RNS Number : 0481S
Artemis Resources Limited
12 June 2024

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Artemis Resources Limited

("Artemis" or the "Company")

Rock chip ASSAYS return 6.93 g/t Au and 10.85% Cu,

multiple Gold nuggets discovered

Highlights:

- Recent ground reconnaissance confirms prospective gold and copper targets across Artemis' licence tenure
- **Nickol River Hill South** delivers high grade gold assay of **6.93 Au g/t** in rock chips, inclusive of a peak copper assay of **10.85% Cu**
- **21 gold nuggets** observed at **Sing-Six prospect** in surficial cover with physical characteristics suggesting close to hard rock source
- Further exploration plans under development

Artemis Resources Limited ('**Artemis**' or the '**Company**') (ASX/AIM: **ARV**) is pleased to announce positive results from a ground reconnaissance program testing gold targets within the Company's tenure located in the Pilbara region of Western Australia.

Executive Director George Ventouras commented: *"We are very pleased with the results of this small program as we begin to delve into the prospectivity of the numerous gold targets contained within our tenements.*

Numerous targets have been identified and we are planning to conduct further work around each of these as well as seeking to extend the known mineralised areas across the tenements. We believe further work will result in the delineation of additional prospects that will be developed into attractive drill targets."

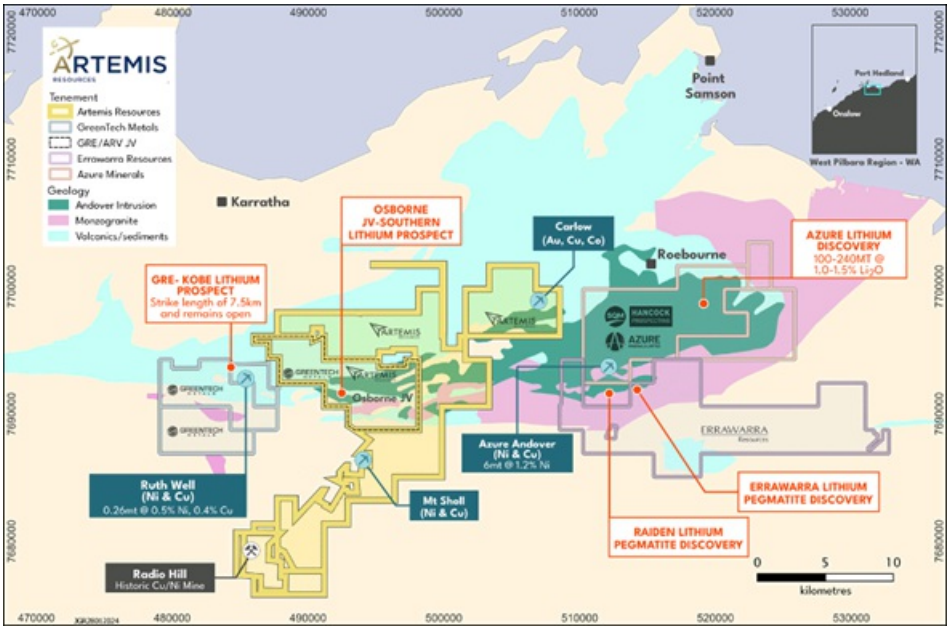

Figure 1. Artemis tenements in the West Pilbara.

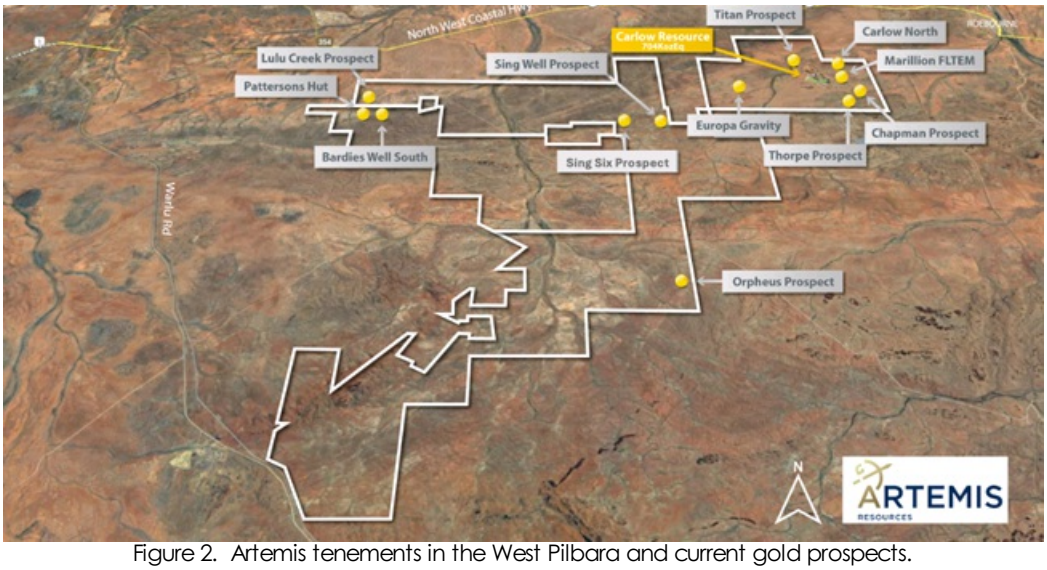

Figure 2. Artemis tenements in the West Pilbara and current gold prospects.

Ground reconnaissance work was undertaken as part of the Company's initial exploration across known historic gold occurrences to assist with validation of some target areas.

This work has confirmed mineralisation in association with **multiple licence-wide structural trends**.

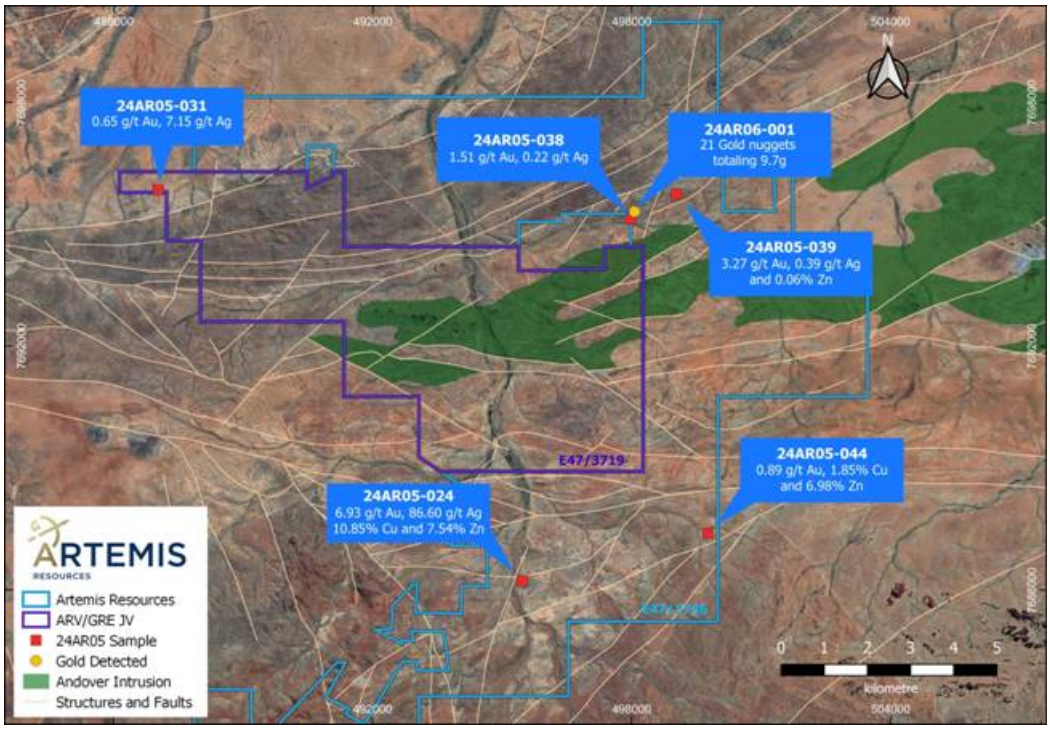

Figure 3. Location of significant rock chip assay results and gold nuggets with structures and faults noted

Figure 4. Iron-oxide-quartz rock chip sample (24AR05-024) collected from mullock heaps around historic workings at the Nickol River Hill South prospect, featuring assay results of **6.93 g/t Au, 88.6 g/t Ag, 10.85% Cu and 7.54% Zn**

The rock chips collected were taken proximate to previously identified targets, including specimens taken from historic workings to confirm mineralisation at these locations.

Significant rock chip assay results received from the recently completed field program are listed in the table below.

Location	Sample No	Easting	Northing	Au GPT	Cu%	ZN%	Ag GPT
Nickol River Hill South	24AR05-024*	495471.00	7686229.00	6.93	10.850	7.540	86.6
Sing-Well prospect	24AR05-039	499039.00	7695747.00	3.27	0.008	0.062	0.39
Sing-Six prospect	24AR05-038*	497985.00	7695133.00	1.51	0.004	0.002	0.22
Orpheus Prospect	24AR05-044	499775.00	7687406.00	0.89	1.850	6.980	9.44
Lulu Creek prospect	24AR05-031	487025.00	7695845.00	0.65	0.003	0.004	7.15
Sing-Six Prospect	24AR05-037	498045.00	7695294.00	0.45	0.030	0.013	0.21
Lulu Creek Prospect	24AR05-028	489391.00	7696489.00	0.23	0.014	0.033	0.52

**Indicates rock chip sample taken from Mullocks pile.*

Table 1. Highlighted rock chip assay results

These rock chip sampling results are encouraging with anomalous results across the Company's portfolio of prospects. Artemis is particularly pleased to have encountered multicommodity results at the Nickol River Hill South prospect, strong gold and silver results at the Lulu Creek prospect and significant gold at the Sing-Six/Sing Well prospect.

The mineralisation occurs as veining which appears to be structurally controlled and associated with multiple shear zones. These shear zones appear to form major structural corridors across the licence area. Assessment of these structural corridors will form the basis of forthcoming field activities.

Sing-Six Gold Nuggets

A very preliminary assessment for coarse grain gold in surface cover was completed using a gold detector at the Sing-Six prospect. This work tested a relatively small area of approximately 25m x 25m in proximity to historic hard rock gold vein workings.

Results returned **21 gold nuggets** (totalling **9.7gms**) up to 15mm in width.

The physical characteristics of the gold include a majority with a high degree of angularity which indicates that they are very close and/or proximal to the likely hard rock source.

Furthermore, some of the gold nuggets occur with attached quartz and iron oxides which compare to the mineralogy of the nearby gold bearing veins.

The Company views the discovery of these nuggets as a tool to assist with near-surface targeting of hard rock gold occurrences, which is now being considered.

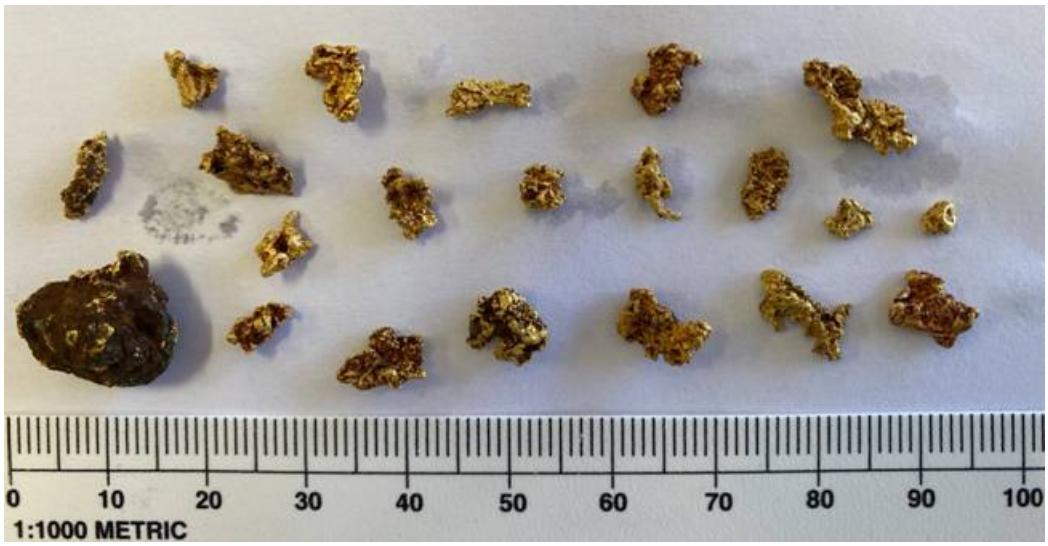

Figure 5. Twenty-one gold nuggets collected (sample 24AR06-001) from the Sing-Six Prospect using metal detector. The physical characteristics of these nuggets indicate a likely 'close to source' relationship and how the discovery of these nuggets can further assist surface targeting toward *in-situ* and hard rock gold occurrences is currently being evaluated.

Next Steps:

Following the completion of this small reconnaissance program, the Company now plans to execute further field programs to evaluate these broad structural zones and these emerging targets.

Furthermore, consideration is being given to expand exploration and build upon the existing resource at Carlow which contains a mineral resource estimate of **704,000oz Au/Eq**[1].

Results from this preliminary program have also provided further confidence for future drilling programs and an initial first target area to be drilled is the Lulu Creek prospect, for which the Company was the recipient of a government grant for co-funded drilling[2].

The Company continues to progress plans to undertake heritage surveys covering the Lulu Creek gold prospect and the Mt Marie lithium prospect. Further updates will be provided shortly with the commencement dates for these surveys.

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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Guy Robertson, Chairman — info@artemisresources.com.au
George Ventouras, Executive Director

WH Ireland Limited (Nomad & Broker)
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About Artemis Resources

Artemis Resources (ASX/AIM: ARV; FRA: ATY; US: ARTTF) is a gold, copper and lithium focused resources company with projects in Western Australia. The Mt Marie Lithium Prospect, the Osborne Lithium JV (Artemis 49%; GreenTech Metals (ASX:GRE) 51%) and the Karratha Gold Project (inclusive of the Carlow gold-copper-cobalt project) in the West Pilbara; and the Paterson Central Gold/Copper project in the Paterson Province (located adjacent to Greatland Gold / Newmont's recent gold-copper discovery at Havieron and only ~42km from the Newmont Telfer gold mine).

Artemis also owns the Radio Hill processing plant, located only 35km from Karratha.

For more information, please visit www.artemisresources.com.au

[1] ASX Announcement, Artemis Resources Ltd, 13 October 2022

[2] ASX Announcement, Artemis Resources Ltd, 13 November 2023

Competent Person Statement

The information in this report that relates to exploration results was prepared by;

Mr Oliver Hirst, a Competent Person who is a member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Hirst is a technical consultant to Artemis Resources. Mr Hirst has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Hirst consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Adrian Hell, BSc (Hons), an advisor and consultant to the Company, is a Member of the AUSIMM, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration 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'. Adrian Hell consents to the inclusion in the report of the information in the form and context in which it appears.

No New Information

To the extent that this announcement contains references to prior exploration results and Mineral Resource Estimates for the Carlow Gold/Copper Project which have been cross referenced to previous market announcements made by the Company, unless explicitly stated, no new information is contained. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

Appendix

Table 1 Rock chip assay results from the 2024 field reconnaissance work

Sample_No	Tenement	Easting	Northing	RL	Au ppm	Cu ppm	Zn ppm	Ag ppm
24AR05-001	E 47/1746	499809	7687476	52	0.01	1,295.00	26.60	0.05

24AR05-002	E 47/1746	499809	7687474	55	0.05	111.50	99.10	0.52
24AR05-003	E 47/1746	499822	7687444	58	0.005	27.20	24.50	0.03
24AR05-004	E 47/1746	499451	7687157	60	0.005	36.30	69.10	0.17
24AR05-005	E 47/1746	499447	7687139	60	0.005	20.90	67.70	0.02
24AR05-006	E 47/1746	499444	7687092	63	0.01	13.05	13.20	0.01
24AR05-007	E 47/1746	498812	7686919	63	0.005	57.30	41.80	0.05
24AR05-008	E 47/1746	498833	7686951	62	0.005	26.20	40.00	0.03
24AR05-009	E 47/1746	498820	7686916	60	0.005	30.40	14.10	0.04
24AR05-010	E 47/1746	498796	7686857	62	0.005	11.40	7.30	0.07
24AR05-011	E 47/1746	498790	7686861	58	0.005	7.67	11.80	0.03
24AR05-012	E 47/1746	497690	7687006	55	0.04	3.23	4.30	0.02
24AR05-013	E 47/1746	496894	7686649	55	0.04	80.10	171.00	0.08
24AR05-014	E 47/1746	496890	7686660	54	0.005	21.50	72.10	0.09
24AR05-015	E 47/1746	495126	7685345	54	0.005	11.40	281.00	0.13
24AR05-016	E 47/1746	495150	7685374	53	0.05	434.00	310.00	0.59
24AR05-017	E 47/1746	495465	7686219	47	0.02	333.00	7,960.00	0.31
24AR05-018	E 47/1746	495450	7686237	75	0.005	163.00	94.90	0.06
24AR05-019	E 47/1746	495447	7686246	59	0.005	1,095.00	54.10	0.11
24AR05-020	E 47/1746	495492	7686273	56	0.005	8.64	94.90	0.03
24AR05-021	E 47/1746	495488	7686259	56	0.005	14.25	17.40	0.04
24AR05-022	E 47/1746	495481	7686244	57	0.005	16.70	21.20	0.02
24AR05-023	E 47/1746	495477	7686236	56	0.16	1,335.00	6,250.00	3.52
24AR05-024*	E 47/1746	495471	7686229	57	6.93	108,500.00	75,400.00	86.60
24AR05-025	E 47/1746	495451	7686181	54	0.005	30.80	49.10	0.05
24AR05-026	E 47/1746	495474	7686161	54	0.005	109.50	146.00	0.08
24AR05-027	E 47/1746	489398	7696497	52	0.04	1,535.00	1,055.00	1.24
24AR05-028	E 47/1746	489391	7696489	55	0.23	138.50	332.00	0.52
24AR05-029	E 47/1746	489391	7696490	55	0.005	5.61	10.40	0.01
24AR05-030	E 47/3719	488200	7695928	37	0.005	71.30	40.80	0.14
24AR05-031	E 47/3719	487025	7695845	38	0.65	34.60	35.10	7.15
24AR05-037	E 47/1746	498045	7695294	50	0.45	304.00	129.50	0.21
24AR05-038*	E 47/1746	497985	7695133	43	1.51	40.10	24.30	0.22
24AR05-039	E 47/1746	499039	7695747	63	3.27	75.20	622.00	0.39
24AR05-040	E 47/1746	499449	7695664	52	0.01	655.00	80.70	0.08
24AR05-041*	E 47/1746	499448	7695662	51	0.04	6.44	42.00	0.04
24AR05-042	E 47/1797	505873	7699464	43	0.02	8.40	36.50	0.04
24AR05-043	E 47/1797	505873	7699465	43	0.005	23.60	6.60	0.03
24AR05-044	E 47/1746	499775	7687406	59	0.89	18,500.00	69,800.00	9.44
24AR05-045	E 47/1746	499800	7687386	63	0.005	26.20	72.30	0.08
24AR05-046	E 47/1746	499799	7687410	61	0.005	17.95	43.30	0.03

Table 2 Metal detector results from Sing-6 Prospect

Sample ID	Sample test area	Easting	Northing	Metal detected number of gold nuggets	Gold nuggets total weight metal detected (grams)
24AR06-001	**25mx25m**	**498025**	**7695328**	**21**	**9.7**

JORC Code, 2012 Edition - Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling	• *Nature and quality of sampling (eg cut channels, random chips, or specific*	• Samples referred to in this report are obtained from random in situ (38) and

techniques	*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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	obtained from random in-situ (36) and workings/mullock (3) rock chip samples collected by Artemis Resources during field reconnaissance exercises. • The random rock chip samples are irregularly spaced which is considered appropriate for preliminary "regional-scale" reconnaissance-level gold exploration. • Rock chips are random, subject to bias and often unrepresentative for the typical widths required for economic consideration. They are by nature difficult to duplicate with any acceptable form of precision or accuracy. • Samples were dispatched to ALS Global Laboratories in Perth for analysis. • Analysis included: - Au-AA26 - Au 50g FA AA finish - ME-MS61L-REE - 60 element four acid digestion and ICP-MS finish. Trigger default overlimit method for Cu,Co, Zn and Ag was requested. • Mine Lab GPZ7000 metal detector used to assess for nugget gold in surface material • Metal detector survey completed across an approximate 25mx25m area in surface material and in proximity with historic mullock heap/workings. • A small 1.8 tonne excavator was used to disturb and fragment hard capped surface material prior to survey • Survey method coverage is approximate only as no gridding was used. Results therefore may be underrepresented. • Nuggets were cleaned using HCl10% and water. • Nuggets weighed using Uniweigh digital scales (2 decimal places) with 50gm calibration weight • Physical characteristics of nuggets assessed using 10X hand-lens
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	• Not applicable, as no drilling was undertaken. • No mention is made in this announcement of exploration results including drilling conducted by other companies on nearby tenements.
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.*	• Not applicable as no details on any drilling carried out by Artemis Resources are included in this announcement.
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.*	• Not applicable due to the reconnaissance nature of the sampling.
Sub-sampling	• *If core, whether cut or sawn and whether*	• No sub sampling of rock chip samples has

Sub-sampling techniques and sample preparation	*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 insitu 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.*	been undertaken as part of this program.
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 factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Rock chip samples were dispatched to ALS Global Laboratories in Perth for analysis using their ME_MS61L (48 elements), MS61L-REE (12 elements) and Au-AA26 (1 element) for 61 elements in total. This technique is considered total for elements assayed. • The laboratory reported the use of standards, blanks and duplicates as part of the analyses for QA/QC. Lab QAQC results have been reviewed by the Competent Person who considers the results to be within acceptable limits. Therefore, the assay results presented are considered valid, accurate and correct. • No standards or blanks were submitted by the company. • The analytical techniques and quality control protocols used are considered appropriate for the data to be used.
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.*	• Rock chip sample and geological information was recorded in the field with coordinates saved from handheld GPS used in the field. • All rock chip samples were inspected and described by Artemis geologists in the field. • Field data is entered into Excel spreadsheets before being stored into an in-house developed Access data management system. • Original lab certificates have been stored electronically. • No analytical result adjustments have been applied. Below detection limit data presented as ½ of the lower detection limit of the method and over the detection limit results presented as the upper detection limit of the method if OG method result not available. •
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (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.*	• Sample points were determined by hand-held GPS which is considered appropriate for the reconnaissance nature of the sampling. • All sample location coordinates are provided in the Geocentric Datum of Australia (GDA94 Zone 50).
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*	• Not applicable due to the reconnaissance nature of the sampling. • No attempt has been made to demonstrate geological or grade continuity between sample points. • No sample compositing is applied to

	Ore Reserve estimation procedure(s) and classifications applied. • *Whether sample compositing has been applied.*	• No sample compositing is applied to samples.
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.*	• Samples were collected from outcropping veins where possible, some samples were taken from historic Mullocks piles where it was not practical to retrieve in situ samples.
Sample security	• *The measures taken to ensure sample security.*	• Sample security is by way of chain of custody.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No review of the sampling techniques has been undertaken.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The project tenement covers an area of 126km^2 and comprises granted tenement: E47/1746 • All Artemis Project tenures are 100% owned by Artemis Resources subsidiary company KML No 2 Pty Ltd E47/1746 & E47/1797 with the exception of E47/3719 which is subject to a GreenTech Metals/Artemis Resources 51%/49% Joint Venture • The tenement is in good standing with DMIRS and there are no known impediments for exploration on these tenements.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous explorers in the region include but not limited to are Westfield Minerals, Consolidated Gold Areas, Open Pit Mining and Exploration, Legend Mining, Agip Exploration, Titan Resources and Fox Resources.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The rock chip sample program was planned identifying historic reported anomalous gold (Au) occurrences from rock chip samples. Some of the Au anomalies are associated with anomalous Copper (Cu), Silver (Ag) and Zinc (Zn).
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level - elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *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*	• Not applicable as no drilling has been undertaken

	understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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.*	• Not applicable as no data aggregation has been used.
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 drill hole 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 (eg 'down hole length, true width not known').*	• Not applicable as surface sampling is reconnaissance in nature.
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 drill hole collar locations and appropriate sectional views.*	• All the appropriate maps are provided in the body of this announcement.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• This announcement discusses the findings of recent reconnaissance sampling and associated assays.
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.*	• All the meaningful exploration data has been included in the body of this announcement.
Further work	• *The nature and scale of planned further work (eg 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.*	• Artemis Resources plans to conduct further ground reconnaissance and sampling in the short term to determine the surface extent both laterally and along strike and also the economic potential of the prospect. Trenching and drilling will also be undertaken if warranted.

END

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