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Artemis Resources Limited
13 October 2022

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Artemis Resources Limited
("Artemis" or the "Company")
(ASX/AIM: ARV, FRA: ATY, US: ARTTF)

High-Grade Resource at Greater Carlow

Artemis Resources Limited is pleased to provide an update on a new Inferred JORC Mineral Resource at its 100%-owned Greater Carlow Project, located in the Pilbara Region of Western Australia.

Highlights

704,000 oz Au Eq. at 2.5 g/t Au Eq[1] from 8.74 Mt, combined open pit and underground.

A high-grade gold copper cobalt project primed for further growth:

- Conservative assumptions underlying the new resource estimate reflect the robust nature of the project and take into consideration the recent rising cost environment.
- The Greater Carlow resource compares very favourably to other gold mining projects on a grade equivalent basis.
- Inferred Mineral Resource completed for the Greater Carlow gold copper cobalt project reported in accordance with The JORC Code 2012.
- Total Inferred Mineral Resource of 8.74 Mt at 2.5 g/t Au Eq comprises:
  - Open pit resource of 7.25 Mt at 2.4 g/t Au Eq. for 557 Koz Au Eq.
    - (using a 0.7 g/t Au Eq. cut-off grade).
  - Underground resource of 1.49 Mt at 3.1 g/t Au Eq. for 146 Koz Au Eq.
    - (using a 2 g/t Au Eq. cut-off grade).
- With this high-grade resource open in multiple directions exploration will now push on to seek to grow resources further.

Alastair Clayton, Executive Director, commented: "*On behalf of Artemis I am delighted to report to shareholders the results of our updated resource model. What we have now established at the Greater Carlow Project is a robust, credible, high-grade multi-metal resource from which our exploration team can now seek to continue to grow via drilling. The next phase at Greater Carlow is to drill and add more high-grade tonnes to the open pit and underground resources, including the high-grade Keel Zone which is not included in this resource statement.*

Importantly, this resource has taken into consideration recent industry cost escalation and still returned robust results. There is an adage used in mining that "grade is king", we believe this is as relevant today as it ever was.

With a diverse potential product stream of gold and the key battery metals of copper and cobalt we believe Greater Carlow grade ranks very favourably against other comparable Western Australian pre-development resource projects. Furthermore, Greater Carlow's enviable project location likely obviates the need for a future development to finance and operate a range of expensive capital items such as airstrip, accommodation village, power station, water plant etc. as well as contribute strongly to local communities by utilizing a non-FIFO workforce.

With one of the world's largest green energy projects, the Asian Renewable Energy Hub supporting 26 GW of combined solar and wind power generating capacity being proposed by BP in the Pilbara, the Greater Carlow project also has potential to further garner its ESG credentials as a sustainable battery metals and gold producer.

We look forward to updating shareholders with our next steps for the project and I would like to thank our geological team and consultants for the resource update delivered today."

The resource has significant scope to grow in the near term

http://www.rns-pdf.londonstockexchange.com/rns/7046C_1-2022-10-12.pdf

Figure 1. Oblique view of the model showing potential continuations of known mineralised zones.

http://www.rns-pdf.londonstockexchange.com/rns/7046C_1-2022-10-12.pdf

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

Resource modelling has identified immediate opportunities to grow the open pit and underground resource with further drilling

- Scope to grow the open pit resource, Figures 1 and 2.
    - Crosscut zone remains open to the north.
    - High-grade shoots have been identified in the block model that will benefit from additional drilling.
    - Additional RC and diamond core drilling to increase the open pit resource is currently being planned.
    - Additional core drilling for samples for metallurgical test work.
- Scope to grow the underground resource, Figures 1 and 2.
    - Gold and copper mineralisation open at depth as demonstrated by previous drilling at Carlow Deeps (or Carlow Keel) (refer to Artemis press release dated 23 November 2020).
    - Additional RC and diamond core drilling to test depth extensions at Crosscut and Carlow Main eastern zones are currently being planned.
    - Additional core drilling for samples for metallurgical test work.

Tier 1 location

- Western Australia was ranked the No. 1 mining investment jurisdiction in the 2021 Fraser Institute Annual Survey of Mining Companies.
- The Greater Carlow project is superbly located 25 km due east of the city of Karratha and 9 km to the west of the town of Roebourne.
- Access is via the North West Coastal National Highway and established haul road.
- Any future mine development would benefit from proximity to a resident skilled labour pool, established mining contractors, as well as adjacent high voltage power lines, gas, water, a nearby rail line, port and 17 daily jet flights from Karratha to Perth.

Independent Mineral Resource estimate

- Resource estimation undertaken by mining consultants Snowden Optiro in collaboration with Artemis.
- Exhaustive estimation process, including:
    - 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 and 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 Mineable Shape Optimiser (MSO) for underground reportable resources.
- Classification - reported in accordance with the Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves (The JORC Code, 2012).
- Internal peer review by Snowden Optiro.

Greater Carlow - Mineral Resource statement

The Mineral Resource for Greater Carlow as at 13 October 2022 is presented in Tables 1 to 4 and Figures 1-4. All three deposits forming Greater Carlow are open at depth, and Quod Est and Crosscut are open along strike (Figure 1 and 2).

***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.*

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
Total	-	8.74	2.5	1.3	0.73	0.09	374,000	64,000	8,000

http://www.ms-pdf.londonstockexchange.com/ms/7046C_1-2022-10-12.pdf

Figure 3. Oblique view showing potential open pit (grey) and underground (blue) mining method for Inferred Mineral resource.

***Table 2.** Greater Carlow Mineral Resources by weathering state 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.*

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 3.** Greater Carlow Mineral Resources reported by area above a cut-off of 0.7 g/t Au Eq. within an optimised pit shell (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.*

Area	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

***Table 4.** Greater Carlow Mineral Resources reported by area above a cut-off of 2 g/t Au*

Eq. 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.

Area	Tonnes (Mt)	Au Eq. (g/t)	Au (g/t)	Cu (%)	Co (%)	Au (oz)	Cu (t)	Co (t)
Main	1.09	3.1	1.9	0.57	0.11	66,000	6,250	1,200
Crosscut	0.39	3.1	1.0	1.14	0.14	12,500	4,450	550
Total	1.49	3.1	1.6	0.72	0.12	78,500	10,700	1,750

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Figure 4. Block model long section (looking north) coloured on resource classification where Green = Inferred and Blue = Unclassified.

The following sections have been provided in fulfilment of ASX Listing Rule 5.8.1.

Geology and mineralisation

The Greater Carlow project is hosted by mafic Archaean volcanic arc rocks. The Carlow Main and Quod Est deposits are hosted within structurally controlled, mineralised zones occurring at right-angles to each other. The recently defined Crosscut deposit is located approximately 200 m north of Carlow Main and strikes north-south, sub-parallel to Quod Est (Figure 5). Mineralisation is hosted within chloritic shear zones in basalts and is focussed along contacts between the host basalt and footwall and hangingwall gabbro units. At Carlow Main, mineralisation dips steeply north at the western end, while at the eastern end the mineralisation dips steeply south. The Carlow Main deposit strikes over 1.2 km and is partially oxidised from depths of 40 m to as much as 100 m in the east. Mineralisation trends are complex, with gold, copper and cobalt occurring across multiple lithologies. Some structural control on mineralisation is likely, with high-grade trends identified within Carlow Main (Figure 2). The Quod Est and Crosscut mineralisation is hosted by north-south chloritic shear zones, and is partially oxidised above 25 m.

http://www.rns-pdf.londonstockexchange.com/rns/7046C_1-2022-10-12.pdf

Figure 5. Oblique overview of Greater Carlow area showing Carlow Main, Quod Est and Crosscut.

Drilling, sampling, analysis and QAQC

Both Reverse Circulation (RC) and diamond core has been used to drill out the geological sequences and identify zones of mineralisation. RC samples comprised 58,261 m or 89% and HQ3 quarter (1,116: 33%) and half (3,685: 77%) core samples comprised 7,094 m or 11% of the total drilling at Greater Carlow.

RC drilling was used to obtain one metre samples, using a 4.5" (112.5 mm) or 5.25" (131.2 mm) face sampling hammer. The entire RC sample was extracted prior to subsampling at surface next to the rig. Field duplicates were taken on selected intervals within the interpreted mineralised horizons. Duplicates were collected at the rig from a static cone splitter, with the primary and duplicate sample simultaneously collected from separate outlets. The cyclone was cleaned between rod changes to minimise contamination. Samples were collected via a rig-mounted splitter to yield sub-samples of approximately 3 kg per 1 m sample length. If any mineralised samples were collected wet, they were noted in the drill logs and database. The rig splitter provided a primary sample of 20-30 kg, and a sub-sample of 2-4 kg for every metre drilled. RC sample recoveries were recorded by the field geologist in the field during logging and sampling. If poor sample recovery was encountered during drilling, the supervising geologist and driller endeavoured to rectify the problem to ensure maximum and representative sample recovery. Visual assessments for moisture and possible contamination were made by a field geologist. Minor damp samples were encountered, with the field geologist and driller ensuring the cleanliness of the cyclone and splitter. A cyclone and static cone splitter were used to ensure representative RC sampling and were routinely inspected and cleaned during drilling. Sample recoveries during drilling completed by Artemis were high, with average overall recovery at 97%. Almost all samples were dry.

Diamond sampling techniques employed at the Artemis core facility include saw cut HQ3 (63 mm) half drill core samples. Sample intervals for diamond ranged from 0.3 m to 1.5 m of which 97% are 1 m length. Triple-tube HQ3 core drilling was completed to maximise diamond core recoveries. For drilling in 2017 and 2018 diamond core was cut into two quarters and one half using a core saw. One of the quarter core segments was placed into a numbered calico bag, which was then tied and placed in a plastic/polyweave bag. For drilling in 2020 and 2021, diamond core was cut into two halves using a diamond core saw. One of the halves was placed into a numbered calico bag, which was tied and placed in a plastic/polyweave bag. Drill core sample recoveries were recorded by the field geologist in the field during logging and sampling. Core recoveries were calculated based on nominal run lengths versus measured lengths of recovered core. Sample recoveries during drilling completed by Artemis were high, with average overall recovery for diamond core 1 m samples at 97%.

For all samples, laboratory preparation consisted of drying, coarse crushing to c. 10 mm, riffle splitting 2-4 kg followed by pulverisation in an LM5 or equivalent pulverising mill to a grind size of 85% passing 75 microns. All assays were by 30-50 g fire assay.

QC procedures involve the insertion of Internal Reference Materials (IRM), along with duplicates and blank samples. IRMs are based on material with a local matrix matched composition which underwent a round-robin process involving five laboratories analysing ten 100 g pouches for Au, Cu and Co. The insertion rate of each these was approximately 1 in 20. For RC and diamond drilling, field duplicates were collected at the rig at a rate of approximately 1 in 20.

Geological and mineralisation modelling and grade estimation methodology

Geological modelling of mineralised domains was undertaken in Leapfrog Geo using the vein modelling tools (Figure 6). Separate mineralised vein domains were built from a merged table using assay data. An interval selection table was derived from the merged table to selectively code the drillholes to facilitate the construction of vein systems. The mineralised vein system used a nominal lower grade cut-off of both 0.3% Cu and 0.5 g/t Au as determined from exploratory data analysis. Three separate mineralised vein systems were created for Main Trend, Crosscut and Quod Est. Main Trend comprises 22 domains (1010-1220), Crosscut comprises six domains (2010-2060) and Quod Est comprises three domains (3010-3030). The wireframes can be considered as hard-wireframed solids and are not derived from a grade shell interpolant process. A mineralised envelope was created using the distance to object function, set at +25 m from the final vein merged systems; this represented the approximate volume of a 0.2% copper halo identified within the Greater Carlow mineralised system. A separate mineralised halo was created for Main Trend (9990) and a combined halo created for Crosscut and Quod Est (9980). Veins were visually checked for thickness, continuity, and extents. Areas of extrapolation used half the drill spacing as a limiting distance. Vein relationships were assessed individually and a priority, i.e. termination on adjacent domains, was set. Vein pinch-outs and pinch-outs around drillholes were used where data supported this requirement.

http://www.ms-pdf.londonstockexchange.com/ms/7046C_1-2022-10-12.pdf

Figure 6. Plan displaying the new wireframes.

Wireframes were exported from Leapfrog Geo to Datamine Studio RM Pro software for the purposes of data coding and estimation. Exploratory data analysis was undertaken on coded samples, using Snowden Supervisor software, to understand data distribution, boundary analysis for weathering relationships, elemental correlation within modelled domains and sample lengths. Samples were composited within domained surfaces (weathering and domain boundaries) to 1 m representing the typical sample length of the data at Greater Carlow. 97% of the sample data occurs within the 0.93-1.02 m range.

Weathering domains were coded to the mineralised domain intercepts covering overburden, oxide, transitional and fresh profiles. For the purposes of estimation the overburden and oxide domains were combined, and the transitional and fresh domains were also combined based on contact boundary analysis. This is expected to honour the mineral speciation between the two principal weathering domains.

Dynamic Anisotropy, a process of locally rotating search orientations with the strike/dip and plunge of the domain, was applied and directions were estimated into the block model prior to grade estimation. The dip and dip direction were derived from a central domain reference surface built from sample point centroids in Leapfrog Geo and exported to Datamine Studio RM Pro.

Top-cutting was undertaken on composited samples, with each coded domain being treated as a separate population. Top-cuts were applied to high Au, Cu and Co grades following statistical and geospatial review.

Exploratory data analysis (EDA) was also undertaken on density data. The amount of density data was not deemed sufficient to effectively estimate density into the model given its spatial distribution within the modelled domains. Density was therefore hard coded based on weathering state and whether a domain was mineralised or waste. Default density values were derived from the EDA analysis.

Variography was undertaken on grouped data that reflected the domains' spatial position and orientation. Seven main mineralised domain areas were grouped, with variography undertaken for each element (Au, Cu and Co) for a total of 21 variograms modelled. Variography was borrowed for domains deemed to be similar in geometry and grade tenor.

Quantitative Kriging neighbourhood analysis (QKNA) was undertaken using Snowden Supervisor software to assess several parameters i.e., block size, estimation volume, sample numbers and discretisation points. This process was undertaken for the 21 variograms. The cross-validation tool was used to quantify how well a theoretical continuity model (variogram) was likely to perform by comparing estimates produced using the model to the original sample values.

A block model was built using a 20 m(E) x 20 m(N) x 10 m(RL) parent cell size covering the full volume of the Greater Carlow deposit. Sub-celling was permitted to 0.5 m in the X and Y directions and 1 m in the Z direction to facilitate a high-resolution filling of the wireframes. The model was further coded by weathering, using the same surfaces as the drillhole database. Discretisation on a grid of 5 x 5 x 3 per parent cell was applied. A three-pass search strategy was used. The first search extended to the full range of the modelled variogram, the second pass was 1.5 times the range of the first search using the sample minima and maxima as per the first search listed above. The final and third pass used 3 times the range of the variogram, halving the sample numbers defined in searches 1 and 2. Where insufficient samples were available for small domains, search parameters were changed on an individual domain basis. The maximum number of samples allowed from any one drillhole was 3 or 4 and the number of samples used ranged from 6-12 to 12-24, depending on domain.

Estimation was by 3D Ordinary Kriging (OK) with dynamic anisotropy (DA) enabled. Check estimates were carried out using OK without DA, and inverse distance squared with DA enabled.

In comparison to the 2021 resource (refer to Artemis press release dated 20th May 2021), the 2022 resource is based on a higher-grade width-constrained interpretation, which includes new drilling from 2021 and 2022. This is a change from the 2021 low-grade bulk volume interpretation. The implication being a more selective mining approach for the 2022 resource. The 2021 and 2022 models are also therefore not directly comparable.

The resource estimate was classified in accordance with the Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves (JORC Code, 2012).

Reasonable Prospects for Eventual Economic Extraction (RPEEE) parameters

Pit optimisations were generated to constrain the Mineral Resource in the context of Reasonable Prospects for Eventual Economic Extraction (RPEEE), as required by the JORC Code. Whittle was used for the open pit resource and Datamine MSO for the underground resource, as described below:

Open Pit

- Selective mining units have not been defined for open pit mining; however, for the open pit a typical bench height approximates 5 m, with the parent block being double that at 10 m in the Z direction.

Underground

- Sub-level long hole open stoping is the expected mining method and is appropriate for the orebody widths and orientations.
- Stope dimensions were assumed to be 10 m along strike and 20 m between levels.
- A minimum mining width of 1.5 m was applied, with 0.25 m dilution applied on both the footwall and the hangingwall (thus the minimum mining width of a diluted shape equates to 2.0 m).

Metallurgical factors

In 2019, ALS Metallurgy in Perth completed preliminary metallurgical testwork on two drill core composite samples. The metallurgical testwork demonstrated a potential Greater Carlow flowsheet utilising gravity and cyanide leach for gold, and flotation to produce copper and cobalt concentrates.

Details are:

- 48% of the gold in testwork on metallurgical samples was recovered using gravity separation, and most of the balance of the non-gravity gold is recoverable in sulphide concentrates as a by-product, using standard flotation. The total recovery of gold achieved was 94.8%.
- Quick floating copper minerals produced a high-grade copper concentrate of approximately 30% Cu.
- Deleterious elements, including arsenic, could be managed with a light concentrate polishing using regrind or blend control. Recoveries depended on mineralogy, with 77-85% copper recoveries achieved.
- Unrecovered copper minerals are predominantly non-floating silicates or secondary oxide copper minerals.
- Cobalt recoveries ranged from 73-79%. Saleable cobalt concentrate grades ranging from 2.3-5.3% Co were produced. Cobaltite (CoAsS) is the dominant cobalt bearing mineral, and is therefore intrinsically linked to arsenic, affecting its refining route and ultimate sale price.

The mining and metallurgical factors used for the current resource estimate are presented in Table 5.

Table 5. *Mining and metallurgical factors used for RPEEE assumptions.*

Parameter	Input Value
Overall Slope Angles	Oxide 40° Transition 45° Fresh 50°
Processing Cost	AU$50 / t
Gold Recovery	Oxide: 96% Transitional: 93.5% Fresh:93%
Copper Recovery	Oxide: 61% Transitional: 56% Fresh: 90.5%
Cobalt Recovery	Oxide: 47% Transitional: 43% Fresh: 78%
Mining Costs	AU$2.70 / t +0.5c / t per m below 30 m RL, thereafter add Transitional AU$0.25 / t and Fresh AU$0.50 / t
NSRs (incl. payability, royalty and treatment and refining costs)	Gold: 94% Copper: 84% Cobalt: 41%
Gold Price	AU$2,600 / oz
Copper Price	AU$12,699 / t
Cobalt Price	AU$90,478 / t
Au Royalty (in dore)	2.5%
Au Royalty (in concentrate)	5%
Cu Royalty	5%
Co Royalty	5%

In the Competent Persons' opinion all elements have reasonable potential to be recoverable and sold.

Gold Equivalent formula

The gold equivalent formula used in the calculation of an Au Eq. grade has the following parameters:

Overburden/Oxide	Au Eq. equation = Au (g/t) + Cu(%) x 0.86 + Co(%) x 2.31
Transitional	Au Eq equation = Au (g/t) + Cu(%) x 0.81 + Co(%) x 2.17
Fresh	Au Eq equation = Au (g/t) + Cu(%) x 1.31 + Co(%) x 3.96

It is the Competent Persons' view that all elements contributing to the gold equivalent calculation have the potential to be extracted and sold.

Resource Classification

The Mineral Resource has been classified as Inferred. The classification level is based upon assessment of geological understanding of the deposit, geological and mineralisation continuity, drill spacing, QC results, search and interpolation parameters, analysis of available density information and current metallurgical test work.

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.*

This announcement was approved for release by the Board.

For further information on the Company, please visit www.artemisresources.com.au or contact:

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About Artemis Resources

Artemis Resources (ASX: ARV; AIM: ARV, FRA: ATY; US: ARTTF) is an Australian-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.

MAR

This announcement contains inside information for the purposes of Article 7 of the UK version of Regulation (EU) No 596/2014 which is part of UK law by virtue of the European Union (Withdrawal) Act 2018, as amended ("MAR"). Upon the publication of this announcement via a Regulatory Information Service, this inside information is now considered to be in the public domain.

JORC Code, 2012 Edition Table 1

JORC (2012) Table 1 - Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	· Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. · Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. · Aspects of the determination of mineralisation that are Material to the Public Report. · In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	· Both Reverse Circulation (RC) and diamond core has been used to drill out the geological sequences and identify zones of mineralisation. RC samples comprised 58,261 m or 89% and HQ3 quarter (1,116: 33%) and half (3,685: 77%) core samples comprised 7,094 m or 11% of the total drilling at Greater Carlow. · RC drilling was used to obtain one metre samples, using a 4.5" (112.5 mm) or 5.25" (131.2 mm) face sampling hammer. The entire RC sample was extracted prior to subsampling at surface next to the rig. Field duplicates were taken on selected intervals within the interpreted mineralised horizons. Duplicates were collected at the rig from a static cone splitter, with the primary and duplicate sample simultaneously collected from separate outlets. The cyclone was cleaned between rod changes to minimise contamination. Samples were collected via the rig-mounted cone splitter to yield sub-samples of approximately 3 kg per 1 m sample length. If any mineralised samples were collected wet, they were noted in the drill logs and database. The rig splitter provided a primary sample of 20-30 kg, and a sub-

Criteria	JORC Code explanation	Commentary
		sample of 2-4 kg for every metre drilled. RC sample recoveries were recorded by the geologist in the field during logging and sampling. If poor sample recovery was encountered during drilling, the supervising geologist and driller endeavoured to rectify the problem to ensure maximum and representative sample recovery. Visual assessments for moisture and contamination were made by the field geologist. Minor damp samples were encountered, with the field geologist and driller ensuring the cleanliness of the cyclone and splitter. Sample recoveries during the drilling completed by Artemis were high, with the average overall recovery at 97%. All samples were dry. · Diamond sampling techniques employed at the Artemis core facility include saw cut HQ3 (63 mm) half drill core samples. Sample intervals for diamond holes ranged from 0.3 m to 1.5 m, of which 97% are 1 m length. Triple-tube HQ3 core drilling was completed to maximise diamond core recoveries. For drilling in 2017 and 2018, diamond core was cut into two quarters and one half using a core saw. One of the quarter core segments was placed into a numbered calico bag, which was then tied and placed in a plastic/polyweave bag. For drilling in 2020 and 2021, diamond core was cut in half using a diamond core saw. One of the halves was placed into a numbered calico bag, which was tied and placed in a plastic/polyweave bag. Drill core sample recoveries were recorded by the geologist in the field during logging and sampling. Core recoveries were calculated based on nominal run lengths versus measured lengths of recovered core. Drill core recoveries during drilling completed by Artemis were high, with average overall recovery for diamond core 1 m samples at 97%.
Drilling techniques	· Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	· Drillhole data comprised 65,355 m, consisting of 58,261 m of RC and 7,094 m diamond holes. Holes were drilled by TopDrill, with RC by a Schramm TD685 rig and diamond by an Evolution FH3000 rig. · RC samples were collected using a face-sampling bit via the inner return tube to a rig-mounted Sandvik cone splitter. · All diamond core was collected by HQ3 sized triple-splitter core barrels. Core was orientated by Reflex orientation tools.
Drill sample recovery	· Method of recording and assessing core and chip sample recoveries and results assessed. · Measures taken to maximise sample recovery and ensure representative nature of the samples. · Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	· The Competent Persons did not supervise previous drill programs; however Artemis have provided the following guidelines for drill sample recovery which are considered as adequate. · Sample recoveries were recorded by the geologist in the field during logging and sampling. Core recoveries were calculated based on nominal run lengths versus measured length of recovered core.

Criteria	JORC Code explanation	Commentary
		If poor sample recovery was encountered during drilling, the supervising geologist and driller endeavoured to rectify the problem to ensure maximum and representative sample recovery. · Visual assessments by a field geologist were made for moisture, and possible contamination. Minor damp samples were encountered, and the field geologist and driller ensured that the cleanliness of cyclone and splitter was maintained. · For RC drilling, a cyclone and static cone splitter were used to ensure representative sampling and were routinely inspected and cleaned. · Sample recoveries during drilling completed by Artemis were high, with average recovery of 97% for DD and RC samples. Almost all samples were dry. · Triple-tube HQ3 core drilling was completed to maximise diamond core recoveries. Diamond drilling was completed to assist in validating the results from the RC samples; no identifiable bias was observed. · No relationship exists between sample recovery and grade.
Logging	· Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. · Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. · The total length and percentage of the relevant intersections logged.	· All RC and diamond drillholes were geologically logged to industry standards for the mineralisation present at the project. · All drill chip samples were geologically logged at 1 m intervals from surface to the end of each drillhole. · Diamond core was photographed, and RC chips were retained in chip trays for future reference. · RC sample bags are placed in rows of 50 bags each. clear of the rig. A field technician mixes the bag by hand before taking a sample using a sieve and sieves the sample to remove fines. The sieved sample is then transferred to a wet sieve in a bucket of water, and the sample is sieved further until rock fragments are clearly visible. These rock fragments are then logged by the site geologist, taking note of colour, grainsize, rock type, alteration if any, mineralisation if any, veining if any, structural information if notable and any other relevant information. This information is then written down on pre-printed logging sheets, using codes to describe the attributes of the geology. A representative sample is transferred to pre-labelled chip trays into the corresponding depth from where the sample was drilled from. The remainder of the sample from the sieve is then transferred into a tray that has been marked up by depths at metre intervals. An identification sheet noting the hole number and from-to depths that correspond to each tray is then written up and placed above the tray and a photograph is taken of the chips. · The Competent Persons consider

Criteria	JORC Code explanation	Commentary
		that the level of detail is sufficient for the reporting of Mineral Resources. Logging data provides information to support geological modelling, including weathering/oxidation and water table surfaces and rock type.
Sub-sampling techniques and sample preparation	· If core, whether cut or sawn and whether quarter, half or all core taken. · If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. · For all sample types, the nature, quality and appropriateness of the sample preparation technique. · Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. · Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. · Whether sample sizes are appropriate to the grain size of the material being sampled.	· For drilling in 2017 and 2018 diamond core was cut into two quarters and one half using a diamond core saw. One of the quarters was placed into a numbered calico bag, which was tied and placed in a plastic/polyweave bag. · For drilling in 2020 and 2021 diamond core was cut in half using a diamond core saw. One of the halves was placed into a numbered calico bag, which was tied and placed in a plastic/polyweave bag. · RC samples were collected via a rig-mounted, Sandvik cone splitter to yield sub-samples of approximately 3 kg per 1 m sample length. If any mineralised samples were collected wet, they were noted in the drill logs and database. The rig splitter provided a primary sample of 20-30 kg, and a sub-sample of 2-4 kg for every metre drilled. · Sample preparation consisted of drying, coarse crushing to c. 10 mm, riffle splitting the 2-4 kg followed by pulverisation in an LM5 or equivalent pulverising mill to a grind size of 85% passing 75 microns. · QC procedures involve the insertion of Internal Reference Materials (IRM), along with duplicates and blank samples. IRMs are based on material with a local matrix matched composition which underwent a round-robin process, involving five laboratories analysing 10 x 100 g pouches for Au, Cu and Co. The insertion rate of each these was approximately 1 in 20. For RC and diamond drilling, field duplicates were collected at the rig at a rate of c. 1 in 20. For RC drilling, field duplicates were taken on a routine basis at approximately a 1:20 ratio using the same sampling techniques (i.e. cone splitter) and inserted into the sample run. · The Competent Persons consider the sampling, sample preparation and assay methods are reasonable for the stage of the project and resource classification; however, they are not optimised for coarse gold, which may be present based on the observations of; (1) high RC field duplicate pair precision of 51%; (2) the presence of occasional visible gold and (3) metallurgical testwork which displays GRG values of up to 48%.
Quality of assay data and laboratory tests	· The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. · For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations	· A certified laboratory, ALS Chemex, was used for all analysis of drill samples. · Sample preparation consisted of drying, coarse crushing to c. 10 mm, riffle splitting the 2-4 kg followed by pulverisation in an LM5 or equivalent pulverising mill to a grind size of 85% passing 75 microns.

Criteria	JORC Code explanation	Commentary
	factors applied and their derivation, etc. · Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	This fraction was split again down to a 50 g charge for fire assay (Au-AA26) with ICP finish. · All samples were dried, crushed, pulverised, and split to produce a sub-sample of 50 g which was digested in hydrofluoric, nitric, hydrochloric and perchloric acid (4 acid digest). This digest is considered a total dissolution for most minerals. Analysis was performed using ICP-OES finish (ME-ICP61) for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, Zn. Additional ore grade ICP-OES finish (ME-OG62) was used for Cu reporting out of range. · IRMs are matrix matched by using previous pulps from drilling programs and homogenised using certified laboratories. Standards were analysed by round robins to determine grade. Standards were routinely inserted into the sample run at 1:20. Artemis inserted IRMs, of which 11 were used in the Mineral Resource estimate. IRMs "18A" to "18F" and "A" to "F". · RC and diamond field (quarter core) duplicates for 2021-2022 totalled 923 and 94, respectively. 1,010 IRMs and 171 blank samples were inserted with routine samples at the rate of approximately one standard, blank or duplicate in every 20 samples. · Campaign-based analysis and reporting of quality control (QC) data was undertaken of blanks, field duplicates, laboratory repeats, laboratory blanks, repeats and IRMs in several groups of batches, and as a project-wide group of all results. · Laboratory internal duplicate checks (pulp duplicates) numbered 1,672, which represents duplication of 11% of the 2020 to 2022 dataset. Repeatability between duplicate pairs was acceptable, though with a pairwise precision of 22% which indicates a potential coarse gold content. · IRMs for Au display bias between -5% to +9%. For the 2021-22 programme the key 18A-C IRMs are +8%, +6% and +9% respectively which is high (expectation <5%). All IRM results for Cu and Co are <2% bias. The 3SD failure rate for IRM Au is high, with values of >1% to 7.7% for 18A-D. For Cu 18C-E are >1% and for Co 18A, C-E are >1%. · The Competent Persons consider the sampling, sample preparation and assay methods are reasonable for the stage of the project and resource classification; however, they are not optimised for coarse gold, which may be present based on the observations of; (1) high RC field duplicate precision of 51%; (2) the presence of occasional visible gold observed in core and RC chips; and (3) metallurgical testwork which displays GRG (gravity recoverable gold) values of 48%. The application of IRMs is not considered to be optimal, and the use of commercial

Criteria	JORC Code explanation	Commentary
		CRMs for future drilling is recommended.
Verification of sampling and assaying	· The verification of significant intersections by either independent or alternative company personnel. · The use of twinned holes. · Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. · Discuss any adjustment to assay data.	· Artemis geological staff collected and submitted all samples to the laboratory. · The independent Competent Person, Ms Janice Graham, inspected RC drilling residues and drill core during her site visit in May 2022. · The non-independent Competent Person, Dr Simon Dominy, inspected limited drill core and observed RC residue bags during a site visit in November 2019. At this time, Dr Dominy was not a Director of Artemis. · Diamond holes were drilled to infill areas of RC holes, and diamond sample results showed moderate correlation to the nearest RC sample results. A slight bias was observed for Au, Cu and Co in a comparison of RC versus diamond assay grades. · Electronic data capture is on MS Excel spreadsheets which are then uploaded as .csv files and routinely sent to certified database management provider. · PDF laboratory certificates are stored on the server and are checked by the Exploration Manager. · No adjustments or calibrations have been made to any assay data. · The Competent Persons consider that the information provided to them by Artemis geological staff allows them to appropriately consider the necessary factors in establishing Mineral Resources for the confidence estimated.
Location of data points	· Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. · Specification of the grid system used. · Quality and adequacy of topographic control.	· A Garmin GPSMap62 hand-held GPS was used to define the location of the initial drillhole collars. Standard practice is for the GPS to be left at the site of the collar for a period of 5 minutes to obtain a steady reading. Collar locations are accurate to within 5 m. · All hole collars were surveyed by differential global positioning system (DGPS). The topographic surface was calculated from the onsite mine survey pickups and subsequently verified by RTK GNSS collar surveys. · Zone 50 (GDA 94) is the relevant grid. Surface collar coordinates are surveyed via RTK GNSS with 1 cm accuracy by a professional surveying contractor. · Downhole locations were predominantly surveyed by gyroscope, covering 95% of the total metres surveyed. Gyroscope values in the database were recorded every 30 m, except in diamond hole 18CCAD001, and RC holes ARC190 to ARC222 (inclusive) which include records every 10 m. Holes were also surveyed by Reflex EZ TracTM down-hole camera. · Another unknown method ("UNK") existed in the database for the survey records of the collar of RC

Criteria	JORC Code explanation	Commentary
		holes ARC033 and ARC105, and another record of the latter at 66 m, both of which had no additional records. The maximum depths of these holes were 22 m and 66 m. The survey data for ARC033 has been derived from the planned hole azimuth and dip, and the survey data for ARC105 was derived from the DGPS collar survey measurement, which has been copied to the maximum depth. · Topographic data were captured in GDA94 MGA Zone 50 grid system. A topographic surface was built from high-resolution 5 m Unmanned Aerial Vehicle (UAV or drone) point data, with a resolution of 10 cm. · The Competent Persons consider that the topographic control is suitable to support the Mineral Resource estimate.
Data spacing and distribution	· Data spacing for reporting of Exploration Results. · Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. · Whether sample compositing has been applied.	· The mineralisation has been defined by two orthogonal drilling grids to intersect the east-striking Carlow Main lodes and the north-striking Quod Est lodes. The southern boundary of the Quod Est drilling grid adjoins the northern boundary of the Carlow Main grid at its central-western area. Aside from minor mineralisation extensions, infill drillholes and several interpretation-controlling scissor holes, drilling is regularly spaced 20 m apart on 40 m spaced sections, nominally averaging -60° dips, and this has provided consistent support to intersections of mineralisation and eliminated any influence of hole angles on grade. · Drillholes that define the Carlow Main mineralisation lie on 35 sections that shift north or south perpendicular to the sigmoidal curve that defines the mineralisation trend. Drillholes in the western section of the Carlow Main lodes have been drilled to the south to intersect the very steeply north-dipping lodes, until section 507,640 mE, where the holes have been drilled to the north to intersect the very steeply south-dipping lodes. · Drilling into the Quod Est mineralisation has been intersected by east-west orientated holes lying on eight sections - two of which are infill sections - perpendicular to a central easting of 506,650 mE. · Drilling into the Crosscut mineralisation has been intersected by three sections with east-west orientated drillholes, two sections with north-south orientated drillholes, and three sections with south-west orientated drillholes. · The downhole intervals logged by the geologist as being mineralised or showing significant alteration were sampled and assayed at 1 m intervals. Compositing of RC chip samples occurred for holes ARC036 to ARC081 only. All unmineralised intervals (based on the field portable XRF readings for Cu, Co and As) were composited and assayed over 3 m intervals. Mineralised intervals based on the field XRF readings were assayed in 1

Criteria	JORC Code explanation	Commentary
		m intervals. · If a 3 m RC composite returned assays above normal background levels, these intervals were re-sampled and assayed at 1 m intervals. · The Competent Persons believe that the mineralised wireframes have sufficient geological and grade continuity to support the classification applied to the Mineral Resources given the current drill pattern.
Orientation of data in relation to geological structure	· Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. · If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	· The regularly-spaced drilling on consistent sections, and the orientations orthogonal to the strike of the lodes, have provided consistent support to intersections of mineralisation such as to minimise any bias or influence of hole angles on grades. · No relationship has been noted between drillhole dip angle and mineralisation. · A positive bias has been noted for Au, Cu, and Co for drillholes with azimuths oriented sub-parallel to mineralisation compared to similar holes normal to mineralisation. The bias was limited to the eastern section of Carlow Main and influence of high-grade sub-parallel drillholes on the estimation controlled using a small volume wireframe.
Sample security	· The measures taken to ensure sample security.	· Samples were bagged, and cable tied upon collection. The chain of custody was managed by the supervising geologist, who placed up to 10 calico sample bags in polyweave sacks, clearly labelled with: § Artemis Resources Ltd § Address of laboratory § Sample range · The polyweave sacks were then loaded directly into a bulka bag. Each hole was placed in a separate bag, and twice a week the labelled bags would be collected and delivered to a transport depot. These were then loaded directly onto a truck and delivered direct to the laboratory. Each bulka bag or hole had a separate sample dispatch, which became a separate analytical batch at the laboratory. · Sample security was maintained through short collection and delivery turnarounds and the use of secured transport yards.
Audits or reviews	· The results of any audits or reviews of sampling techniques and data.	· No external audit of sampling techniques and data has been undertaken. · The Competent Persons strongly recommend that a study is undertaken to optimise the Greater Carlow sampling protocols in the light of the potential presence of coarse gold and relatively poor QC results.

JORC (2012) Table 1 - Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	· Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	· The project lies on tenement E47/1797-I, which is held by KML No. 2 Pty Ltd (KML), a 100% owned subsidiary of Artemis. The tenement was granted on 07/05/2008 and is held in good standing.

Criteria	JORC Code explanation	Commentary
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	According to the Department of Mines, Industry and Regulation (DMIRS) of WA Mineral Titles Online system, the tenement has an excised portion of land for the expired tenement M47/385 (DMIRS, 2019). · The tenement is overlapped by a miscellaneous licence, granted tenement L47/416 held conjointly by Stirling Bay Holdings and Swan Bay Holdings. · The tenement is securely held by a 100% owned subsidiary of Artemis and there are no impediments preventing the operation of the Lease.
Exploration done by other parties	· Acknowledgment and appraisal of exploration by other parties.	Prior to its naming as Greater Carlow, the Project area was known first as Cooper's. **Pre-1968** As early as the 1870s, copper ore was mined at the area formerly known as Glen Roebourne. Gold was discovered in the district in the late 1880s and numerous, small gold and gold-copper prospects, and minor silver, were worked to 1960. In the 1930s, the area was investigated by North Australian Aerial Geological, Geophysical Survey. In 1964, Westfield Minerals NL undertook extensive regional mapping and stream-soil sampling, and identified and drilled geochemical, magnetic and induced polarisation (IP) anomalies. The Geological Survey of Western Australia (GSWA) published a regional geology map in 1965. **1968 - 1972** In 1968, Consolidated Gold Mining Areas NL drilled seven DD holes for 759 over mining claims MC387 and MC410, which are now within E47/1797-I. The holes intersected mineralisation containing three main chalcopyrite veins ranging from 23 cm to 76 cm thickness and hosted up to 5.36% Cu, 17.14 g/t Au and 1.42% cobalt in separate 2 ft samples. Geophysical work was carried out to improve mineralisation targeting included magnetometer, self- potential and IP surveys. In 1969, in partnership with Roebourne Exploration and Mining Ltd, Amax commenced exploration of the area by 275 wide-spaced magnetometer survey lines and 141 line- miles of IP survey, 2,800 ft of auger drilling, 14,000 ft of percussion drilling, 2,800 ft of DD and 475 ft costean/trench. The details of the exploration program completed are unclear, as the financing arrangements only allowed for partial program completion. The trench revealed two vein structures of high-grade mineralisation, with 8 m at 1.73% Cu and 14 m at 2.2% Cu within a wide low-grade copper mineralisation halo grading 0.38% Cu that contained numerous anomalous gold and cobalt results. However, Amax's primary focus for the drilling program was targeting IP anomalies to the north of Greater Carlow that were coincident with a chert band formed from a felsic volcanic horizon that yielded 10 ft at 2.5% zinc. The target was a stratiform zinc deposit, but instead the source of the IP anomalies was identified as pyrite, and so Amax lost interest in the project area. **1986 - Openpit Mining Ltd** In a report for Artemis inserted into the

Criteria	JORC Code explanation	Commentary
		annual report for the combined reporting group to the GSWA, Torbinup Resources Pty Ltd noted that Openpit Mining Ltd explored the known base metal mineralized areas for gold mineralisation in 1986 and 1987, which included detailed mapping of the main workings at Greater Carlow and the drilling of 31 RC holes for 1,527 m in the Greater Carlow, Good Luck and Little Fortune areas (Cahill, 2011, cited in Voermans, 2012). One hole, GC04, intercepted 22 m at 10.7 g/t Au below the No 1 Lode, which included a 6 m interval at 30.97 g/t Au. **1995 - 2008: Legend Mining Pty Ltd and others** The following has been taken from Cahill (2011), cited in Voermans (2012). Legend commenced exploration of the area in 1995, initially concentrating on areas of historic workings. Dragon Mining NL, ("Dragon") and Titan Mining NL ("Titan") commissioned an Airborne Electromagnetic ("AEM") survey over a large portion of the West Pilbara in 1996 and 2001 respectively. In 1999 and 2000, Legend explored the copper anomaly identified by AMAX in 1969, which led to the discovery of high-grade copper-gold mineralisation in a soil covered area of Carlow South, south of the main workings. Further field activities included RC drilling, soil geochemical sampling, detailed ground magnetic surveys, trenching, preliminary metallurgical testwork, gradient array induced polarization ("IP"), transient electromagnetic ("TEM") surveys and resource estimates. This program was successful in identifying a high-grade pod of gold mineralisation which plunges 60° easterly within a broad shear zone and remains open at depth. This pod is surrounded by an extensive halo of lower grade gold and copper mineralisation over a strike length of 400 m which is open to the west. In 2000 estimates of mineralisation within 100 m of the surface were produced using a sectional polygonal method. Several other prospects within a 500 m radius of the old Greater Carlow workings were subject to first-pass RC drilling, and results confirm the widespread presence of copper and gold mineralisation in the area. Approximately 400 m east of the main workings, drillhole CC54 in Carlow East intersected two mineralised horizons within a 20 m thick highly altered zone. The intersections included 4 m grading 1.32% Cu and 4.55 g/t Au from 38 m, and 48 m 5.66% Cu and 1.87 g/t Au, which included 8 m at 0.16% Co. Following orientation TEM and IP surveys over the Carlow South resource, a detailed IP survey was completed over the main area of interest. A detailed interpretation of the data resulted in the identification of numerous IP and resistivity targets. A total of 28 IP targets and nine resistivity targets were selected and assigned a follow-up priority for immediate drilling. This planned drilling was never undertaken. Small scale mining of the green chrysoprase was undertaken in the past on M47/385 just north of the Greater Carlow main workings and several large

Criteria	JORC Code explanation	Commentary
		boulders were mined and subsequently cut and polished for marketing purposes. Polished hand specimens show a translucent pattern of fine grained, apple green colour chert, transected by milky-white to blackish quartz veins and veinlets. In 2007 and 2008, Legend undertook geophysical exploration surveys over the project area, which used a combination of AEM and ground-based geophysics, and consisted of: · Compilation and processing of regional aeromagnetic and radiometric datasets covering the entire the project area. The compilation involved several historic datasets with line spacing varying from 25 m to 400 m. · Three Versatile Time Domain Electromagnetic ("VTEM") surveys covered an area of approximately 410 km^2, with flight directions ranging from E-W to NW-SE to N-S depending on the orientation of stratigraphy. Line spacing was either 200 m or 100 m with infill lines of 100 m or 50 m respectively if conductive features of interest were identified. · Three Ground Fixed-Loop Transient Electromagnetic ("FLTEM") surveys were carried out to investigate 16 conductors identified by the airborne VTEM surveys. Thirteen of the 16 VTEM targets surveyed identified conductors considered significant enough to warrant future drill testing. **2008 - 2016:** No on ground exploration activities were conducted between 2008 and 2016 as a native title agreement was being negotiated. **2017 - 2019:** Artemis commenced resource development drilling at Greater Carlow in 2017 with 81 RC holes for 7,357 m. A sub-audio magnetic (SAM) survey over the Carlow South area in 2018 confirmed the 1.2 km strike of the Greater Carlow Mineral Resource. Resource development drilling in 2018 included 108 RC holes for 15,882 m, and 12 DD holes for 1,505 m. Drilling focussed on the Carlow South and Quod Est areas with drillholes nominally spaced 20 m apart on 40 m spaced sections. The drilling results were incorporated into mineral resource estimates in February 2019 and updated in November 2019 and May 2021. In 2019, ALS Metallurgy in Perth completed preliminary metallurgical testwork on two 100 kg drill core composite samples. The metallurgical testwork demonstrated a potential Greater Carlow ore flowsheet utilising gravity and cyanide leach for gold, and flotation to produce copper and cobalt concentrates. **2020 - 2022:** In 2020, Artemis completed follow-up resource development drilling at Greater Carlow targeting infill and extensions at depth in the Main (East and West), Quod Est and Crosscut areas. A total of 62 RC holes for 7,574 m and 11 DD holes for 3,788 m were completed and successfully intersected mineralisation up to 250 m

Criteria	JORC Code explanation	Commentary
		below the November 2019 Mineral Resource.
Geology	· Deposit type, geological setting and style of mineralisation.	· The mineralisation system at Greater Carlow is currently understood to represent a hydrothermal Cu-Co-Au system. Mineralisation is hosted by sulphide-rich quartz-carbonate veins within a pervasively chloritised shear zone of the Ruth Well Formation, consisting of mafic volcano-sedimentary host rocks. · The project area lies on Archaean volcanic arc rocks, which overly two unconformable sequences of mainly volcanic and intrusive rocks. Amphibolites and undifferentiated mafic and ultramafic rocks dominate the older sequence, which have been metasomatised by intrusive activity. Gabbros and calcrete-covered serpentinites have been recognised in the area. · The Greater Carlow gold-copper-cobalt (Au-Cu-Co) deposit is located 28 km northeast of the Radio Hill processing plant. Carlow Main and Quod Est are structurally controlled mineralised zones occurring almost at right angles to each other. · The Quod Est portion strikes approximately north-south, dipping steeply east with a strike length of about 200 m and is fault-terminated to the north and potentially at depth. · The Carlow Main portion strikes east-west, being fault disrupted at each end. Drill definition has been completed over the 1,200 m strike length which has a flattened sinusoidal form. At the western end mineralisation dips steeply north; at the eastern end the mineralisation dips steeply south. Mineralisation at Carlow Main has been shown to extend to at least 550 m below surface. · The Crosscut mineralisation strikes approximately north- south, dipping steeply east, with a strike of about 150 m.
Drillhole Information	· A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: o easting and northing of the drillhole collar o elevation or RL (Reduced Level - elevation above sea level in metres) of the drillhole collar o dip and azimuth of the hole o down hole length and interception depth o hole length. · If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	· Exploration results are not being reported in this Mineral Resource declaration.
Data aggregation	· In reporting Exploration Results, weighting averaging techniques,	· Exploration results are not being reported.

Criteria	JORC Code explanation	Commentary
methods	maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. · Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. · The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	· These relationships are particularly important in the reporting of Exploration Results. · If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. · If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	· The bulk of the Carlow Main mineralisation lodes dip sub- vertically or steeply to the north and steeply to the south in the eastern 20%, while Quod Est and Crosscut lodes dip steeply to the east. Other than a low proportion of scissor holes that provided volume control, drillholes were angled near to 60° and with an azimuth perpendicular to the lodes strike to provide as near a 'true' intercept thickness as realistically possibly.
Diagrams	· Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.	· See the body of the release
Balanced reporting	· Exploration results are not being reported.	· Exploration results are not being reported.
Other substantive exploration data	· Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	· Surface geological observations have been incorporated into the geological interpretation and, in concert with the results of geochemical assays, are considered reasonable for this style of mineralisation.
Further work	· The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). · Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	· Infill drilling around the higher-grade zones is planned to improve the geological understanding of the host structures and the confidence of the geological model, grade estimate and Mineral Resource classification in these zones. · Metallurgical testwork samples are planned from the oxide, transitional, and fresh weathering zones to optimise the process flowsheet and allow accurate cutoff grades to be determined. · Scoping-level studies are planned to increase the confidence in the input parameters for an economic evaluation of the project.

JORC (2012) Table 1 - Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	· Measures taken to ensure that data has not been corrupted by, for	· Artemis Resources is responsible for all primary data collection. · Core/chip logging utilised project specific codes and was

Criteria	JORC Code explanation	Commentary
	example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	stored using the database management system DataShed™. The software uses primary key fields and look-up tables. · Project specific validation rules and data integrity processes are deemed adequate for database control of transcription or keying errors. · Expedio, an external database partner, is responsible for loading and exporting drillhole data. An accompanying PDF document is provided with each database export detailing relevant changes and geologist accountable. · Missing or incomplete data is flagged during export and is rectified by site geologists. · Validation errors and summary files were generated during the drillhole database creation using output reports in Datamine Studio RM Pro software.
	· Data validation procedures used.	· Snowden Optiro undertook a review of the database provided on 07 August 2022. No material flaws were identified, and the database was deemed of sufficient quality to inform the October 2022 MRE. *Database integrity checks:* · Cut-off date and database file names · Location plot of drillholes and collar elevation checks against high resolution topographic surface · Number of drillholes, hole type used · Assay field and assay determination method · Historical data review, suitability, and limitations of use · Excluded drillholes and reasons · Geological fields, and if used · Treatment of below detection limit data and missing values · All validation changes listed · Survey method and visual validation for artificial drillhole traces.
Site visits	· Comment on any site visits undertaken by the Competent Person and the outcome of those visits. · If no site visits have been undertaken indicate why this is the case.	· Geological staff from Artemis were responsible for the logging and sampling of drill data from the Greater Carlow deposit. · The Snowden Optiro Competent Person, Ms Janice Graham, visited the Greater Carlow deposit on 13 July 2022, observing the local geology, core logging, drilling, and sampling practices of diamond and reverse circulation (RC) programmes. The CP was shown example diamond core and RC chips from the three main mineralised areas at Greater Carlow (Carlow Main, Crosscut and Quod Est). · The Artemis Competent Person, Dr Simon Dominy, visited the Greater Carlow site in November 2019. Dr Dominy walked the Greater Carlow site and viewed limited drill core at the Radio Hill site.
Geological interpretation	· Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	· The mineralisation system at Greater Carlow is currently understood to represent a hydrothermal Au-Cu-Co system. Mineralisation is hosted by sulphide-rich quartz-carbonate veins within a pervasively chloritised shear zone of the Ruth Well Formation, consisting of mafic volcano-sedimentary host rocks. · The Competent Persons are of the opinion that the geology of the deposit and mineralisation model is sufficiently understood consummate to the current drill spacing, data density and stage of the project.
	· Nature of the data used and of any assumptions made.	· All drillholes used in the interpretation and estimation are either reverse circulation or diamond drill core. No assumptions have been made that will affect the Mineral Resource estimate reported.
	· The effect, if any, of alternative interpretations on	· Alternative interpretations were presented and reviewed prior to the October 2022 geological interpretation. Snowden Optiro has worked closely with Artemis

Criteria	JORC Code explanation	Commentary
	Mineral Resource estimation.	Resources' technical team to create a mineralised model that reflects the current understanding of the deposit based on structural and mineralogical studies. Snowden Optiro is of the opinion that the current interpretation is appropriate for the stage of the project and is globally reasonable. Further drilling may lead to a change in the interpretation..
	· The use of geology in guiding and controlling Mineral Resource estimation.	· Geological modelling of mineralised system at Greater Carlow used a 0.3% Cu and 0.5 g/t Au cut-off. · At these cut-offs sufficient continuity is shown, allowing an anastomosing vein system to be modelled. A broad 0.2% Cu halo can be identified in the sample population, which is indicated visually and by inflections in the copper log-probability plots. · Structural data and logging of massive sulphide veins from diamond core indicate that a hard-wireframed methodology appropriately represents the underlying shoot geometry of the mineralisation. Existing research supports a single mineralised system for all three elements modelled (Au-Cu-Co).
	· The factors affecting continuity both of grade and geology.	· The co-occurrence of Au-Cu-Co bearing minerals within the hypogene and supergene show no evidence of successive overprinting phases of mineralisation. This indicates that the ore fluid must have been capable of simultaneously transporting these metals. As such Au, Cu and Co have been domained together to represent a single, continuous, coincidental mineralisation event. Sufficient continuity is achieved at the current drill spacing to model continuous vein systems for Carlow Main, Crosscut and Quod Est. · Artemis Resources provided weathering surfaces for overburden, base of complete oxidation, top of fresh rock and transitional zones · Surfaces are modelled from regolith logging and geochemical data notably that of sulphur ratios to Cu. · The weathering surfaces are considered of moderate to high confidence based on project stage and available data density.
Dimensions	· The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	· The deposit is split into three areas, Carlow Main, Crosscut and Quod Est. · Carlow Main is further split into three sub areas, east, west, and far west, with mineralisation striking east-west with a broad sigmoidal shape (approximating a 1.2 km strike). A southerly dip is exhibited in the east of Carlow Main, with mineralisation modelled to a depth of approximately 600 m below datum with appropriate drill support. The average depth of Carlow Main mineralisation occurs to a depth of 240 m below datum. Towards the west dip reverts to the north and repeated in the far west. · Carlow Main is modelled as a series of veins with widths ranging from 0.3 m to 33 m · Crosscut and Quod Est are orthogonal vein arrays located north of the Carlow Main shear zone, striking north-south occurring as narrower vein array (0.3 m-12 m) than that of Carlow Main. There is a general step down of veins (representing distinct/individual pods) gradually increasing in depth to the south. Crosscut is modelled to a depth of 300 m and Quod Est modelled to a depth of 140 m below datum where drill support allows.
Estimation and modelling techniques	· The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer	· In comparison to the 2021 resource (refer to Artemis press release dated 20th May 2021), the 2022 resource is based on a higher-grade width-constrained interpretation, which includes new drilling from 2021 and 2022. This is a change from the 2021 low-grade bulk interpretation. The implication being a more selective mining approach for the 2022 resource. The 2021 and 2022 models are also therefore not directly comparable. · Geological modelling of mineralised domains was undertaken in Leapfrog Geo using the vein modelling tools. · Separate mineralised vein domains were built from a merged table using assay data. An interval selection table was derived from the merged table to selectively code the

Criteria	JORC Code explanation	Commentary
	assisted estimation method was chosen include a description of computer software and parameters used.	drillholes to facilitate vein systems to be built. · The mineralised vein system utilised a lower guide cut-off of 0.3% Cu and 0.5 g/t Au as determined from exploratory data analysis. Three separate mineralised vein systems were created for Carlow Main, Crosscut and Quod Est. · Carlow Main comprises 22 domains (1010-1220), Crosscut comprises six domains (2010-2060) and Quod Est comprises three domains (3010-3030). The wireframes can be considered hard-wireframed domains and are not derived from grade shell interpolant process. · A mineralised envelope was created using the distance to object function, set at +25 m from the final vein merged systems, this represented the approximate distance of a 0.2% Cu halo identified within the Greater Carlow mineralised system. A separate mineralised halo was created for Carlow Main (9990) and a combined halo for Crosscut and Quod Est (9980). · Veins were visually checked for thickness, continuity, and extents. Areas of extrapolation used half the drill spacing as a terminal distance. Veins were checked for any unflagged drillholes to ensure no incorrect data is inadvertently selected. If required veins were modified using control polylines to prevent unrealistic volume extrapolation. · Vein terminations were set to Boolean on the base of the topographic surface. · Vein relationships were assessed individually and a priority i.e., termination on adjacent domains set. Vein pinch outs and pinch outs around drillhole were used where data supported this requirement. · Wireframes were exported from Leapfrog Geo to Datamine Studio RM Pro software for the purposes of data coding and estimation. · Exploratory data analysis undertaken on coded drillholes using the Snowden Supervisor software to understand density data distribution, boundary analysis for weathering relationships, elemental correlation within modelled domains and sample lengths. · Samples were composited within domained surfaces (weathering and domain boundaries) to 1 m representing the typical sample length of the data at Greater Carlow. 97% of the sample data occurs within the 0.93 - 1.02 m range. · Weathering domains were coded to the mineralised domain intercepts covering overburden, oxide, and transitional and fresh profiles. · For the purposes of estimation overburden/oxide domains were combined, and transitional/fresh domains combined based contact boundary analysis. This is expected to honour the mineral speciation between the two principal weathering domains · A block model was built using a 20 m(E) by 20 m(N) by 10 m(RL) parent cell size covering the full volume of the Greater Carlow deposit. Sub-celling was permitted to 0.5 m X/Y directions and 1 m in the Z direction to facilitate a high-resolution fill of the wireframes. The model was further coded by weathering, using the same surfaces as the drillhole database. · Dynamic Anisotropy, a process of locally rotating search orientation with strike/dip and plunge of the domain was utilised and estimated into the block model prior to grade estimation. The dip and dip direction were derived from a central domain reference surface built from sample point centroids in Leapfrog Geo and exported to Datamine Studio RM Pro. An isotropic search was applied at 50 m by 50 m by 50 m ranges using 2-5 samples. The estimated TRDIP/TRDIPDIR was visually validated against input data. TRPLUNGE was hard coded into each domain based on variography modelling of direction of maximum continuity. Rotations were checked by creating ellipses in Datamine Studio RM Pro to ensure correct search rotations were being applied.

Criteria	JORC Code explanation	Commentary
		Top-cutting was undertaken on composited samples, with each coded domain being treated as a separate population. Top-cuts were applied to high grades for Au, Cu and Co following statistical and geospatial review. · Exploratory data analysis was undertaken on density data. Density data was deemed insufficient to effectively estimate density into the model given the spatial distribution within the modelled domains. Density was elected to be hard coded based on weathering surface and whether a mineralised domain or waste domain (country rock). Density data was derived from the EDA analysis. · Variography was undertaken on grouped data that reflected the domains spatial position and orientation. Seven main mineralised domain areas were grouped, with variography undertaken for each element (Au, Cu and Co) for a total of 21 variograms modelled. Grouped estimation domains are listed below: o Carlow Main East - 1013,1015,1023,1025,1033 and 1035 o Carlow Main West - 1043,1045,1053,1055,1063 and 1065 o Carlow Main Far West - 1073,1075,1083,1085,1093,1095 o Crosscut - 2015-2065 o Quod Est - 3015-3035 o Carlow Main Mineralised Waste - 9993 and 9995 o Crosscut/Quod Est Mineralised Waste - 9983 and 9995 · Variography was borrowed for domains deemed to be similar in geometry and grade tenor. · Quantitative Kriging neighbourhood analysis (QKNA) was undertaken using the Snowden Supervisor software to assess several parameters i.e., block size, sample pairs, discretisation points. This process was undertaken for the twenty-one variograms. The cross-validation tool was used to understand how well a theoretical continuity model (variogram) was likely to perform by comparing estimates produced using the model to the original sample values. A cross validation histogram was used to understand the estimated population distribution against the histogram for composited estimation points (degree of smoothing) A summary of each grouped domains QKNA is listed below: o Carlow Main East (Au, Cu and Co) - 12-24, using a max key of four samples per hole identifier o Carlow Main West (Au, Cu and Co) - 12-24, using a max key of four samples per hole identifier o Carlow Main Far West (Au, Cu and Co) - 8-16, using a max key of four samples per hole identifier o Crosscut (Au, Cu and Co) - 8-16, using a max key of four samples per hole identifier o Quod Est (Au, Cu and Co) - 6-12, using a max key of three samples per hole identifier o Carlow Main Mineralised Waste (Au, Cu and Co) - 12-24, using a max key of four samples per hole identifier o Crosscut/Quod Est Mineralised Waste (Au, Cu and Co) - 12-24, using a max key of four samples per hole identifier · Discretisation was used nodes on grid of 5 by 5 by 3 m. · A three-pass search strategy was used. The first distance to the full range of the modelled variogram, the second pass, 1.5 times the range of the first search using the sample pairs listed above. The final, third pass using 3 times the range of the variogram halving the sample numbers

Criteria	JORC Code explanation	Commentary
		defined in search 1 and 2. · Where insufficient samples criteria were met for small domains, search populations were changed for individual domains. · Mineralised waste domains used a two-pass strategy, where if grade was not estimated in pass 1 or 2, grade at half the detection limits was assigned to absent grade blocks. · Estimation utilised 3D Ordinary Kriging (OK) with dynamic anisotropy (DA) enabled. Check estimates using OK without DA, and inverse distance squared with DA enabled.
	· The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	No production data is available as the deposit is unmined, bar some minor historic workings, with no stated production figures. Previous Mineral Resource estimates were available to the Competent Persons for comparison. In comparison to the 2021 resource (refer to Artemis press release dated 20th May 2021), the 2022 resource is based on a higher-grade width-constrained interpretation, which includes new drilling from 2021 and 2022. This is a change from the 2021 low-grade bulk interpretation. The implication being a more selective mining approach for the 2022 resource. The 2021 and 2022 models are also therefore not directly comparable. *2018* · Mr Philip Jones estimated an Inferred Mineral Resource for Carlow South of 3.9 Mt at 0.9 g/t Au, 0.06% Co and 0.4% Cu using an inverse distance cubed method (ID^3). The estimate was reported above a 0.5 metal content, where metal content defined using Au g/t + Cu% + Co ppm / 1,000. Drilling data was provided by Artemis Resources to model mineralisation wireframes that were based on a total net smelter return of >US$30 using the following metal factors: o Copper: prices - US$4.473/lb; recoveries - 75% (mining and metallurgical) o Gold; price - US$1,282.10/oz; recoveries - 90% (mining and metallurgical) o Cobalt: price - US$54,000/t; recoveries - 75% (mining and metallurgical) *2019* · January 2019, Al Maynard & Associates estimated an Inferred Mineral Resource at Carlow South and Quod Est of 7.7 Mt at 0.51% Cu, 1.06 g/t Au and 0.08% Co. Four domains were identified, based on strike of the mineralisation. High-grade cuts were also applied using mean grades +2 standard deviations of copper, gold, and cobalt per domain. Grades were interpolated by using inverse distance squared (ID^2). · November 2019, CSA Global estimated an Inferred Mineral Resource at Carlow South and Quod Est of 8 Mt at 0.6% Cu, 1.6 g/t Au and 0.08% Co, reported above a lower cut-off of 0.3% Cu, and within an optimised pit shell. Two estimation domains for Carlow Main and Quod Est were used in the modelling based on a lower cut-off grade of 500 ppm copper. Grade interpolation was achieved initially by ordinary Kriging into panels, with post-processing using localised uniform conditioning (LUC) within the panels to derive an estimate at the smaller selective mining unit (SMU) scale. Grade limiting was employed in the panel estimates to restrict the influence of extremely high grades to 10 m. The optimised pit shell for the Mineral Resource reporting used the following parameters: o 50° overall slope angle o Oxide and Fresh used same recoveries/processing costs o A$48.1/t processing cost o 85% copper recovery o 94.8% gold recovery o 73% cobalt recovery

Criteria	JORC Code explanation	Commentary
		o Mining costs A$/t incremented by depth ranging from A$2.57 through to A$5.77 inclusive o Copper: A$9,000/t o Gold: A$2,000/oz o Cobalt: A$48,000/t *2021* · May 2021, CSA Global estimated an Inferred Mineral Resource at Greater Carlow Main, Crosscut and Quod Est of 14.3 Mt at 1.4 g/t Au Eq., 0.7 g/t Au, 0.4% Cu and 0.05% Co within an optimised pit shell. Geological modelling utilised Leapfrog Geo to generate estimation domains by indicator interpolants at a nominal 200 ppm/500 ppm Cu and 0.5 g/t Au cut-offs. 9 estimation domains resulted with a corresponding minzon code, listed below: o Carlow Main (minzon 10 - low-grade zone - Cu, Co ± Au, minzon 11 - high-grade zone - Au, Cu and Co, minzon 12 - very high-grade zone - Au, Cu and Co) o Quod Est (minzon 20 - low-grade - Cu, Co ± Au, minzon 21 - high-grade zone Au, Cu and Co) o Crosscut (minzon 30 - low-grade Cu, Co ± Au, minzon 31 - low-grade zone - Au, Cu and Co, minezon 32 - Low-grade zone - Cu, Co ± Au and minzon 33 - Au, Cu, Co) · High-grade cuts were used to constrain high grades in the dataset. · Grade interpolation for gold, copper, cobalt, arsenic, and sulphur was completed using ordinary Kriging (OK) using dynamic anisotropy. Low-grade minzon domains (10,20,30 and 32) were estimated using indicator Kriging based on a single 0.1 g/t Au indicator, the resulting Kriged indicator was multiplied by 0.6 g/t Au to get the final block estimate grade. · Acid soluble copper variable Cu_Spct (sulphuric acid soluble), Cu_Cpct (cyanide soluble), Cu_Rpct (residual copper), were estimated using inverse distance squared (ID^2) with a two-pass search ellipse strategy. · An open pit optimisation undertaken using Whittle software and assumed the following parameters: o 50° overall slope angle o Oxide, transitional and fresh use same recoveries and processing costs o Processing costs of A$48.1/t (includes refining, insurance and general and administration). o Recoveries, which in Artemis' opinion have a reasonable potential to be achieved of; 94.8% gold recovery, 85% copper recovery and 73% cobalt recovery. o Mining costs A$/t incremented by depth, ranging from A$2.57/t through to A$6.35 inclusive. o Commodity prices (A$) Gold - A$2,200/oz, copper A$9,400/t and cobalt A$50,000t. o Royalties per tonne payable on both copper and cobalt produced of 5%. Gold royalty of 2.5% per ounce produced. o Mineral Resource reported above a 0.3 g/t gold equivalent, and calculated by a weighted average of the three components of gold, copper, and cobalt, using the same commodity prices and metallurgical recoveries as the optimisation o AuEq equation - Au (g/t) + ((Cu (%) x ((Cu$/t x Cu recovery x 0.01) / (Au $/g x Au recovery)) + (Co (%) x ((Co $/t x Co recovery x 0.01) / (Au $/g x Au recovery)).

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>· The assumptions made regarding recovery of by-products.</td><td>· Mineralised domains were modelled using a combined 0.3% copper cut-off and 0.5 g/t gold cut-off. Cobalt is constrained to this domain demonstrating sufficient correlation with copper and gold.

· Gold can be recovered via gravity, prior to subsequent floatation for the copper. It is reasonable to expect residual gold may be recovered by conventional cyanide leach finish.

· Testwork for copper and cobalt demonstrate recovery via sequential floatation.</td></tr>
<tr><td></td><td>· Estimation of deleterious elements or other non-grade variables of economic significance (e.g., sulphur for acid mine drainage characterisation).</td><td>· Three elements were estimated Au-Cu-Co.

· Arsenic and sulphur have not been estimated at this stage, and further work is required to evaluate their impact on the project.</td></tr>
<tr><td></td><td>· In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</td><td>· The dimensions of the block model selected represent the half the typical drill spacing as 40 m along strike and 20 m down-dip. Sub-celling was permitted to 0.5 m (X) by 0.5 m (Y) and 1 m (Z) to provide a suitable volume fill consummate to the drill spacing and selectivity.

· Block size was determined and validated using QKNA review observing slope of regression and kriging efficiencies, by moving the centroid of the block to different data densities.

· Estimations used a three-pass strategy, whereby the first search reflected the maximum modelled continuity, the second pass used 1.5 times the maximum modelled continuity and third pass was three times the primary ranges.

· Detailed sample pairs are listed in Estimation and Modelling Techniques (Table 1, Section 3).

· Resource classification has considered search volume as part of the resource classification process.</td></tr>
<tr><td></td><td>· Any assumptions behind modelling of selective mining units.</td><td>Open Pit
· Selective mining units have not been defined for open pit mining, however, for the open pit a typical bench height approximates 5 m, with the parent block being double that at 10 m in the Z direction.

Underground
· Sub-level long hole open stoping is an expected mining method appropriate for the ore body widths and dip.

· Stope dimensions utilised a strike of 10 m and a 20 m dip.

· Minimum mining width of 1.5 m with 0.25 m dilution on both FW and HW (minimum mining width of a diluted shape equates to 2.5 m).</td></tr>
<tr><td></td><td>· Any assumptions about correlation between variables.</td><td>· A good correlation is shown for the primary elements Au-Cu-Co within the modelled domains. The three elements are modelled in the same mineralised domains. The estimation method has not specifically built in the correlation and the elements have been estimated independently. Pearsons correlation coefficients for the three elements are shown below:

<table>
<tr><th>Element</th><th>Au_ppm</th><th>Cu_ppm</th><th>Co_ppm</th></tr>
<tr><td>Au_ppm</td><td>1</td><td>0.66</td><td>0.67</td></tr>
<tr><td>Cu_ppm</td><td>0.66</td><td>1</td><td>2</td></tr>
<tr><td>Co_ppm</td><td>0.67</td><td>0.45</td><td>1</td></tr>
</table></td></tr>
<tr><td></td><td>· Description of how the geological</td><td>· Modelling of the mineralised domains utilised available data provided to Snowden Optiro including logged geology and</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	interpretation was used to control the resource estimates.	structural data available on diamond core. · Domains are considered hard wireframed with estimation taking place within a final derived estimation field grouped by weathering. · The mineralised envelope utilised a hard top-cutting approach of the sample population to avoid material flagging as economic in non-hard wireframed constrained areas. The mineralised envelope correlated well with a broad lower 0.2% copper halo that surrounded the primary mineralised domains and a stoped out by the mineralisation, therefore no double counting of blocks can occur.
	· Discussion of basis for using or not using grade cutting or capping.	· A top-cutting methodology was used and undertaken on a domain-by-domain basis for Au, Cu and Co. Top-cuts were selectively chosen via statistical review along with a geospatial review of their location, with the likely effect of their influence on metal contribution considered. Where high grades were identified, populations were trimmed or cut back to an expected high-grade value.
	· The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	· Models were validated using tonnage weighted output grades against equal weighted mean grades and declustered top-cut sample grades. Models were subjected to visual interrogation against input data for response to grade changes both in plan, section and globally. Further validation utilised swath plot analysis to understand model responsiveness to underlying data support to determine areas of extrapolation over interpolation. · Domains were ranked in order of metal contribution to the Greater Carlow project for materiality to the estimation. · Domains that were to be split by resource classification, were validated using Inferred Resources solely, excluding extrapolated unclassified resources.
Moisture	· Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	· Tonnages have been estimated on a dry basis.
Cut-off parameters	· The basis of the adopted cut-off grade(s) or quality parameters applied.	Mineral Resources were reported separately for the open pit and underground using an Au Eq. calculation. Au Eq. factors include payability and downstream costs (NSR). The global Au Eq. formula follows, and includes payability and downstream costs: Au Eq. = Au (g/t) + (Cu (%) x ($Cu_{NSR\ A\$/t}$ / $Au_{NSR\ A\$/t}$)) + (Co (%) x ($Co_{NSR\ A\$/t}$ / $Au_{NSR\ A\$/t}$)) The Table below summarises the inputs into the above equation for Au Eq. The calculation was determined for each weathering interface using the following formula (refer Table above)[Au Eq. = g/t]: · Oxide: Au Eq. = Au(g/t) + ((Cu%) x 0.86)) + (Co%) x 2.31)) o Recovery of 96.0% gold, 61.0% copper and 47.0% cobalt · Transitional: Au Eq. = Au(g/t) + ((Cu%) x 0.81)) + (Co%) x 2.17)) o Recovery of 93.5% gold, 56.0% copper and 43.0% cobalt

Criteria	JORC Code explanation	Commentary
		Fresh Au Eq. = Au(g/t) + ((Cu%) x 1.31)) + (Co%) x 3.96)) o Recovery of 93.0% gold, 90.5% copper and 78.0% cobalt *Open pit - OP cut-off grade - 0.70 g/t Au Eq.* *OXIDE* · Processing cost: A$50.00/t · Mining dilution: 5% · Gold royalty: 2.5%, copper royalty: 5% · Gold price: A$2,600/oz · Copper price: A$12,699/t · Cobalt price: A$90,478/t · NSR: Au - 94.0% Cu - 84.0%, Co - 41.0% *TRANSITIONAL* · Processing cost: A$50.00/t · Mining dilution: 5% · Gold royalty: 2.5%, copper royalty: 5% · Gold price: A$2,600/oz · Copper price: A$12,699/t · Cobalt price: A$90,478/t · NSR: Au - 94.0% Cu - 84.0%, Co - 41.0% *FRESH* · Processing cost: A$50.00/t · Mining dilution: 5% · Gold royalty: 2.5%, copper royalty: 5% · NSR: A$66.64/t · Gold price: A$2,600/oz · Copper price: A$12,699/t · Cobalt price: A$90,478/t · NSR: Au - 94.0% Cu - 84.0%, Co - 41.0% *Underground cut-off grade - 2.00 g/t Au Eq.* *FRESH* · Mining cost: A$80/t · Processing cost: A$50.00/t · Mining dilution: 10% · Gold royalty: 2.5%, copper royalty: 5% · Gold price: A$2,600/oz · Copper price: A$12,699/t · Cobalt price: A$90,478/t · NSR: Au - 94.0% Cu - 84.0%, Co - 41.0%
Mining factors or assumptions	· Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always	· Open pit mining is considered as the appropriate mining method for future studies with an underground reported below the optimised pit outline. The Competent Persons believe that there are Reasonable Prospects for Eventual Economic Extraction based on the outputs of the Whittle™ and MSO optimisations. Open pit optimisation parameters *Modifying factors:*

Criteria	JORC Code explanation	Commentary
	necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Slope angles: o Overburden/oxide: 40° o Transitional: 45° o Fresh: 50° · Dilution: 5% · Mining recovery: 95% · Processing recovery: o Gold overburden/oxide: 96.0% o Gold transitional: 93.5% o Gold fresh:93.0% o Copper overburden/oxide: 61.0% o Copper transitional: 56.0% o Copper fresh: 90.5% o Cobalt overburden/oxide: 47.0% o Cobalt transitional: 43.0% o Cobalt fresh: 78.0% *Revenue factors:* · Gold price: $A2,600/oz · Copper price: A$12,699/t · Cobalt price: A$90,478/t · NSR (including payability, royalty, and transport/refining costs) o Au 94.0% o Cu 84.0% o Co 41.0% *Costs:* · Mining cost: A$2.70 +5c/m depth, below 30mRL/rock transitional - A$0.25/t and fresh - A$0.5/t · Processing costs: A$50.00/t *Royalties:* · Gold - 2.5% (in dore) · Gold - 5% (in concentrate) · Copper - 5% Underground optimisation parameters · The Datamine Mining Stope Optimiser (MSO) was run over Inferred Resource below the optimised pit. · MSO shapes were removed if they occurred in isolation or presented a low likelihood of eventual economic extraction. *MSO parameters:* · Evaluation field: Au Eq. · Au Eq. cut-off grade: >=2.00 g/t · Minimum mining width of 1.5 m with 0.25 m HW and FW dilution (2.0 m) minimum diluted stope shape · Stope geometry run for XZ (E-W) strike 10 m x dip 20 m - Carlow Main · Stope geometry run for YZ (N-S) strike 10 m x dip 20 m - Crosscut and Quod Est · Orebody wireframe used as a control surface

Criteria	JORC Code explanation	Commentary
		Strike max change of 20° · Vertical side length ratio 1.5 (front/back and top/bottom) · Stope waste dilution maximum permittable: 80%
Metallurgical factors or assumptions	· The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	· Chemech Consulting were engaged to undertake a preliminary metallurgical review of the Greater Carlow deposit (July 2022). A summary of the findings is documented below: · Three testwork programmes have been undertaken on the Greater Carlow deposit, two programmes using RC chips to generate three samples from three drillholes. The second using diamond to create two composite samples from twelve drillholes. This data has been used to develop the flowsheet and predict metallurgical performance (grade and recoveries). · Testwork identified a flowsheet that includes a gravity gold circuit, followed by sulphide flotation (producing a separate copper/gold concentrate) · Concentration circuits include separate cleaning circuits with regrinding. · Cyanide leach of the flotation tail to recover residual gold. · Preliminary metallurgical testwork was conducted by ALS Metallurgy in 2019 results are present below: Gold · 48% recovery of gold by using gravity separation. The remaining balance of non-gravity gold is recoverable in sulphide concentrates as a by-product of standard flotation or via CIL scavenging. Copper · Quick floating copper minerals produced a high-grade copper concentrate of approximately 30% Cu. Deleterious elements including arsenic may be managed with a light concentrate polishing using regrind or blend control. Recoveries depending on mineralogy, with 77-85% copper recoveries achieved. Unrecovered copper minerals are represented by non-floating silicates or secondary oxide copper minerals. Cobalt · Cobalt recoveries ranged from 73-79%. Potentially saleable cobalt concentrate grades ranging between 2.3-5.3% Co were produced. Cobaltite (CoAsS) is the dominant cobalt-bearing mineral and therefore intrinsically linked to arsenic affecting its sale price. Given the potentially low-grade nature of the Co concentrate, Artemis believe that the route to Co monetization could include: (1) concentrate sale for blending into a higher-grade feed thus ameliorating the low Co and high As content; (2) potential route via oxidative hydrometallurgy involving concentrate roasting, acid leaching and solvent extraction to form a Co salt; or (3) via some other innovative leaching technique. · Full and further testwork and evaluation is required to resolve the monetization of Co at Greater Carlow. Future Work · It is recommended that additional metallurgical testwork be undertaken to understand how individual comminution and metallurgical responses may differ through the weathered zones for each proposed ore zone. · Further metallurgical drilling at an approximate 50 m to 100 m spacing along strike of the deposit within the optimised pit shell.
Environmental factors or assumptions	· Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable	· No assumptions regarding waste and process residue disposal have been made. · No assumptions of arsenic or sulphur have been made at this stage of the project.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>projects for potential economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</td><td></td></tr>
<tr><td>Bulk density</td><td>· Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</td><td>· There was insufficient density data per domain to accurately estimate density.

· Density was hard coded based on exploratory data analysis, comparison to previous studies and empirical data density values.

· Bulk density data was derived from either downhole geophysical gamma density or from core using water immersion on HQ3 core.

· Good correlation of density between gamma density and diamond density determinations is recorded.

· Bulk density data was coded into the block model based on weathering and mineralised domain. A summary of the values used is shown below:

<table>
<tr><th>Domain</th><th>Weathering</th><th>Bulk density assigned (t/m3)</th></tr>
<tr><td>Mineralised overburden</td><td>Overburden</td><td>1.94</td></tr>
<tr><td>Mineralised oxide</td><td>Oxide</td><td>2.51</td></tr>
<tr><td>Mineralised transitional</td><td>Transitional</td><td>2.73</td></tr>
<tr><td>Mineralised fresh</td><td>Fresh</td><td>2.88</td></tr>
<tr><td>Country rock overburden</td><td>Overburden</td><td>1.94</td></tr>
<tr><td>Country rock oxide</td><td>Oxide</td><td>2.43</td></tr>
<tr><td>Country rock trans</td><td>Transitional</td><td>2.75</td></tr>
<tr><td>Country rock fresh</td><td>Fresh</td><td>2.86</td></tr>
</table>
</td></tr>
<tr><td></td><td>· The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and</td><td>· Gamma density is a quantitative, in-situ measurement of density that accounts for void spaces. The measurements have been calibrated to regular calibration holes in the iron ore deposits of the Pilbara, and on material at the contractors' facilities.

· The water immersion method measurements were determined by measuring the weight of part or the entire sample in air and water and then applying the formula bulk density = weight (air)/ weight (air) - weight (water).

· Samples of drill core were sealed with masonry sealant/wax</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	alteration zones within the deposit.	and allowed to dry prior to bulk density determination.
	· Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	· The gamma density data were considered sufficient in number for all material types, quantitative and unbiased. · Calibration was undertaken using comparison to other holes and to density measured by water immersion. · Density values assigned are robust considering the stage of the project and consummate resource classification.
Classification	· The basis for the classification of the Mineral Resources into varying confidence categories.	· The Greater Carlow deposit is classified as an Inferred Mineral Resource. The cut-off boundary for Inferred to unclassified has been determined based on estimation quality parameters, drill spacing, estimation search pass, extrapolation, and qualitative risk in the underlying geological interpretation. The classification also takes into consideration the level of geological knowledge of the deposit, density data coverage, soluble/insoluble copper speciation and sampling/assaying protocols.
	· Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity, and distribution of the data).	· The classification reflects the overall confidence in the Greater Carlow deposit based on observed continuity at the current drill spacing. · Continuity is consistent at the current drill spacing and orientation.
	· Whether the result appropriately reflects the Competent Person's view of the deposit.	· The Inferred Mineral Resource results are in line with expectations of the Competent Persons. · The Inferred Mineral Resource has been reported within an optimised pit shell and the underground resource constrained to a Mining Stope Optimiser (MSO) run, indicating reasonable prospects of eventual economic extraction. · The Inferred Mineral Resource statement is in line with prior MRE estimations, notably grade and contained ounces.
Audits or reviews	· The results of any audits or reviews of Mineral Resource estimates.	· The MRE has been peer reviewed as part of Snowden Optiro standard internal peer review process by Mr. Ian Glacken FAusIMM(CP) FAIG MIMMM(CEng). Covering, but not exclusive to geological interpretation of mineralised domains, domain coding and compositing, top-cuts, estimation method/suitability and input parameters to the resultant estimate. · Snowden Optiro and Artemis have applied RPEEE factors to the Reportable Resource via the use of a Whittle Shell and MSO. · No reviews external to Snowden Optiro or Artemis have been undertaken on this Mineral Resource estimate.
Discussion of relative accuracy/ confidence	· Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource	· The relative accuracy of the Greater Carlow Mineral Resource Estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. · The Mineral Resource was validated against the input composite data. · The statement relates to a global estimate of tonnes and grade by combining Reportable Resource within the optimised open pit cut-off utilising a cut-off 0.7 g/t Au Eq. and MSO constrained underground resource reported at a cut-off 2 g/t Au Eq.

Criteria	JORC Code explanation	Commentary
	the stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	
	· The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	· Confidence in the Mineral Resource estimate is consummate to guidance in the JORC Code 2012. · The Mineral Resource statement relates to a global estimate of in-situ tonnes and grade.
	· These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	· No production data is available for comparison.

[1] Gold equivalent equations for the oxide, transition and fresh domains are given below:

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

END

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