

7 May 2019

## NICKEL AND COPPER RESOURCES AT RUTH WELL

**Indicated Sulphide tonnage now 152kt @ 0.63% Ni and 0.47% Cu for 965 t contained Nickel and 713 t contained Copper**

Artemis Resources Limited (“Artemis” or “the Company”) (ASX:ARV, Frankfurt: ATY, US OTCQB: ARTFF) is pleased to announce this Indicated Mineral Resource reported in accordance with the JORC Code (2012) at the Company’s 70% owned Ruth Well Ni-Cu project (E47/3487) in the West Pilbara region of Western Australia.

This resource estimate is based on 37 Reverse Circulation (RC) drill holes for 2,839m and 1 (one) diamond drill hole of 84.3m is tabulated below in **Table 1**. The December 2018 resource estimate is a sulphide resource classified as an Indicated Mineral Resource totalling 152k tonnes at 0.63% Ni and 0.47% Cu. A small tonnage of oxide material exists but has not been included in the resource estimate due to its small size and the lack of any suitable nearby processing facility which could treat oxide material.

The resource is reported for sulphide material using a lower cut-off grade of 0.3% Ni without capping (top cut).

**Table 1: Ruth Well Indicated Resource**  
**(@ 0.3% Ni cut-off grade)**

	Cut-off grade	Tonnes (000’s)	Ni %	Cu %	Ni Tonnes Metal	Cu Tonnes Metal
<b>Sulphide</b>	0.3% Ni	152	0.63	0.47	965	713

Artemis’ Executive Director Ed Mead commented:

*“This early stage drilling has defined a small nickel-copper target at Ruth Well. Complementary targets such as the Zac Prospect (to the west of Ruth Well) exist with both showing strong electromagnetic anomalism that may provide additional tonnage.*

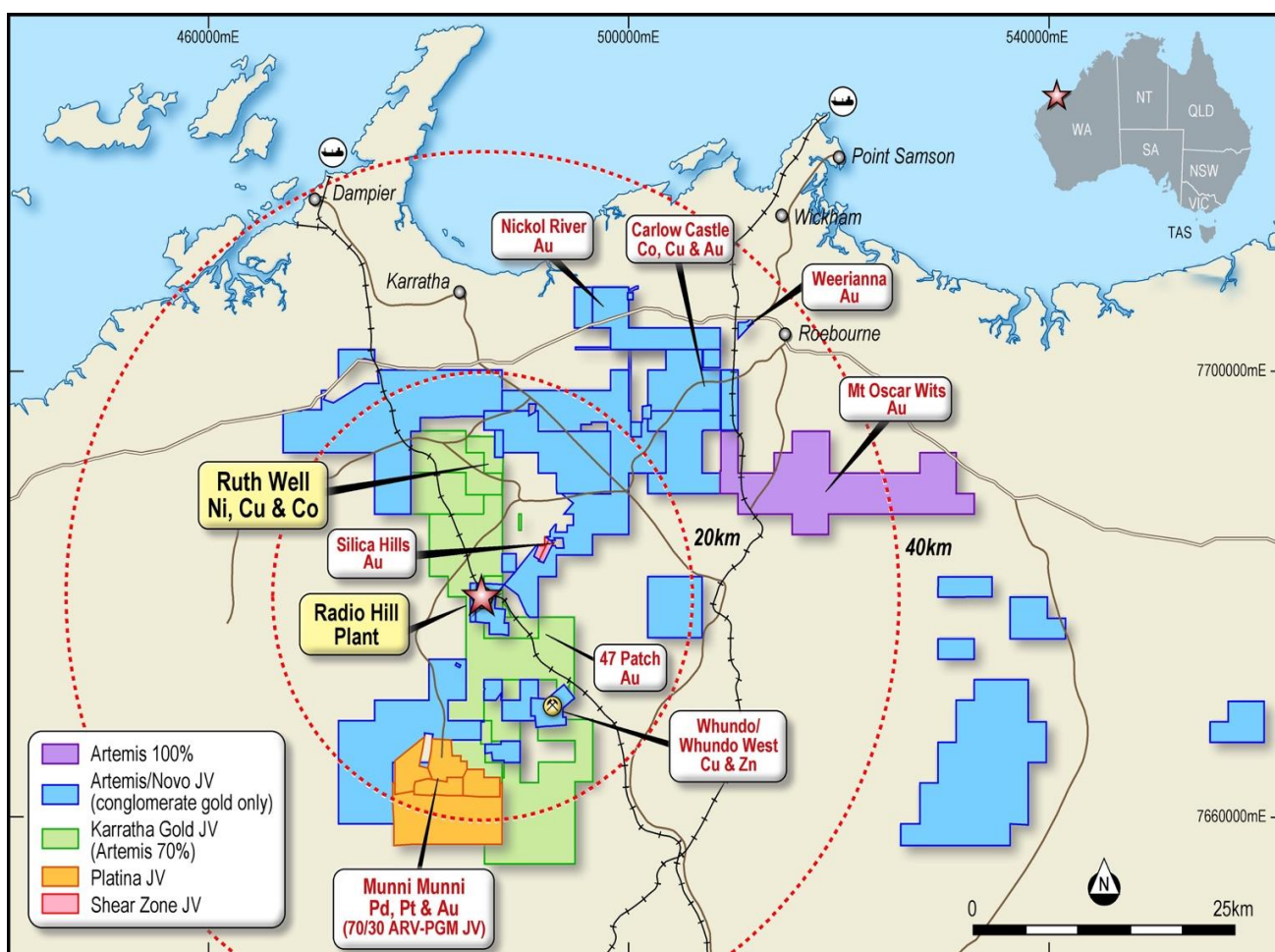
*Artemis sees a greater regional opportunity in this area for gold and as such the Monarch and Conqueror gold targets will take precedent over further base metal investigation across these tenements and a heritage survey will commence over these prospects this Quarter.”*

**RUTH WELL NICKEL - COPPER PROJECT RESOURCE SUMMARY**

The Ruth Well Ni-Cu Project is in the West Pilbara region of Western Australia, ≈185 km south of the city of Karratha and only 18 km by road from Artemis’ 100% owned Radio Hill Processing Plant (**Figure 1**). Access is via the Karratha - Tom Price sealed road and then station access tracks. Ruth Well is on E47/3487 of which 70% is held by Artemis’ wholly owned subsidiary, Elysian Resources Pty Ltd and 30% by Hardrock Resources Ltd.

Artemis drilling of the Ruth Well Ni-Cu deposit was aimed to verify older drilling and to improve the definition of the resource. Previous historic drilling in and around Ruth Well comprised 426 drill holes including open hole percussion, RAB, RC and diamond drilling for a total of approximately 18,827 metres.

Artemis has drilled another 37 RC drill holes and 1 diamond drill hole for an additional 2,923 metres in 2018.



**Figure 1: Ruth Well Ni-Cu Project Location Map.**

The Artemis drilling was completed on a 20 m by 10 m pattern with the Artemis assay data informing the grade estimate.

A considerable amount of drilling was completed prior to the Artemis drilling and prior to the adoption of the JORC 2012 code and guideline for the reporting of mineral resource estimates. It was not possible to discover reports detailing sampling and assay QAQC procedures pertaining to the pre-Artemis drilling.

Therefore, assays from the older drilling have not been used to estimate grades.

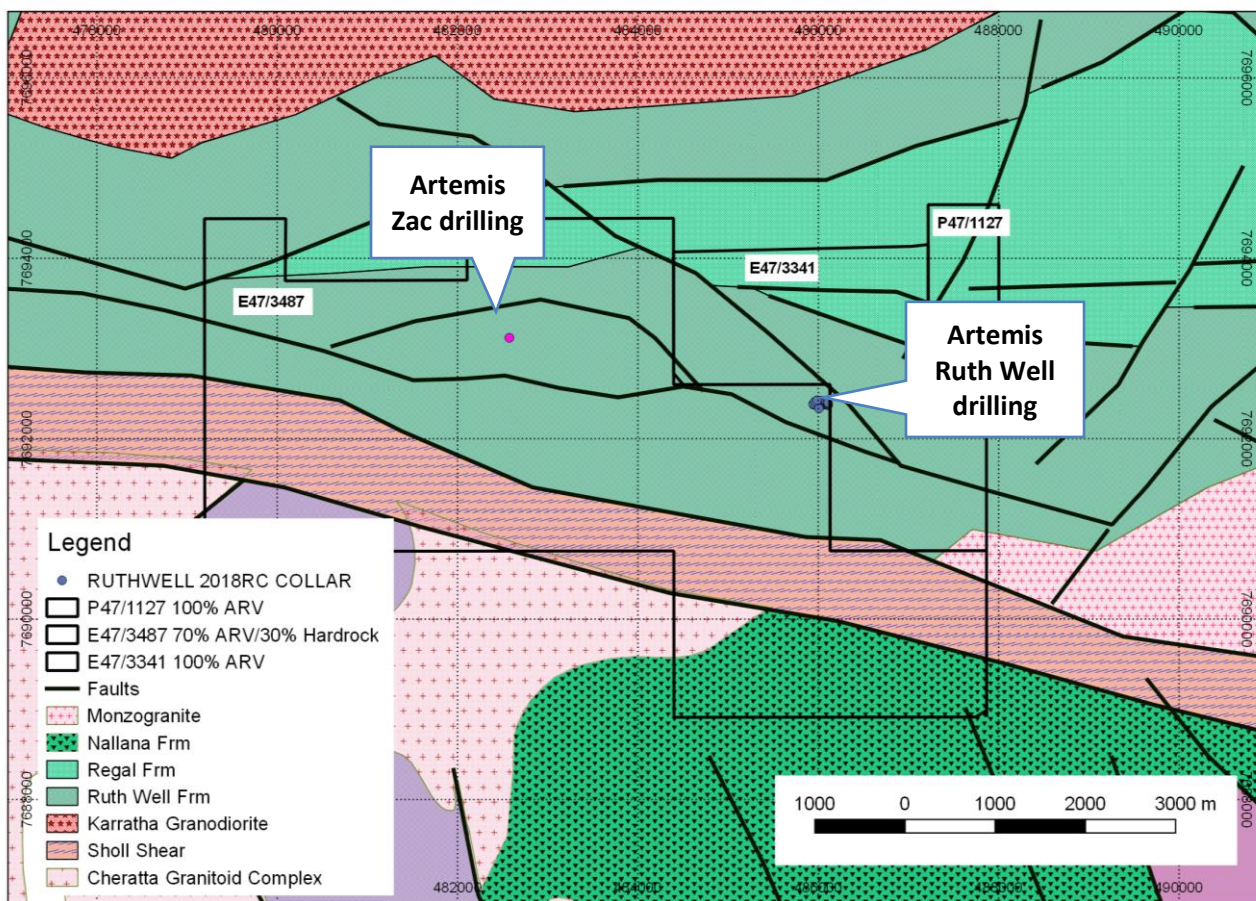
The geological interpretation uses all geological information available to develop three dimensional wireframes of the interpreted mineralisation with the wireframes developed spatially constraining the resource estimate.

**RUTH WELL DEPOSIT GEOLOGY AND MINERALISATION**

The Ruth Well deposit (**Figure 2**) is considered to be an intrusion related Ni-Cu-Co sulphide deposit and was discovered by Westfield NL in 1971. It lies within the Ruth Well Formation of the Roebourne Group on the northern side of the Sholl Shear Zone, a major (ca. 300 km long) shear.

The Ruth Well Formation is dated 3,270-3250 Ma and consists of basalt and spinifex textured ultramafic flows, similar to the extrusive Kambalda nickel deposits of the eastern Yilgarn Craton. At Ruth Well, mineralisation comprises violaritized pentlandite, pyrrhotite, gersdorffite, niccolite, chalcopyrite, and magnetite within serpentinised extrusive peridotite of the Ruth Well Formation.

The mineralisation assemblage is also consistent to the extrusive Kambalda nickel deposits of the eastern Yilgarn Craton. However, there has been and still is considerable debate about the genesis of the deposit given the prevalence of numerous intrusive hosted nickel deposits in the region.



**Figure 2: Local Geology at Ruth Well Nickel-Copper Project (After GSWA Dampier 100,000 sheet 2256).**

## RUTH WELL DRILLING

Drilling methods used at the Ruth Well deposit include:

- Diamond drilling
- RC drilling
- RAB and open hole percussion drilling.

The database includes drilling carried out by a number of previous operators stretching back to the 1960's. Historical data has been sourced from an industry standard digital database (Fox Resources) and original hardcopy data. Recent drill data is derived from the Artemis database.

**Only Artemis diamond drilling and RC drilling drill hole assays inform the resource estimate.**

Ruth Well RC and diamond drillholes are tabulated in **Table 2**. The locations of the Artemis drillholes are shown in **Figure 3**.

**Table 2: Ruth Well diamond drill holes and RC drillholes**

Series*		Count	Hole Type	Depth (m)	Year
<b>Pre Artemis drilling</b>					
07RWDD331	07RWDD33	4	DD	1,387.10	
70RWD02		1	DD	100.58	
71RWD01	71RWD37	18	DD	1,738.39	
72LCD1	72LCD2	2	DD	213.97	
72RWD2	72RWD9	3	DD	324.39	
73LCD1	73LCD6	6	DD	257.70	
RURC101	RURC106	6	RC	274.00	
RWRC101	RWRC245	48	RC	4,250.00	
RWRCD240		1	RCD	482.70	
<b>Subtotal pre 2018</b>		<b>89</b>		<b>9,028.75</b>	
<b>Artemis Drilling</b>					
18RWAD001		1	DD	84.30	2018
ERWRC001	ERWRC037	37	RC	2,839.00	2018
<b>Subtotal 2018</b>		<b>38</b>		<b>2,923.30</b>	
<b>TOTAL</b>		<b>122</b>		<b>11,952.05</b>	



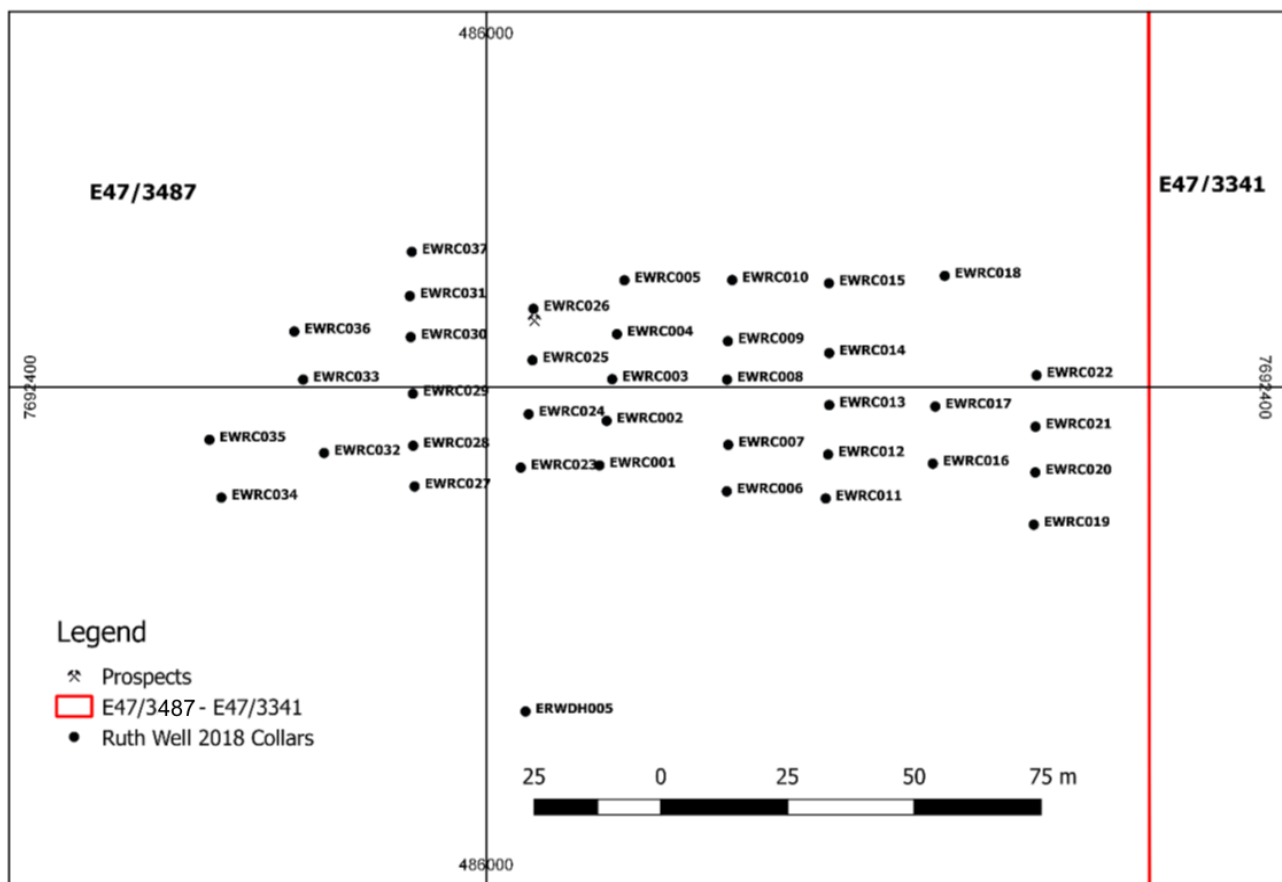


Figure 3: Ruth Well Artemis 2018 drill hole locations (plan view)

## DRILLING TECHNIQUES, SAMPLING AND ASSAY

### Artemis 2018 Drilling, Sampling and Assay

All the drilling by Artemis in 2018, on a nominal 20 m x 10 m grid, was RC using a truck-mounted Schramm 685 RC drilling rig using a 5¼ inch (13.3 mm) diameter face sampling hammer with a single HQ3 diamond drill hole. The RC drilling chips were split using a rig mounted cyclone and static cone splitter over one metre intervals to obtain 2-4 kilogram sub-samples to be dispatched to the laboratory for multi-element analysis including Ni, Cu, Co, S and Au, Pt and Pd within mineralised zones.

A field geologist supervised all the drilling and logged the drill samples for lithologies, weathering, alteration and mineralization. Reference samples were collected for each metre and stored in chip trays for future reference. Sample recoveries are recorded by the geologist in the field during logging and sampling and the recoveries were consistently very high and all samples were dry with no visual evidence of contamination.

All samples were collected and assayed at 1 m intervals and were routinely scanned in the field with a field portable XRF to assist the geologist in logging and supervision of the drilling. Field duplicates in the form of a second split from the static cone splitter were taken every 20<sup>th</sup> sample with standard reference samples and blanks inserted on a rotational basis every 20<sup>th</sup> sample to monitor the quality control of the sampling and chemical analyses.

The HQ3 diamond drilling was completed using a truck mounted Evolution FH3000 Diamond Drill. The core was logged by the site geologist with core recoveries, lithologies, alteration type and intensity, mineralogy's and fractures/structures recorded. All the diamond core was cut by trained technicians along the long-axis using a diamond saw between intervals marked up by the geologist.

The sampling intervals were nominally 1.0 m adjusted to match lithological/mineralisation boundaries.

### Topography and Surveying

A Garmin GPSMap62 hand-held GPS was used to locate the drill hole collars. Nominal hole spacing was 20m x 10m on setup. Once the holes were complete the drill hole collars were surveyed with a DGPS. All the drill holes were gyroscopically surveyed down-hole for dip and azimuth at 30 metre intervals.

Topographic control for the resource modelling was created using the drill hole collar data.

### DATA VERIFICATION, SAMPLE ANALYSIS AND QAQC

#### Drilling records

#### **Artemis 2018 drilling conforms to standards which are described in the attached JORC (2012) Table 1 Section 1 and Table 1 Section 2.**

Based on review of available information of the drilling at Whundo and Radio Hill by Fox Resources, it is thought the Fox drilling (pre-Artemis 2018 drilling) would meet the standards required by the JORC Code (2012) for reporting exploration results and Mineral Resource estimates.

However, all historical (pre-Artemis) assay information has been **excluded** because the records are incomplete with documented procedures for sampling and details of QAQC procedures for sampling and assaying unable to be located. There are no references available that adequately describe the sampling and QAQC methods used by the project owners at Ruth Well prior to Artemis drilling in 2018.

#### **Artemis 2018 drilling sample collection and analysis**

During the RC drilling five samples were bagged into poly-weave sacks and then loaded directly into a bulk bag, each hole was placed in a separate bag, at the end of each day a Hiab equipped truck would collect the labelled bulk bags and deliver direct to the transport depot. These were loaded directly onto the truck and delivered direct to the laboratory. Each bulk bag or hole had a separate sample dispatch form and became a separate analytical batch in the laboratory.

Diamond core was cut with an Almonte core saw according to pre-marked sample intervals determined by a geologist who logged the core. A quarter core sample was processed for dispatch to the assay laboratory following the sample dispatch procedure for RC samples.

The Artemis drill samples were submitted to the independent laboratory ALS Global (Perth) for all chemical analyses. Their sampling and chemical analysis procedures are as follows:

- Samples above 3Kg riffle split.
- Pulverise to 95% passing 75 microns
- 4 Acid Digest ICP-AES Finish (ME-ICP61) – 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.
- Ore Grade 4 Acid Digest ICP-AES Finish (ME-OG62).
- Samples with >1% Ni were subject to 50-gram Fire Assay (PGM-ICP24) with ICP finish – Au, Pt, Pd.

#### **Artemis 2018 drilling QAQC**

Artemis regularly inserted blanks, standards and duplicates in the batches of samples submitted to the laboratory for chemical analysis as part of the QAQC protocol. Standards and blanks were inserted into the sample stream as every 20<sup>th</sup> sample and riffle split duplicate samples were collected at every 20<sup>th</sup> sample.

A total of 207 blanks and standards were inserted by Artemis into the drill sample batches.

Overall the QAQC sampling results show that the sampling and assaying of Co, Cu and Ni is of a high standard with a possible negative bias in some assays.

A total of 171 duplicate pairs were inserted by Artemis into the sample batches dispatched for chemical analysis. A number of Cu and Ni results were outside +/-10% correlation with a slight negative bias with the duplicate Ni assays. Overall the correlations are fair indicating no serious issues with the sampling and assays.

All core samples were followed the same regime as for RC samples, with standard reference samples inserted every 20<sup>th</sup> sample, except that core duplicates were not included.

The laboratory sample preparation and chemical analysis techniques used by ALS Global are considered appropriate for the style of mineralisation at Ruth Well.

### **BULK DENSITY**

The 38 Artemis drill holes and were logged by Wireline Services Group using a down-hole calliper/density logger with the readings taken at 0.1m intervals then averaged over 1 m intervals resulting in a total of 2066 density measurements were from the Artemis drill holes.

To model the densities the down-hole densities were treated as assays and estimated into the model using the same search parameters as the assays.

### **DOWNHOLE SURVEYS**

Artemis drill holes were surveyed at 30m intervals using gyroscopic equipment to overcome the effects of any magnetic minerals that are probable in the mafic/ultramafic country rocks.

This was necessary as a ~5m zone of near massive magnetite adjoins the sulphide mineralization.

### **RESOURCE MODEL (CRITERIA USED FOR CLASSIFICATION)**

The Mineral Resource has been classified as an Indicated Resource on the following basis:

1. the resource is drilled on a close spaced pattern, nominally 20m line spacing and a nominal 10m collar spacing.
2. the majority of the drilling is RC drilling.
3. the mineralisation is interpreted as being an intrusion related Ni-Cu-Co sulphide with internally variable grades of mineralisation that form coherent trends within the deposit
4. A significant amount of historical diamond drilling has meant the geological interpretation is well informed by geological logging and is also supported by geological mapping. The diamond drill hole completed by Artemis was collared approximately 6.5m from a previous diamond drill hole 71RWD2, neither reported major faulting within logs and intersected similar geology and mineralisation in similar positions with similar widths and grades, i.e., 10m @ 1.49%Ni vs 12.5m @ 1.02%Ni, which is an acceptable level of correlation between the two holes indicating that a high degree of confidence can be attributed to geological interpretations based on historical drilling.

### **ESTIMATION METHODOLOGY**

The drilling database received by AM&A for this resource estimate was supplied by the Company as Excel spread sheets including each of drill hole collar coordinates, down-hole surveys, down hole lithology logs, sample recovery data and assays.

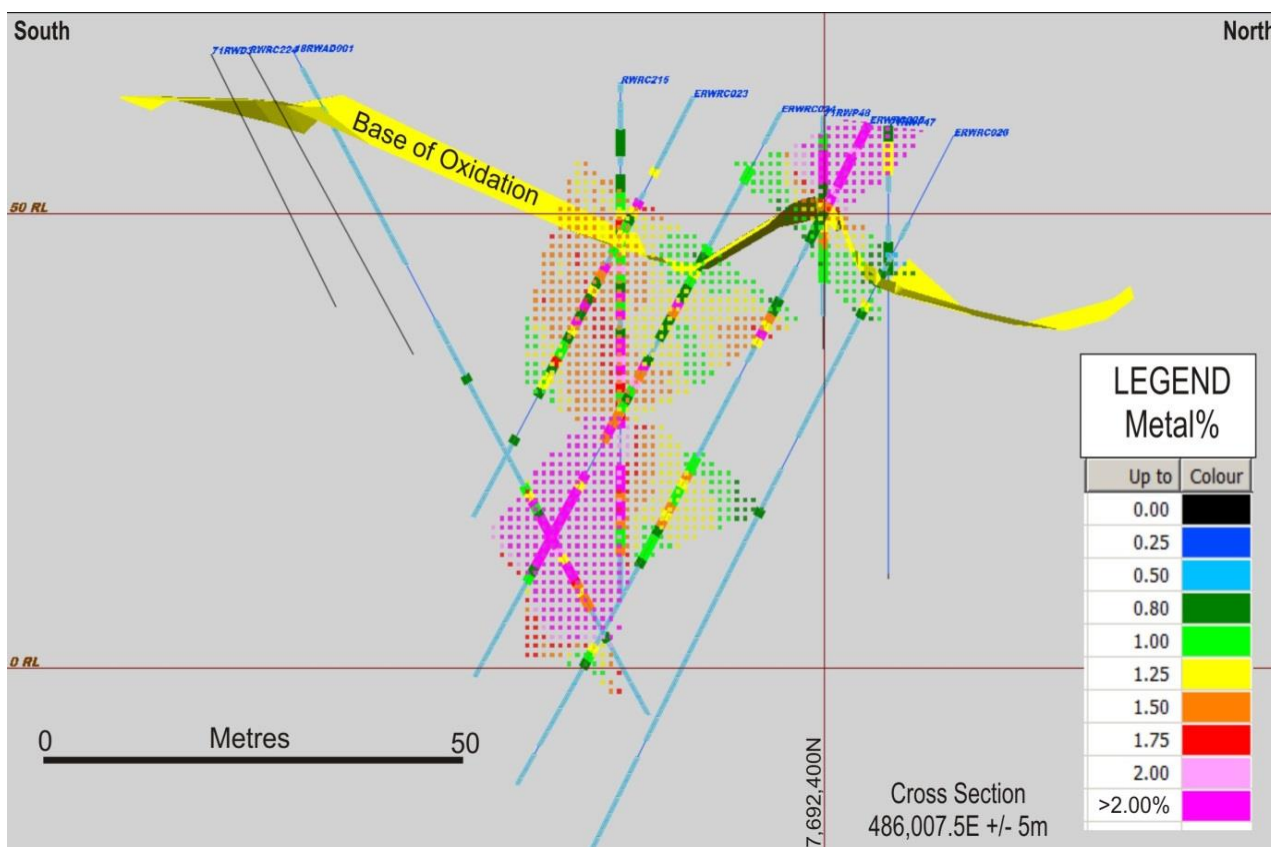
The data as received was entered into MineMap© software and checks were made to ensure that the hole IDs were correct and sample intervals did not overlap or were negative. No errors were found in the data.

The mineralisation was digitised using MineMap© software on cross sections, snapping to the drill intercepts using a generic metal factor algorithm calculated using London Metal Exchange metal prices as at 30/8/2018 >0.5 based on (Metal = Cu% \* \$8346.40/tonne (\$US6,062.50/t) \* 80% metallurgical recovery + 2 \* Ni% \* 18200.32/tonne (\$US13,220.00/t) \* 80% metallurgical recovery). Metallurgical test work has yet to be conducted on Ruth Well mineralisation hence the 80% metallurgical recovery assumed for both metals is predicated upon the metallurgical performance of nickel-copper ores previously treated at Radio Hill.

The Ruth Well material is considered as potential supplementary processing feed should other discoveries be made which could support full refurbishment and restart of the Radio Hill processing plant.

**MINERALISED ENVELOPE BOUNDARY DEFINITION**

The metal unit threshold value of >0.5 was chosen solely to define the mineralised envelope boundary because the nickel and copper are strongly associated with each other within the mineralization and are both potentially metallurgically recoverable. Sample intervals within the interpreted mineralization below the designated 0.5 metal units’ content were included within the lode wireframe where this internal dilution did not drop the total intersection below 0.5 and where it provided improved continuity with other adjacent drill intersections of the mineralization, **Figure 4**.



**Figure 4: Typical cross section 486,007E +/- 5 m showing resource model and drill holes colour coded by Metal % (i.e. Cu % + Ni %\*2).**

The mineralised zones on each cross-section were then linked by wireframes to produce “solids”. The base of oxidation was triangulated from the drill hole geology logs. These wireframes were extended along strike beyond the last mineralised drill intercept by a maximum of 5 m, one quarter of the nominal drill line spacing, and down-dip by half way to a limiting drill hole or by a maximum of 25 m.



Only the Ni and Cu metal assays from the Artemis drilling were then estimated into the model cells using an Inverse Distance Cubed (ID<sup>3</sup>) algorithm applied to Ni and Cu assays of drill hole samples within the mineralised envelope wireframes.

### GRADE CUTTING

The Cu and Ni grade populations both have a typical single population log normal distribution with almost all assays less than 2% and without a significant number of high-grade outliers, (Figure . Unlike typical gold populations with nugget effects and extreme high-grade outliers, cutting the high Cu and Ni grades has no significant effect to the modelling.

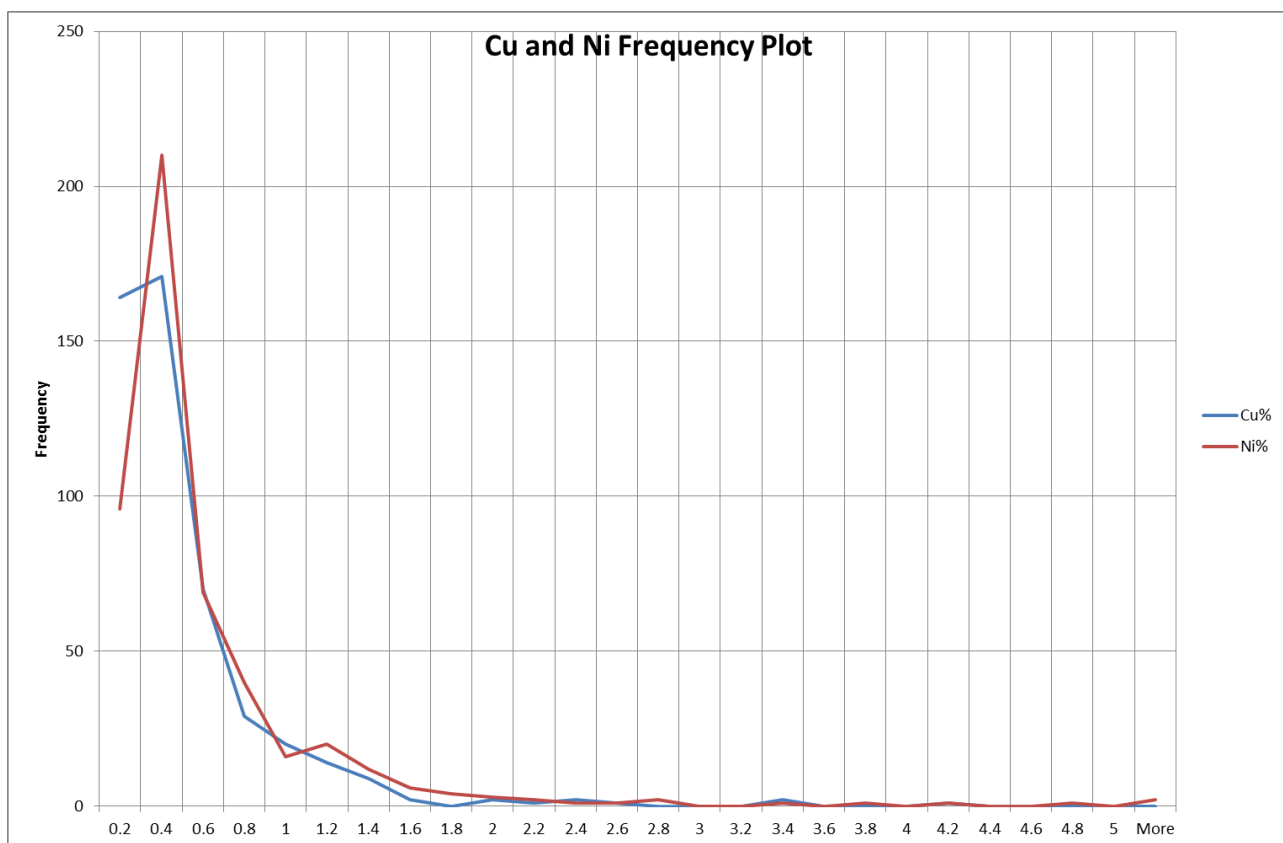


Figure 5: Cu and Ni frequency plots.

There has been no mining within the modelled resource area.

### RESOURCE ESTIMATE

Newly obtained data informing this resource estimate is based on 37 Reverse Circulation (RC) drill holes for 2,839m and 1 (one) diamond drill hole of 84.3m. With regard to this resource estimate:

- the resource is drilled on a relatively close spaced pattern, nominally 20m line spacing and 10m collar spacing yielding a nominal 9m down dip spacing.
- Interpretations for wireframing were extended; along strike from the last mineralised intercept by a maximum of 5m, one quarter of the nominal drill section spacing, and down dip from the last mineralised intercept by a maximum of 25m.
- the majority of the drilling is RC drilling.
- the mineralisation is interpreted as being syngenetic massive sulphides associated with a mafic intrusive complex.

- The closeness of the drilling and the syngenetic character of the mineralization have resulted in the resource being classified as an Indicated Resource.

AM&A estimated the total Indicated Resource (**Table 3**) at Ruth Well to be **152,000 tonnes at 0.63% Ni and 0.47% Cu based on the mineralised zone wireframes (at a 0.3% Ni lower grade cut-off) but with no upper grade cuts,**

The lower cut-off grade of 0.3% Ni for sulphide material within the wireframes is estimated to be the minimum grade required to cover processing costs (i.e. the marginal cut-off grade). The estimated cost of treatment through the refurbished plant is \$32-\$42/t for sulphide ores. Mining at Ruth Well is assumed to be an open pit mining scenario, based on its shallow depth (ASX release 6 March 2018).

Similar Ni-Cu ore from the Radio Hill underground mine was processed through the Radio Hill plant previously with a high-quality nickel-copper concentrate being produced for export but the validity of these assumptions will be verified via future mining studies and metallurgical testing programs.

**Table 3: AM&A Resource Estimate for the Ruth Well Ni-Cu Project.**

**(INDICATED RESOURCES 0.3% Ni cut-off grade)**

	<b>Cut-off grade</b>	<b>Tonnes (000's)</b>	<b>Ni %</b>	<b>Cu %</b>	<b>Ni Tonnes Metal</b>	<b>Cu Tonnes Metal</b>
<b>Sulphide</b>	0.3% Ni	152	0.63	0.47	965	713

The 2012 JORC Code, Table 1, Sections 1, 2 and 3 are appended at the end of this announcement.

#### **Other Modifying Factors**

It has been assumed that the mineral resources at Ruth Well will be mined using open cut mining methods as the bulk of the resource is above 50m in vertical depth below natural surface and more suited to this type of extraction with the mined material trucked to Artemis' nearby processing plant Radio Hill. The Company has not yet considered other material modifying factors.

#### **LOOKING FORWARD**

The resource is effectively drilled out in all directions although there may be some very limited potential for further mineralization with further drilling to the west. The sulphide portion could represent an opportunistic mining target within close proximity to the Radio Hill infrastructure and given additional resource development work and favourable commodity prices, this target would be reassessed for future processing as supplementary nickel sulphide feed.

For further information on this announcement or the Company generally, please visit our website at [www.artemisresources.com.au](http://www.artemisresources.com.au) or contact:

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**COMPETENT PERSONS STATEMENT**

The information in this announcement that relates to the Ruth Well Project Resource is based on the Ruth Well Project Resource Report written by Mr Philip A Jones, who is a Member of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Mr Jones is a consultant working for Al Maynard & Associates (AM&A) who were engaged by Artemis Resources to prepare the report and undertake the resource estimation for the Ruth Well Project for the period ending 30 September 2018. Mr Jones 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 Jones consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

**FORWARD LOOKING STATEMENTS AND IMPORTANT NOTICE**

This report contains forecasts, projections and forward-looking information. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions it can give no assurance that these will be achieved. Expectations and estimates and projections and information provided by the Company are not a guarantee of future performance and involve unknown risks and uncertainties, many of which are out of Artemis' control.

Actual results and developments will almost certainly differ materially from those expressed or implied. Artemis has not audited or investigated the accuracy or completeness of the information, statements and opinions contained in this announcement. To the maximum extent permitted by applicable laws, Artemis makes no representation and can give no assurance, guarantee or warranty, express or implied, as to, and takes no responsibility and assumes no liability for the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omission from, any information, statement or opinion contained in this report and without prejudice, to the generality of the foregoing, the achievement or accuracy of any forecasts, projections or other forward looking information contained or referred to in this report.

Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities.

**BACKGROUND INFORMATION ON ARTEMIS RESOURCES**

Artemis Resources Limited is an exploration and development company focussed on its large (~2,400 km<sup>2</sup>) and prospective base, battery and precious metals assets in the Pilbara region of Western Australia. Artemis owns 100% of the Radio Hill processing plant and infrastructure, located approximately 35 km south of the city of Karratha.

The Company is evaluating 2004 and 2012 JORC Code compliant resources of gold, nickel, copper-cobalt, PGE's and zinc, all situated within a 40 km radius of the Radio Hill plant.

Artemis have signed Definitive Agreements with Novo Resources Corp. ("Novo"), which is listed on Canada's TSX Venture Exchange (TSXV:NVO), and pursuant to the Definitive Agreements, Novo has satisfied its expenditure commitment, and earned 50% of gold (and other minerals necessarily mined with gold) in conglomerate and/or paleoplacer style mineralisation in Artemis' tenements within 100 km of the City of Karratha, including at Purdy's Reward ("the Gold Rights"). The Gold Rights do not include:

- (i) gold disclosed in Artemis' existing (at 18 May 2017) JORC Code Compliant Resources and Reserves; or
- (ii) gold which is not within conglomerate and/or palaeoplacer style mineralisation; or
- (iii) minerals other than gold.

Artemis' Mt Oscar tenement is excluded from the Definitive Agreements. The Definitive Agreements cover 33 tenements / tenement applications that are 100% owned by Artemis.

Pursuant to Novo's successful earn-in, two 50:50 joint ventures have been formed between Novo's subsidiary, Karratha Gold Pty Ltd ("Karratha Gold") and two subsidiaries of Artemis (KML No 2 Pty Ltd and Fox Radio Hill Pty Ltd). The joint ventures are managed as one by Karratha Gold with Artemis and Novo contributing to further exploration and any mining of the Gold Rights on a 50:50 basis.

Table 4: Collar Locations used in Resource Estimate

Hole Id	Type	MGA E Zone 50	MGA N Zone 50	RL (m)	Depth (m)	Dip	Azimuth
18RWAD001	DDH	486008	7692337	67.835	84.3	-50	360
ERWRC0001	RC	486022	7692385	61.649	60	-60	180
ERWRC0002	RC	486024	7692393	60.453	66	-60	180
ERWRC0003	RC	486025	7692402	59.544	84	-60	180
ERWRC0004	RC	486026	7692410	58.482	96	-60	180
ERWRC0005	RC	486027	7692421	57.466	90	-60	180
ERWRC0006	RC	486047	7692380	60.711	72	-60	180
ERWRC0007	RC	486048	7692389	59.707	72	-60	180
ERWRC0008	RC	486047	7692401	58.421	84	-60	180
ERWRC0009	RC	486048	7692409	57.701	90	-60	180
ERWRC0010	RC	486048	7692421	57.21	102	-60	180
ERWRC0011	RC	486067	7692378	59.46	60	-60	180
ERWRC0012	RC	486067	7692387	58.113	72	-60	180
ERWRC0013	RC	486068	7692397	57.722	84	-60	180
ERWRC0014	RC	486068	7692407	56.913	90	-60	180
ERWRC0015	RC	486068	7692420	57.087	102	-60	180
ERWRC0016	RC	486088	7692385	56.523	84	-60	180
ERWRC0017	RC	486089	7692396	56.04	90	-60	180
ERWRC0018	RC	486090	7692422	57.157	102	-60	180
ERWRC0019	RC	486108	7692373	56.22	72	-60	180
ERWRC0020	RC	486108	7692383	55.781	84	-60	180
ERWRC0021	RC	486108	7692392	55.134	102	-60	180
ERWRC0022	RC	486109	7692402	54.831	102	-60	180
ERWRC0023	RC	486007	7692384	62.868	54	-60	180
ERWRC0024	RC	486008	7692395	61.179	72	-60	180
ERWRC0025	RC	486009	7692405	59.962	84	-60	180
ERWRC0026	RC	486009	7692415	58.592	90	-60	180
ERWRC0027	RC	485986	7692381	63.869	54	-60	180
ERWRC0028	RC	485986	7692389	62.805	60	-60	180
ERWRC0029	RC	485986	7692399	61.409	72	-60	180
ERWRC0030	RC	485985	7692410	59.762	84	-60	180
ERWRC0031	RC	485985	7692418	58.644	84	-60	180
ERWRC0032	RC	485968	7692387	62.39	42	-60	180
ERWRC0033	RC	485964	7692401	60.459	60	-60	180
ERWRC0034	RC	485948	7692378	61.289	48	-60	180
ERWRC0035	RC	485945	7692390	60.397	72	-60	180
ERWRC0036	RC	485962	7692411	59.449	60	-60	180
ERWRC0037	RC	485985	7692426	57.814	42	-60	180

**JORC Code, 2012 Edition – Table 1 (extracted from AM&A resource estimate report)**
**SECTION 1 SAMPLING TECHNIQUES AND DATA**
**THIS SECTION REFERS TO THE ARTEMIS 2018 RC DRILLING PROGRAM ONLY**

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Reverse Circulation (RC) drilling was carried out Topdrill on the Ruth Well Project 2018.</li> <li>The resource drilling comprised of 37 RC and 1 diamond drill holes totalling 2923.3 metres. No previous drilling work was used in the resource grade estimation.</li> <li>All samples were analysed using a portable XRF instrument (Innovex). Initial methodology trialling the units has been to make a single randomly placed measurement on the drill sample bag. Optimum sampling time is 90 seconds per measurement.</li> <li>Mineralised zones were identified visually during field logging, and sample intervals selected by the supervising geologist.</li> <li>Samples from each metre were collected through a rig-mounted cyclone and split using a rig-mounted static cone splitter.</li> <li>Field duplicates were taken and submitted for analysis.</li> <li>All the diamond core was cut by trained technicians along the long-axis using a diamond saw between intervals marked up by the geologist. The sampling intervals were nominally 1 m adjusted to match lithological/mineralisation boundaries.</li> <li>Information regarding historic drilling data has been compiled from open-file mineral exploration reports through the Western Australian Department of Mines, Industry Regulation and Safety (DMIRS) WAMEX website.</li> <li>Historic drilling at Ruth Well was completed by Westfield NL between 1969 and 1975, Titan Resources between 1989 and 2002, and by Fox Resources Ltd between 2004 and 2015. Drilling completed was a combination of diamond drilling, rotary air blast drilling, percussion drilling, and reverse circulation drilling.</li> <li>Assays for Au, Co, Cu, Fe, Mg, Ni, Pt, Pd, S, Cr, Zn &amp; Pb have been variably completed on samples within the historic dataset, although not all of these elements have been analysed on all samples, and no description of methodologies used or original laboratory reports have been located to date. The absence of any QA/QC information requires the historical data to be</li> </ul>



Criteria	JORC Code explanation	Commentary
		ignored for resource estimation purposes.
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Reverse Circulation drilling at Ruth Well was completed by a truck-mounted Schramm 685 RC drilling rig using a 5¼ inch diameter face sampling hammer.</li> <li>• The HQ3 diamond drilling was completed using a truck mounted Evolution FH3000 Diamond Drill.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sample recoveries are recorded by the geologist in the field during logging and sampling.</li> <li>• If poor sample recovery is encountered during drilling, the supervising geologist and driller endeavour to rectify the problem to ensure maximum sample recovery.</li> <li>• Visual assessments are made for recovery, moisture, and possible contamination.</li> <li>• A cyclone and static cone splitter were used on the RC drill rig to ensure representative sampling and was routinely inspected and cleaned.</li> <li>• Sample recoveries during drilling completed by Artemis were high, and all samples were dry.</li> <li>• Insufficient data exists at present to determine whether a relationship exists between grade and recovery.</li> <li>•</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All RC drill chip samples are geologically logged at 1m intervals from surface to the bottom of each drill hole. It is considered that geological logging is completed at an adequate level to allow appropriate future Mineral Resource estimation.</li> <li>• Geological logging is considered semi-quantitative due to the limited geological information available from the Reverse Circulation method of drilling.</li> <li>• All RC drill holes completed by Artemis during the current program have been logged in full.</li> <li>• All diamond core is lithologically logged and sample intervals defined by mineralisation.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The RC drilling rig was equipped with a rig-mounted cyclone and static cone splitter, which provided one bulk sample of approximately 20-30 kilograms, and a representative sub-sample of approximately 2-4 kilograms for every metre drilled.</li> <li>• The sample size of 2-4 kilograms is considered appropriate and representative of the grain size and mineralisation style of the deposit; duplicate samples were collected and submitted for analysis confirming subsample representation.</li> <li>• The majority of samples were dry. Where wet sample was encountered, the cleanliness of the cyclone and splitter were closely monitored by the supervising geologist and maintained to a satisfactory level to avoid contamination and ensure representative samples were being</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>collected.</li> <li>Diamond core is cut in half by trained technicians along the long-axis using with an Almonte automated core cutting machine using cradles.</li> <li>The sampling intervals were marked up by the geologist, nominally 1m intervals adjusted to lithological/mineralisation boundaries.</li> <li>RC duplicate samples were collected and submitted for analysis. Reference standards inserted during drilling.</li> </ul>
<b>Quality of assay data and laboratory test:</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>ALS (Perth) were used for all analysis of drill samples submitted by Artemis. The laboratory techniques below are for all samples submitted to ALS and are considered appropriate for the style of mineralisation defined within the Ruth Well Project area: <ul style="list-style-type: none"> <li>Samples above 3Kg riffle split.</li> <li>Pulverise to 95% passing 75 microns</li> <li>50-gram Fire Assay (PGM-ICP24) with ICP finish – Au, Pt, Pd; &gt;1% Ni samples only.</li> <li>4 Acid Digest ICP-AES Finish (ME-ICP61) – 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.</li> <li>Ore Grade 4 Acid Digest ICP-AES Finish (ME-OG62)</li> </ul> </li> <li>Standards were used for external laboratory checks by Artemis.</li> <li>Duplicates were used for external laboratory checks by Artemis.</li> <li>Portable XRF (pXRF) analysis was completed using Innovex Delta unit. XRF analysis was completed on the single metre sample bulk drill sample retained on site. Further statistical analysis will be completed to better determine the accuracy and precision of the pXRF unit based on laboratory assay results.</li> <li>Portable XRF results are considered semi-quantitative and act as a guide to mineralised zones and sampling.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>At least two company personnel verify all significant results.</li> <li>No twinned holes were completed.</li> <li>All geological logging and sampling information is completed firstly on to paper logs before being transferred to Microsoft Excel spreadsheets..</li> <li>No adjustments of assay data are considered necessary.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>A Garmin GPSMap62 hand-held GPS was used to define the pre drilling location of the drill hole 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. The collars of all the completed holes were subsequently picked up with DGPS with an accuracy of within 1 cm and</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>these coordinates were used for the resource modelling.</p> <ul style="list-style-type: none"> <li>• Downhole surveys were captured at 30 metre intervals for the drill holes completed by Artemis.</li> <li>• The grid system used for all Artemis drilling is GDA94 (MGA 94 Zone 50)</li> <li>• Topographic control is obtained from surface profiles created by drill hole collar data.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Artemis drilling was on a nominal 20 m x 10 m grid inclined at 60 degrees to the south.</li> <li>• The drill hole spacing and distribution is sufficient for the resource modelling and reported resource classification.</li> <li>• No sample compositing has been used for drilling completed by Artemis. All results reported are the result of 1 metre downhole sample intervals.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill holes were located in order to intersect the target at an angle perpendicular to strike direction. As the target structures were steep to moderately dipping, all Artemis drill holes were angled at -60 degrees.</li> <li>• The intersection angle of the drilling with respect to the mineralisation was variable, making most drill intersections longer than the true width of the mineralisation. The resource modelling software uses the data in 3D and so compensates for the wider apparent thicknesses.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The chain of custody is managed by the supervising geologist who places calico sample bags in polyweave sacks. Up to 5 calico sample bags are placed in each sack. Sacks from individual holes were placed into bulk bags, each bulk bag is labelled with: <ul style="list-style-type: none"> <li>○ Artemis Resources Ltd</li> <li>○ Address of laboratory</li> <li>○ Sample range</li> </ul> </li> <li>• Samples were delivered by Artemis personnel to the transport company in Karratha on pallets.</li> <li>• The transport company then delivers the samples directly to the laboratory.</li> </ul>
<b>Audits or review</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Data is validated upon up-loading into the master database. Any validation issues identified are investigated prior to reporting of results.</li> </ul>

## SECTION 2 REPORTING OF EXPLORATION RESULTS

## THIS SECTION REFERS TO THE ARTEMIS 2018 RC DRILLING PROGRAM ONLY

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Ruth Well is on E47/3487 of which 70% is held by Artemis's wholly owned subsidiary, Elysian Resources Pty Ltd. Other tenements forming the Ruth Well project, E 47/3341 and P 47/1127 are held by 100% owned subsidiaries, Hard Rock Resources Ltd (E47/3341), and Armada Mining Pty Ltd (P47/1127).</li> <li>These tenements form a part of a broader tenement package that comprises the West Pilbara Project.</li> <li>This tenement is in good standing and no known impediments exist (see map provided in this report for location).</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The most significant work to have been completed historically in the Ruth Well area was conducted by Westfield NL between 1969 and 1975, Titan Resources between 1989 and 2002, and by Fox Resources Ltd between 2004 and 2015.</li> <li>These companies completed diamond drilling, rotary air blast drilling, percussion drilling, and reverse circulation drilling.</li> <li>Titan Resources completed a TEMPEST AEM survey in 2000 and Fox Resources Ltd completed an airborne VTEM HEM survey in 2006.</li> <li>The historic VTEM HEM (2006) and TEMPEST AEM (2000) surveying provided coverage over the broader Ruth Well project area, however given the high base frequency utilised (25Hz) these surveys were unable to resolve highly conductive EM targets amongst broader-areally extensive stratigraphic/formational conductive units.</li> <li>Fox completed a ground-based SQUID EM survey in 2007, on targets separate to those identified by Artemis.</li> <li>Compilation, validation, and assessment of historic drilling completed by Westfield, Titan Resources and Fox Resources is ongoing.</li> <li>All exploration and analysis techniques conducted by Westfield, Titan and Fox are considered to have been appropriate for the style of deposit.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Ruth Well deposit is considered to be an intrusion related Ni-Cu-Co sulphide deposit, with mineralisation having undergone remobilisation due to subsequent tectonic activity, although there is considerable debate given the similarities to the Kambalda style komatiitic nickel deposits.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the</li> </ul>	<ul style="list-style-type: none"> <li>Collar information for all drill holes reported is provided in the body of this report.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> <ul style="list-style-type: none"> <li>● <i>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.</i></li> </ul>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>● <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>● <i>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.</i></li> <li>● <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>● All intervals reported are composed of 1 metre down hole intervals for Reverse Circulation drilling, and lithological intervals are used for Diamond core and are therefore length weighted.</li> <li>● No upper or lower cut-off grades have been used in reporting results.</li> <li>● No metal equivalent calculations are used for reporting Exploration Results in this report.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>● <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>● <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>● <i>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’).</i></li> </ul>	<ul style="list-style-type: none"> <li>● True widths of mineralisation have not been calculated for this report, and as such all intersections reported are down-hole thicknesses and compensated for in 3D for the resource modelling.</li> <li>● Due to the moderately to steeply dipping nature of the mineralised zones, it is expected that true thicknesses will be less than the reported down-hole thicknesses.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>● <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should</i></li> </ul>	<ul style="list-style-type: none"> <li>● Appropriate maps and sections are available in the body of this report.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Reporting of results in this report is considered balanced.</li> <li>Only Artemis drilling results and data have been considered in the resource estimate and all Artemis drill holes are listed in Table 4.</li> <li>None of the available historical data has been used to estimate grade in the resource estimate.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Targeting for the RC drilling completed by Artemis was based on compilation of historic exploration data.</li> <li>There is no other relevant data to report on.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions, depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>The results at the Ruth Well project warrant a Whittle© mining study as part of a Pre-Feasibility study for mining the deposit.</li> <li>Drilling is also planned elsewhere on other targets to test geophysical targets generated by SAM surveys with GSEM data and follow up FLTEM.</li> <li>A Geochemical sampling program has also been undertaken.</li> <li>A Program of Works for further drilling has been submitted to DMIRS.</li> </ul>

## SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

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

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>Data used as received but checked for Hole ID and sample interval errors by MineMap © software. Some RC sample assays in database were checked against laboratory spread sheets and no errors were found.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Two representatives from AM&amp;A (A. Maynard &amp; P. Jones) have visited the site to observe the logistics and geology recently in preparation of this report. Most recently the author visited the Ruth Well deposit on 20 July 2018, confirming the drill hole locations, discussed the regional and local geology and drilling and sampling procedures used by Artemis with Allan Younger. Phil Jones also visited the nearby Radio Hill processing plant where any ore mined at Ruth Well may be processed.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>The geological interpretation is based on a relatively dense grid of drill holes at a nominal 20 m x 10 m spacing so that the geological interpretation is considered to be reliable.</li> <li>There are no other reasonable geological interpretations based on the available data and information.</li> <li>The resource model was confined by wireframes based on the geological interpretation.</li> <li>The mineralisation is controlled by the geology, with interpretations supported by drill hole data.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The mineralisation is effectively closed off down dip to a depth of approximately 80 m.</li> <li>The modelled portion of the deposit approximately 180 m long x 60 m wide.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>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 assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> </ul>	<ul style="list-style-type: none"> <li>The resource modelling was done with MineMap © software by estimating grades into a digital block model using an Inverse Distance Cubed (ID<sup>3</sup>) algorithm confined by wire framing of the 0.5 metal units envelope (where Metal = Cu% + 2*Ni% - based on current metal prices Copper = \$US6,062.50/tonne Nickel = \$US13,220.00/tonne 30/08/2018 at 80% metallurgical recovery for both) with 25 m search radii along and across strike and 5 m vertically up and down dip.</li> <li>This metal unit threshold value was chosen to define the mineralised envelope because the Nickel and copper are intimately associated with each other in the mineralised zone and are both potentially metallurgically recoverable. Sample intervals within the interpreted lode below the</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. Sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> <li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li><i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<p>designated 0.5 metal units' content were included within the lode wireframe where in this internal dilution did not drop the total intersection below 0.5 and where it provided improved continuity with other adjacent drill intersections of the lode.</p> <ul style="list-style-type: none"> <li>AM&amp;A considers that these modelling parameters are appropriate for an Indicated resource of the type and style of mineralisation being modelled.</li> <li>No estimates have been made of non-value components.</li> <li>The block model block size is 1.5 m x 1 m x 1 m, sample intervals of 1 m were used within the mineralisation wireframes. 37 RC drill holes inform the estimate. The majority of the drilling is on a nominal 10 m x 20 m pattern.</li> <li>As stated elsewhere this is a global resource so no SMU modelling has been undertaken.</li> <li>Correlations between variables were not used to estimate variable values.</li> <li>The interpreted geological boundaries are hard boundaries for estimation purposes. This is confirmed by boundary analysis.</li> <li>The model results have been validated visually comparing block grades to adjacent drill holes.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>All tonnes and grades are on a dry basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The lower cut-off grade of 0.3% Ni for Sulphide material within the wireframes is estimated to be the minimum grade required for economic extraction. The validity of these assumptions will be verified via future mining studies and metallurgical testing programs. Similar Ni-Cu ore from the Radio Hill underground mine was processed through the Radio Hill plant with a high quality nickel-copper concentrate being produced for export. It is therefore expected that with the refurbishment of the Radio Hill flotation concentrator the plant could successfully recover fresh sulphide copper and nickel mineralisation as saleable concentrates with metallurgical recoveries of ≈80%.</li> <li>The estimated cost of treatment through the refurbished plant is \$32-\$42/t for sulphide ores. (ARV ASX release 6 March 2018)</li> <li>The lower cut-off grade of 0.3% Ni for sulphide material within the wireframes is estimated to be the minimum grade required to cover processing costs (i.e. the marginal cut-off grade). As mining studies have not been completed this is an estimate only.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It</i></li> </ul>	<ul style="list-style-type: none"> <li>No mining factors were considered for the resource estimate although it was assumed that it is most likely that the deposit will eventually be mined using the open pit mining method as the bulk of the</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>is always 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.</i></p>	<p>resource is above 50m in vertical depth below natural surface and more suited to this type of extraction. It is also assumed that the ore will be trucked to Artemis' nearby processing plant at Radio Hill</p> <ul style="list-style-type: none"> <li>• There is an assumption that Ruth Well may only provide a supplementary feed source to an existing feed source which underpins a decision to refurbish and recommence mineral processing at the Radio Hill plant.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Similar Ni-Cu sulphide ores have previously been successfully processed at the nearby Radio Hill plant with saleable concentrates produced.</li> <li>• It is expected that the nearby Radio Hill plant, once refurbished, could as it previously did, successfully recover the fresh sulphide copper and nickel mineralisation as saleable concentrates.</li> <li>• Predicated on past experience, it is assumed that both the Cu and Ni are recoverable as saleable concentrates and will have metallurgical recoveries of ~80% with future metallurgical testwork required to confirm these recoveries may be achieved. However Ni-Cu sulphide ore has previously been treated through the Radio Hill plant.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>• <i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual 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 green fields 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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No environmental factors were considered. However, the tenement has sufficient suitable area to accommodate a small mining and processing operation including provision for waste disposal.</li> <li>• There are no obvious, especially environmentally sensitive, areas in the vicinity of the deposit although the usual impact studies and government environmental laws and regulations will need to be complied with.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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</i></li> </ul>	<p>The 38 Artemis drill holes were logged by Wireline Services Group using a down-hole caliper/density logger with the readings averaged over 1 m intervals. These insitu bulk densities were then modelled using the same search parameters as the grades.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>alteration zones within the deposit.</i></p> <ul style="list-style-type: none"> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	
<b>Classification</b>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>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).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 37 RC drill holes inform the estimate. The majority of the drilling is on a nominal 10 m x 20 m pattern.</li> <li>• The resource was classified by AM&amp;A as Indicated based on the spacing of the drilling with respect to the variability of the mineralisation and quality of the data used in the estimation.</li> <li>• AM&amp;A believes that this classification to be appropriate.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No audits or reviews of the Mineral Resource Estimates have been made. Alternate models were generated by AM&amp;A using Inverse Distance Cubed and different search radii and these confirmed the reported results.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>• <i>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 within 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.</i></li> <li>• <i>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.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drill hole spacing is adequate to provide sufficient confidence in the resource estimate at the reported resource category. The quality of the data used for the modelling is considered to be reasonable for the reported resource estimate.</li> <li>• All quoted estimates are global for the deposit.</li> </ul>