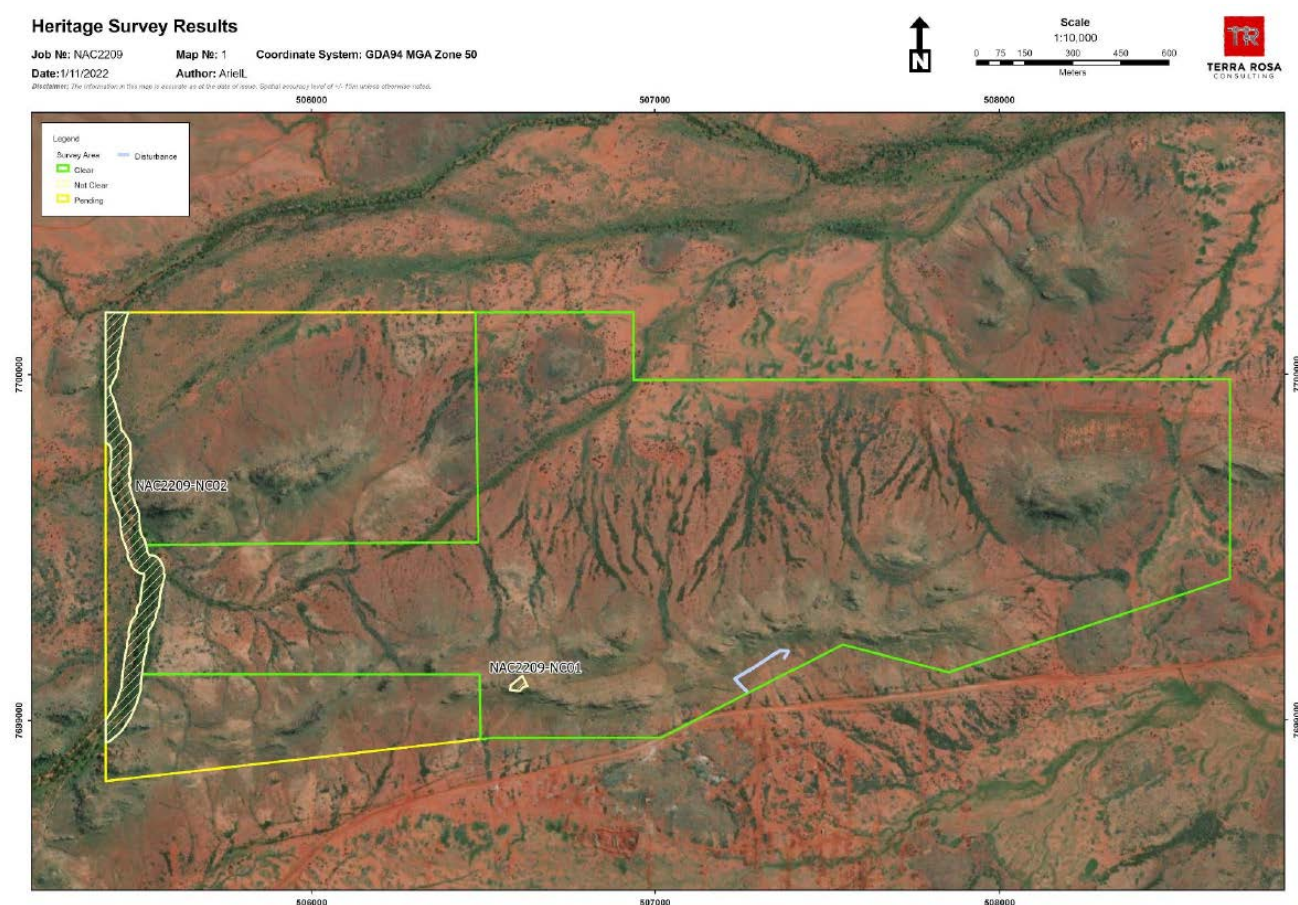


Figure 10: Ngarluma Traditional Owner Heritage Clearance area defined in Green at Carlow North

Corporate

Director Appointment and Resignations

Non-Executive Director Dr Simon Dominy was appointed Technical Director of Artemis Resources on 22 November 2022. Dr Dominy has experience in mine development, resource estimation and developing orebody knowledge, and will form an integral role in the Executive team.

On 22 November Executive Director Alastair Clayton and Non-Executive Director Edward Mead resigned as directors of the Company. Mr Clayton will remain with the company as an Executive Officer to assist with the transition until 17 March 2023. The Board takes this opportunity to thank Mr Clayton and Mr Mead for their service to the company.

In addition to the board changes announced on 22 November 2022, Artemis Resources has commenced a search for an Australian-based Chief Executive Officer (CEO) to strengthen the Executive team. Following the publication of a high-grade inferred MRE in October 2022, the company is now well positioned to embark on an accelerated growth strategy at its Greater Carlow Au-Cu-Co Project in 2023. The further development of this project requires a CEO based in Perth, Western Australia.

Disposal of Non-core Investment

During the December quarter, Artemis Resources sold 100% of its holding in AIM -listed Alien Metals (AIM: UFO) for approximately £1.15 Million GBP (~ \$2.0 Million AUD) of gross cash proceeds. Cash raised from the sale of the holdings is being used to fund exploration activities at the Central Paterson and Carlow Projects and for general working capital.

Financial

The Company spent \$2.28 million on exploration during the quarter, largely on the Paterson drilling program and subsequent assays, and work associated with the Carlow MRE upgrade, gravity and EM surveys.

The Company paid \$144,000 during the quarter to related parties, being directors and associated entities for salaries, company secretarial and consulting fees.

The Company had cash on hand at the quarter end of \$1.67m In addition, the Company has \$0.9m in investments.

Competent Person's Statement

Exploration Results

The information in this report that relates to exploration results is based on, and fairly represents information supporting documentation prepared by Mr Steven Boda, a Competent Person who is a member of the Australasian Institute of 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 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 Boda Consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Mineral Resource Reporting

The information in this report that relates to the Carlow Mineral Resource 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 Technical 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 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

This quarterly activities report was approved for release by the Board.

For further information contact:

Mark Potter

Chairman

mark.potter@artemisresources.com.au

Appendix 1

Schedule of tenements holdings at end of Q4

Tenement	Project	Holder	Status
E47/1797	Greater Carlow	KML No 2 Pty Ltd	Live
E47/1746	Cherratta	KML No 2 Pty Ltd	Live
E47/3719	Cherratta	KML No 2 Pty Ltd	Live
P47/1972	Cherratta	KML No 2 Pty Ltd	Live
M47/337	Radio Hill	Fox Radio Hill Pty Ltd	Live
M47/161	Radio Hill	Fox Radio Hill Pty Ltd	Live
E47/3361	Radio Hill	Elysian Resources Pty Ltd	Live
E45/5276	Central Paterson	Armarda Mining Pty Ltd	Live