ARTEMIS RESOURCES

21 December 2018

ASX : ARV
FRANKFURT : ATY
U.S. OTCQB : ARTTF

## GOLD, COPPER AND COBALT IN THE PILBARA

ARTEMIS RESOURCES LIMITED IS AN AUSTRALIAN MINERAL DEVELOPER ADVANCING ITS WEST PILBARA BASE, BATTERY AND PRECIOUS METALS ASSETS TOWARDS PRODUCTION.

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

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**ASX / MEDIA ANNOUNCEMENT**

# SHALLOW NICKEL-COPPER RESOURCE DEFINED AT RADIO HILL

**Indicated JORC resource of 1.15 Mt @ 0.52% Ni, 0.73% Cu and 277ppm Co for 5,980 t contained Nickel, 8,395 t contained Copper and 318 t contained Cobalt**

Artemis Resources Limited ("Artemis" or "the Company") (ASX:ARV, Frankfurt:ATY, US OTC:ARTTF) is pleased to announce a new, shallow JORC 2012 resource estimate for the company's 100% owned Radio Hill Nickel Mine in the West Pilbara region of Western Australia. The December 2018 resource estimate is classified to JORC 2012 compliant Indicated category.

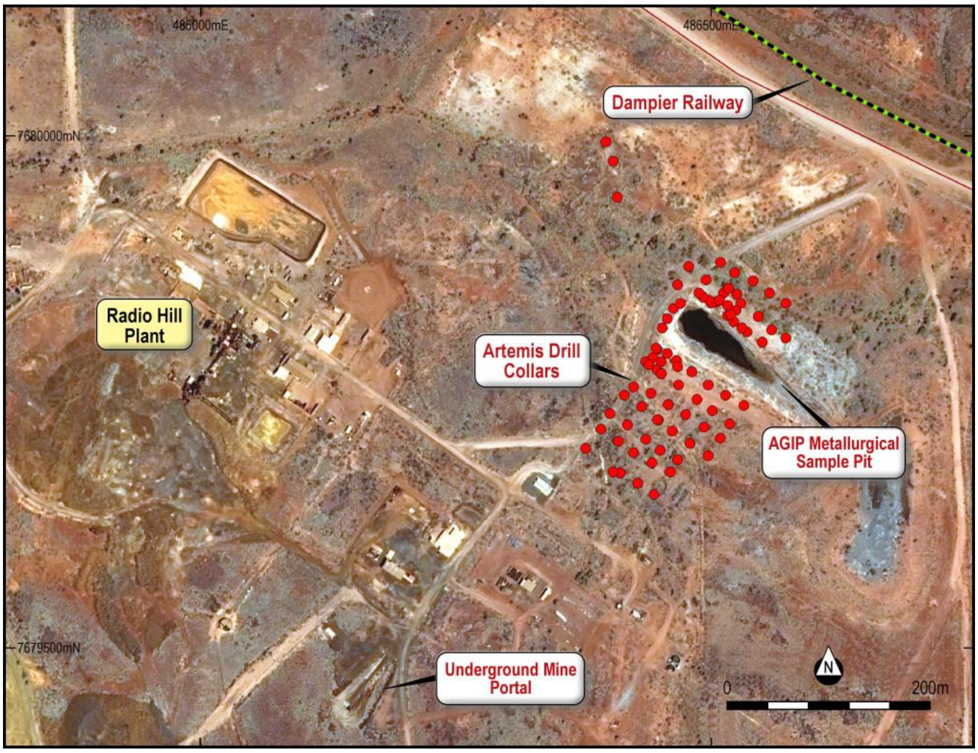


**Figure 1: Radio Hill Mine area, Processing Plant and resource drilling location.**

**Artemis' Executive Director Ed Mead commented:**

***"This updip extension to the historic Radio Hill underground represents a new, shallow nickel – copper resource approximately 400m from the Radio Hill plant.***

***Further resource development work is required to determine the optimum means to monetise the project and this work will be reviewed in 2019."***

## RADIO HILL MINE - RESOURCE SUMMARY

The Radio Hill Nickel Mine is in the West Pilbara region of Western Australia, ≈35 km by road south of the city of Karratha (**Figure 2**). Access is via the Karratha - Tom Price sealed road and then mine access tracks. Radio Hill is on a fully approved mining lease and contains Artemis' 100% owned Radio Hill Processing Plant and the historic Radio Hill underground mine. The underground mine ore was processed through Radio Hill prior to the plant being placed into care and maintenance in September 2008 due to low commodity prices.

Drilling by previous operators of Radio Hill comprised 1,052 drill holes including open hole percussion, RAB, RC, underground sludge and diamond drilling for a total of approximately 89,885 metres. In 2018 Artemis drilled the shallow mineralisation up-dip from the Fox underground workings on a regular grid. This included another 80 Reverse Circulation ("RC") drill holes and 7 diamond drill holes for an additional 6,779.5 metres, aiming to verify older drilling and to increase the drill data available in the upper levels of the mineralisation.

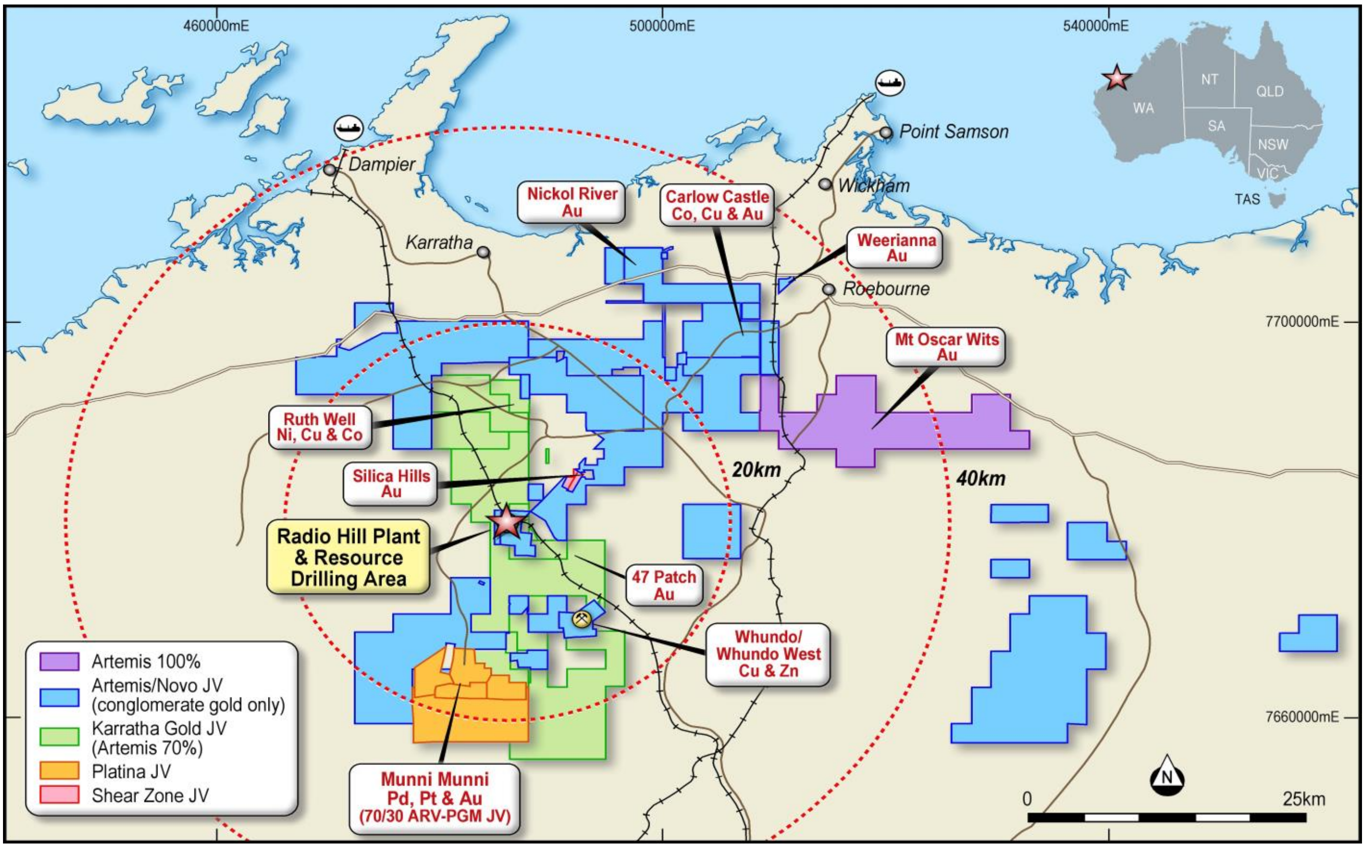


**Figure 2: Radio Hill Location Map**

This drilling, sampling and assaying has been verified by Al Maynard & Associates (AM&A) as complying with the JORC Code (2012) for reporting exploration results and Mineral Resources. AM&A used the Artemis drilling only to model the shallow resources, ignoring the earlier drilling as it could not be verified as conforming to the JORC Code (2012).

**These Indicated resources, as estimated by AM&A are 1.15 million tonnes at 0.52% Ni, 277ppm Co and 0.73% Cu**.

Cobalt is a potential by-product that may report to the Ni concentrate and so is included in the resource estimate.

## CLASSIFICATION

Considering the spacing of the drill intersections, quality of the drilling and sampling and the degree of understanding of the geological controls on the mineralisation, AM&A have classified all the reported resources at Radio Hill as Indicated according to the JORC Code (2012).

**Table 1: AM&A Resource Estimate for the Radio Hill Ni-Cu Project**
**(December 2018 - Indicated Resources @ 0.0% Cu cut off grade)**

| Ore Type | Tonnage (Million) | Nickel Grade (Ni %) | Copper Grade (Cu %) | Cobalt Grade (Co%) | Nickel Metal (tonnes Ni) | Copper Metal (tonnes Cu) | Cobalt Metal (tonnes Co) |
|---|---|---|---|---|---|---|---|
| **Fresh** | 1.15 | 0.52 | 0.73 | 0.0277 | 5980 | 8395 | 318 |
| **Total** | **1.15** | **0.52** | **0.73** | **0.028** | **5980** | **8395** | **318** |

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

The December 2018 resource is a stand alone resource and is independent of the previously reported Fox Resources 2012 resources (refer 4 April 2012, – "Fox Resources Exploration Update", Public announcement ASX - www.asx.com.au/asxpdf/20120404/pdf/425fyyslg7ldy1.pdf )

## RADIO HILL DEPOSIT GEOLOGY AND MINERALISATION

Radio Hill is a small Archaean, 2892 ± 34 Ma, synorogenic-synvolcanic Ni-Cu bearing mafic intrusion containing a minor ultramafic component near its basal contact and is probably comagmatic with nearby Mount Sholl and Munni Munni intrusions. It is considered to be a Voisey's Bay analogue. The massive and disseminated Ni-Cu-Co sulphides are hosted by thin gabbroic units underlying layered ultramafic-mafic sequence. Sulphides are confined to feeder conduit or depressions of basal contact.

Mineralisation is patchy blebs of medium grained disseminated to matrix sulphides in the basal peridotite to olivine pyroxenite. Pyrrhotite, with sub-ordinate pentlandite, and chalcopyrite, forms lobate aggregates up to 12% volume of the Ultramafic host. Pyrrhotite forms layers up to 20 metres thick, 8 metres above the basal contact of an intrusion.

Post-intrusion deformation has tilted the deposit 25-40 degrees to the southeast. The geometry has been modified by northerly trending sinistral faults that, in the A and B massive zone, have created independent mining blocks. These faults have a displacement between one and ten metres and have been named, from east to west, Ebenezer, Newman, Toth, Forster, Irvin and 3-Names.

These faults are all displaced by Brutus fault, which is the most significant fault in the deposit. Brutus is a brittle-ductile deformation zone that has an approximate dip between 35-60 degrees and strikes approximately NNW (approx. 330 degrees mine grid). This fault has a sinistral normal movement with a horizontal translation of approximately 30 metres.

Dolerite dykes have intruded the orebody with relaxation, following deformation, into pre-existing weakness created by faulting. Two mine-site wide dolerite dykes, named Aminya and Zen, have truncated the orebody and act as pillars for the underground mining.

In the 1980's AGIP Australia Pty Ltd divided observed mineralisation, from south to north, into zones A to F although it is potentially misleading as different mineralisation types transverse zonal boundaries. Within these zones three types of mineralisation have been observed at the Radio Hill mine, which are summarised as follows:

- Massive medium to very coarse grained pyrrhotite-chalcopyrite-pentlandite ore that is often strongly brecciated and displays quartz-carbonate-chlorite veining,
- Stringer/gash vein, disseminated and blebby pyrrhotite-chalcopyrite-pentlandite mineralisation associated with tremolite-actinolite-chlorite alteration and minor carbonate veining,
- Disseminated fine grained pyrrhotite-chalcopyrite-pentlandite sulphides hosted by the gabbro, and pyrrhotite dominant sulphides within the ultramafic immediately overlying the gabbro.

A, B and H zones are characterised by massive and some minor disseminated mineralisation. Stringer type mineralisation is not observed in the A and B zones. The division between A and B zones is arbitrary. A zone occurs below the 875 mRL in the eastern domain of the mine overlying, and in parts incorporating, the underlying basement. B zone occurs above the 875 mRL in the western domain of the mine subparallel to Brutus, discordant to basement, but stratabound within the orebody gabbro. A and B zone's geometry is intimately associated with the Brutus Fault. H zone is a faulted offset (by Brutus) of A zone.

C and D zones are characterised by stringer mineralisation overlying a basal interval of massive sulphides. Mineralisation in the C and D zones is strata-form as it mainly occurs 10-20 metres above the basement contact, but is not strictly speaking primary mineralisation because it has been remobilised into veins/stringers and blebs. The C and D zones are also intimately associated with the Brutus Fault. D zone is a faulted offset (by Brutus) of C zone.

## DRILLING INFORMING THE RADIO HILL RESOURCE ESTIMATE

Drilling methods used at the Radio Hill deposits include:

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

Only the Artemis 2018 RC drilling is used to inform the resource estimate. **Table 2** below summarises the total drilling data included in the Radio Hill database including drilling carried out by a number of previous operators stretching back to the 1970s.

All the holes in highlighted in yellow were deleted from the database as they were labelled as being either open hole percussion or sludge samples which do not provide suitable, reliable samples for resource modelling. Only the Reverse Circulation ("RC") and diamond drilling was retained in the database since, if the drilling and sampling was correctly carried out, the samples produced should provide reliable assay results.

**Table 2: Summary of drilling at Radio Hill.**

| Series* | | Count | Hole Type | Depth (m) | Year |
|---|---|---|---|---|---|
| 829001 | 875002 | 72 | DD | 953.40 | ? |
| 905001 | 955014 | 98 | SDG | 1,097.50 | ? |
| 07RHDD077 | 07RHDD084W1 | 7 | DD | 3,165.95 | 2007 |
| 08RHDD085 | 08RHDD110 | 3 | DD | 1,082.30 | 2008 |
| 08RHRC092 | 08RHRC105 | 13 | RC | 2,110.00 | 2008 |
| 08RHRCD086 | 08RHRCD107 | 9 | RCD | 2,277.40 | 2008 |
| 09RHDD111 | 09RHDD121 | 9 | DD | 2,997.44 | 2009 |
| 11RHDD123 | 12RHDD124 | 2 | DD | 205.30 | 2011 |
| 72-RHP-1 | 72-RHP-8 | 17 | PER | 429.70 | 1972 |
| 975JS1 | 975JS9 | 6 | SLUDGE | 36.00 | 1997 |
| ARH001 | ARH080 | 80 | RC | 6,779.50 | 2018 |
| RAHRC001 | RAHRC076 | 69 | RC | 8,177.00 | ? |
| RAHRCD043 | RAHRCD068 | 2 | RCD | 1,010.80 | ? |
| RHD001 | RHD315 | 11 | DD | 579.51 | ? |
| RHDU100 | RHDU113 | 18 | DD | 1,584.85 | ? |
| RHP201 | RHP394 | 113 | PER | 19,968.25 | 1998-2001? |
| RHPD208 | RHPD521 | 92 | PD | 19,939.95 | ? |
| RHPU601 | RHPU1653 | 10 | DD | 897.60 | ? |
| RHW37 | | 1 | RC | 170.00 | ? |
| RSH001 | RSH077 | 73 | SDG | 1,387.20 | ? |
| UGD001 | UGD420 | 409 | DD | 21,728.25 | 1998-2001? |
| UGF790A1 | UGF950C9 | 18 | FCE | 86.60 | 1998? |
| | | | | | |
| **TOTAL** | | **1,132** | | **96,664.50** | |

* Not necessarily in complete numerical order

The Artemis drilling was undertaken to infill less well drilled areas and to verify some of the older drilling to increase confidence in the original data. The Artemis hole spacing was a nominal 20m x 20m grid pattern with some holes adjusted to properly drill below the Agip metallurgical pit.

**Figure 2** shows the positioning of the Artemis drilling relative to the underground workings, the AGIP drop-cut metallurgical sample pit and other mineralized zones.

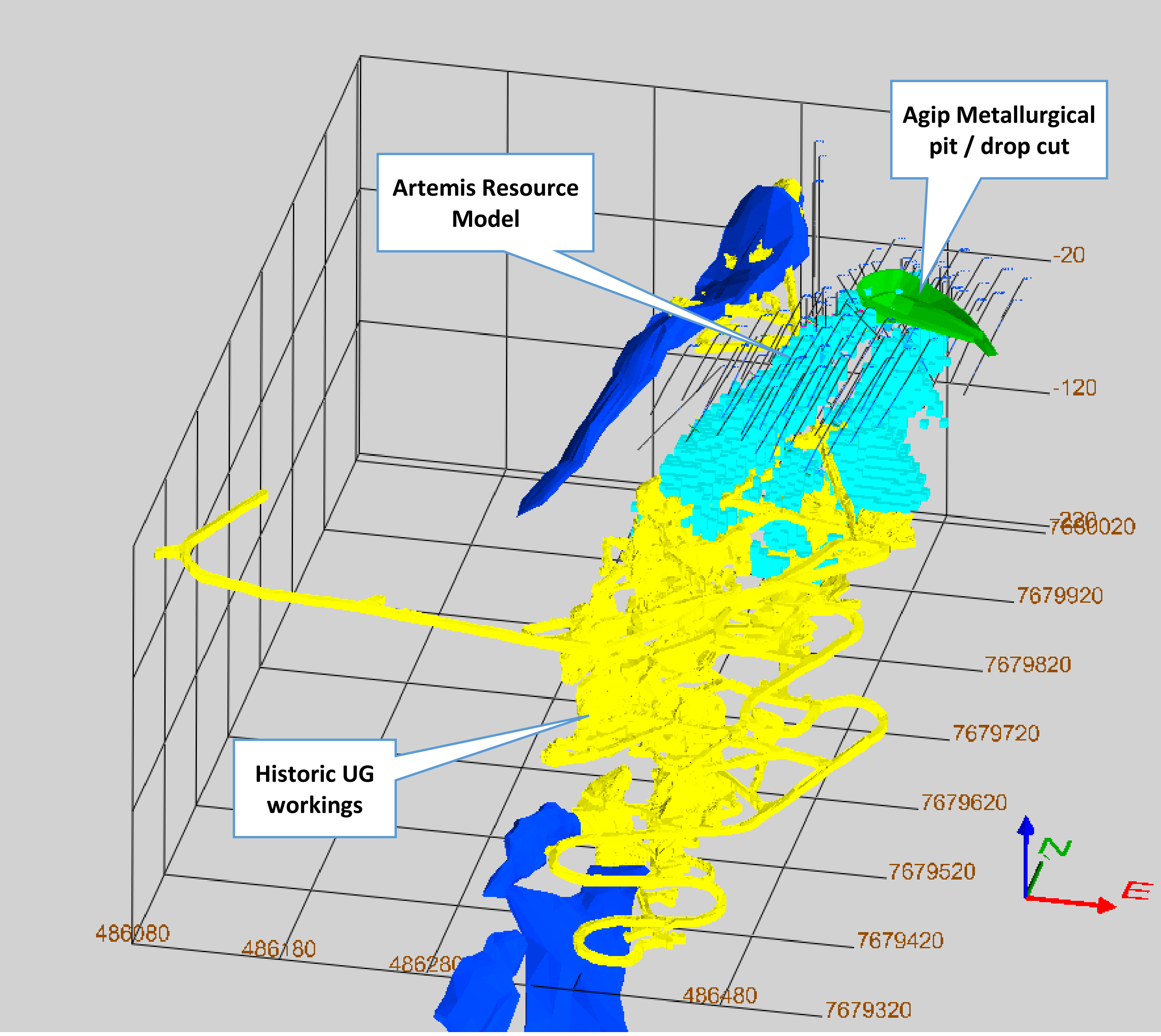


**Figure 3: Oblique view showing Artemis drilling, underground workings (Yellow) and AGIP drop-cut (Green). Artemis Resource Model = Light Blue. Mineralisation not included in resource model = Dark Blue.**

## SAMPLING AND ASSAY

There are no references that describe the sampling methods used by the project owners prior to Fox taking over in 2002 and limited reference to the sampling methods used by Fox in their drilling programs could be found. The only reference found was relating to surface diamond holes that were sampled by sending a quarter of the core off for analysis. It can only be presumed that the historic RC samples were riffled.

### Artemis 2018 Drilling, Sampling and Assay

All the drilling by Artemis in 2018 was RC and utilised a truck-mounted Schramm 685 RC drilling rig using a 5¼ inch diameter face sampling hammer. The 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 and Co.

All samples were logged by the site geologist with those estimated to be mineralised being dispatched preferentially, with all samples subsequently dispatched and analysed.

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.

Duplicate samples, reference standards and blanks were regularly inserted in the sample batches during drilling to monitor the quality control of the sampling and chemical analyses.

Independent laboratory ALS (Perth) were used 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) –Cu, Ni, Co.
- Ore Grade 4 Acid Digest ICP-AES Finish (ME-OG62)

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

A Garmin GPSMap62 hand-held GPS was used to initially locate the drillhole collars. 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 drillhole collar data.

## DATA VERIFICATION AND QA/QC

### Pre Artemis-2018 drilling

The company reviewed a number of memos by Fox that refer to QA/QC results for drilling between 2003 – 2007 and 2008 – 2009. These memos list the number of standards, duplicates and blanks, plot the assays, determine and list the assays outside the limits of the average +/- 2 standard deviations along with limited commentary on the results. It is unclear which of the standards were in-lab or submitted by the company with the sample batches.

The memoranda indicate there were a number of outlier results but overall the results were satisfactory indicating that the sampling and assaying met industry standards at the time of drilling. No drill hole listing was found that linked directly with the memos, however by cross referencing the sample numbers with the assay logs, the drilling indicated in **Table 2** (highlighted in Green) were covered by these memos.

Consequently, all the older drilling and results were deleted from the drill hole database and were not considered in the resource estimate.

### Artemis 2018 drilling

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. A total of 355 blanks and standards were inserted by Artemis into the drill sample batches.

Graphical plots of the QA/QC samples show only 4 of the samples returned suspicious results where the assay differed markedly from the preferred value, one result gave wildly different results for all three elements, and is almost certainly a result of misnumbering of the sample since all three elements are very much less than the preferred value.

The majority of standards produced results close to their preferred value, two standards consistently produced low results and two Blanks produced high results. If they were all consistently high or low it could be presumed there was a calibration problem within the laboratory. Since the variance is not consistent the most likely explanation is that the preferred values are not correct.

A total of 378 duplicate pairs were inserted by Artemis into the sample batches dispatched for chemical analysis. All but a small number of Ni and Co results had excellent correlations with the few anomalous results still falling within reasonable statistical limits of repeatability.

### Bulk Density

Twenty-seven of the Artemis RC drill holes were logged by Wireline Services Group using a down-hole caliper/density logger with the readings averaged over 1 m intervals for a total of 1019 composite values. These insitu bulk densities were then modelled using the same search parameters as the grades. A default bulk density of 3.1 was used in the cells beyond the search radii.

## RESOURCE MODEL

The mineralisation was digitised using MineMap© software on cross sections, snapping to the drill intercepts, using a lower cut-off grade where Cu%*0.5 + Ni% >0.5%. This total metal cut-off was chosen to define the mineralised envelope because the copper and nickel are strongly associated with each other in both the disseminated and vein lodes and are both economically recoverable with a weighting reflecting their approximate relative LME metal prices and metallurgical recoveries (Cu=$US6,068/tonne, Ni=$US11,550/tonne on 01/11/2018).

Sample intervals below the 0.5% total metal cutoff were included in the lode wireframe where this internal dilution did not drop the total intersection below 0.5% and where it provided improved lode continuity with adjacent drill intersections of the lode.

The mineralised zone on each cross-section was then linked by a wireframe to produce a “solid”. The resource model was confined by this wireframe. The grades were interpolated within the wireframe into the model cells using an Inverse Distance Squared (ID2) algorithm.

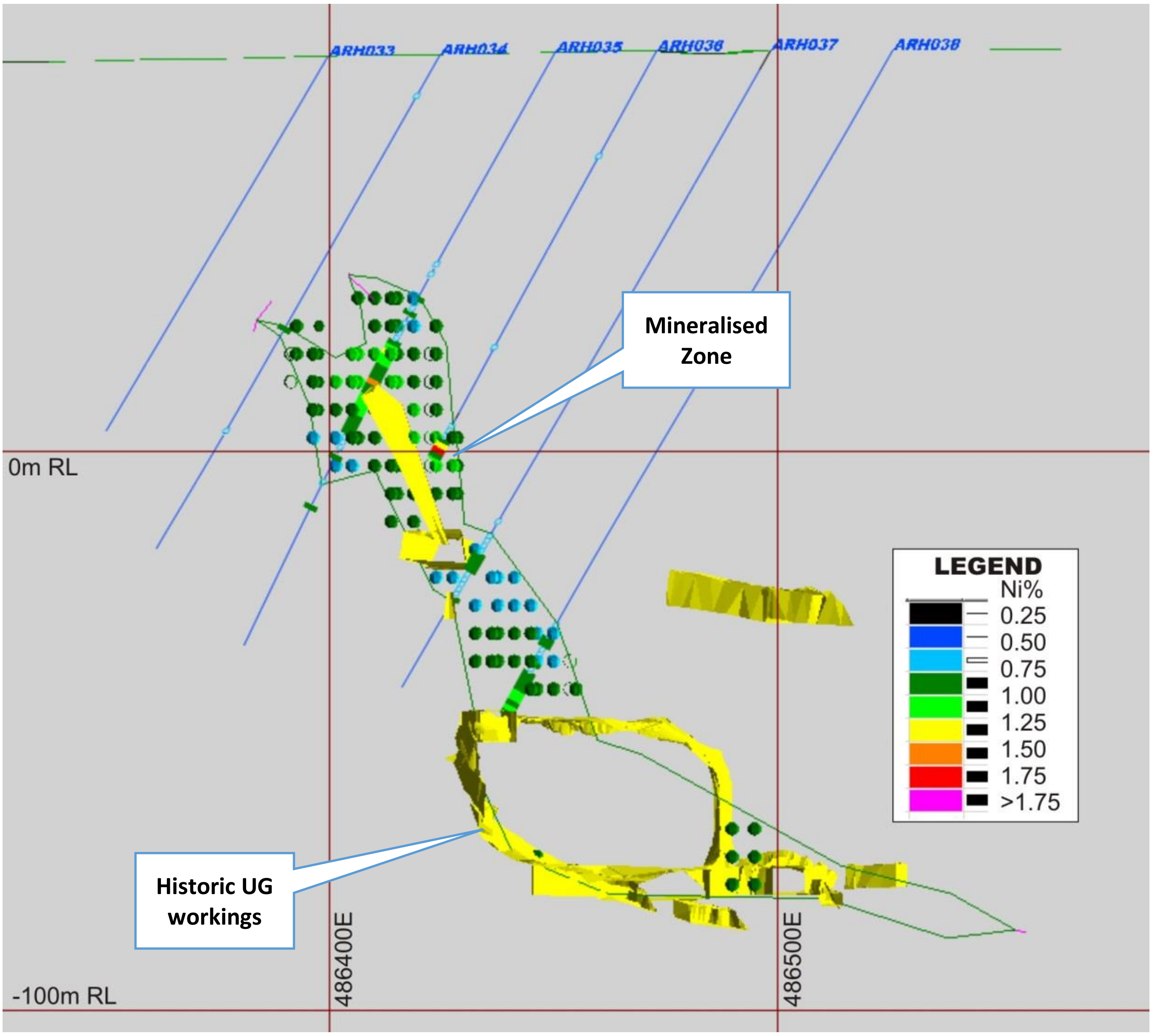


**Figure 4: Typical cross section +/-5 m along Mine Grid 3960 North looking West showing digitised mineralised zone with resource model and drill holes colour coded by Ni%. Yellow outline = underground workings.**

Mine Grid North is orientated on a bearing of 305$^{o}$ Magnetic.

## PREVIOUS RESOURCE ESTIMATES

Fox Resources commissioned an in-house resource estimate in 2009 using all the drilling completed to that date that was subsequently verified by Snowden and Associates as compliant with the then current JORC Code (2004). This resource estimate overlapped with the resources reported herein but also included extensions at depth and a small deposit at F Zone to the north-west.

As explained in previous sections of this report, the 2009 resource estimate does not comply with the current JORC Code (2012) for reporting mineral resources, mainly because of the lack of QA/QC details to allow the verification of the quality and accuracy of the drilling, sampling and assays. All the previous mining activity within the precients of the current 2018 modelled resource has been accounted for within the modelled resource.

All previous 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%.

**LOOKING FORWARD**

The shallow, upper portion of Radio Hill could represent an opportunistic mining target within close proximity to the Radio Hill infrastructure. Given additional resource development work and favourable commodity prices this target would be reassessed for future processing.

For further information on this announcement or the Company generally, please visit our website at www.artemisresources.com.au or contact:



| | | |
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**COMPETENT PERSONS STATEMENT**

The information in this announcement that relates to the Radio Hill Project Resource is based on the Radio Hill 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 Radio Hill Project for the period ending 30 November 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.

## BACKGROUND INFORMATION ON ARTEMIS RESOURCES

Artemis Resources Limited is an exploration and development company focussed on its large (~2,400 $km^2$) and prospective base, battery and precious metals assets in the Pilbara region of Western Australia. Artemis owns 100% of the 500,000 tpa 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 mineralization 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 paleoplacer style mineralization; or
(iii) minerals other than gold.

Artemis' Mt Oscar tenement is excluded from the Definitive Agreements. The Definitive Agreements cover 36 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.

## 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, 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.

## 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.)

| | JORC Code explanation | Commentary |
|---|---|---|
| *Sampling techniques* | • *Nature and quality of sampling (eg 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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *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.* | • Reverse Circulation (RC) drilling was carried out on the Radio Hill Ni-Cu Project. This drilling was designed to obtain drill chip samples from one metre intervals, from which a 2-4 kilogram sub-sample was collected for laboratory multi-element analysis including: Ni, Cu, Co<br>• All samples were analysed using a portable XRF instrument (Innovex). Initial methodology has been to make a single randomly placed measurement on the drill sample bag. For more intensive evaluation a minimum of 4 measurements at regular intervals around the sample bag will be required. Optimum sampling time appears to be 90 seconds per measurement. The results from this were used to prioritised samples through the assay laboratory.<br>• Mineralised zones were identified visually during field logging, and sample intervals selected by the supervising geologist.<br>• Samples from each metre were collected through a rig-mounted cyclone and split using a rig-mounted static cone splitter.<br>• To ensure representivity, field duplicates were taken and submitted for analysis. |
| *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).* | • Reverse Circulation drilling at Radio Hill was completed by a truck-mounted Schramm 685 RC drilling rig using a 5¼ inch diameter face sampling hammer. |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | • Sample recoveries are recorded by the geologist in the field during logging and sampling.<br>• Measures taken to maximise sample recovery include SOPs to keep holes dry and pressurised and to minimise dust loss.<br>• Visual assessments are made for recovery, moisture, and possible contamination.<br>• A cyclone and static cone splitter were used to ensure representative sampling and were routinely inspected and cleaned.<br>• Sample recoveries during drilling completed by Artemis were highly satisfactory, and all samples were dry. |

| | JORC Code explanation | Commentary |
|---|---|---|
| | | • Insufficient data exists at present to determine whether a relationship exists between grade and recovery. This will be assessed once a statistically representative amount of data is available. |
| *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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • All drill chip samples are geologically logged at 1m intervals from surface to the bottom of each drillhole. It is considered that geological logging is completed at an adequate level to allow appropriate future Mineral Resource estimation.<br>• Geological logging is considered semi-quantitative due to the limited geological information available from the Reverse Circulation method of drilling.<br>• All RC drillholes completed by Artemis during the current program have been logged in full. |
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • A cyclone and static cone splitter were used to ensure representative sampling, and were routinely inspected and cleaned.<br>• 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.<br>• The sample size of 2-4 kilograms is considered to be appropriate and representative of the grain size and mineralisation style of the deposit.<br>• 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 collected.<br>• Duplicate samples were collected and submitted for analysis. Reference standards inserted during drilling. |
| *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.*<br>• *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.*<br>• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of* | • ALS (Perth) was 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 Radio Hill Project area:<br>○ Samples above 3 Kg riffle split.<br>○ Pulverise to 95% passing 75 microns<br>○ 4 Acid Digest ICP-AES Finish (ME-ICP61) – Cu, Ni, Co.<br>○ Ore Grade 4 Acid Digest ICP-AES Finish (ME-OG62)<br>• Standards were used for external laboratory checks by Artemis. |

| | JORC Code explanation | Commentary |
|---|---|---|
| | *accuracy (ie lack of bias) and precision have been established.* | • Duplicates were used for external laboratory checks by Artemis.<br>• Portable XRF (pXRF) analysis was completed using Innovex units. XRF analysis was completed on the single metre sample bulk drill ample retained on site.<br>• Portable XRF results are considered semi-quantitative and were only used as a guide to mineralised zones and sampling. |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • At least two company personnel verify all significant results.<br>• All geological logging and sampling information is completed firstly on to paper logs before being transferred to Microsoft Excel spreadsheets.<br>• Physical logs and sampling data are returned to the head office for scanning and storage.<br>• No adjustments to the assay data were considered necessary. |
| *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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • A Garmin GPSMap62 hand-held GPS was used to define the location of the drillhole collars. Standard practice is for the GPS to be left at the site of the collar for a period of 5 minutes to obtain a steady reading. Collar locations are surveyed with a DGPS.<br>• Downhole surveys were captured at 30 metre intervals for the drillholes completed by Artemis.<br>• The grid system used for all Artemis drilling is GDA94 (MGA 94 Zone 50)<br>• Topographic control is obtained from surface profiles created by drillhole collar data. |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • Current drillhole spacing is variable and dependent on specific geological, and geophysical targets, and access requirements for each drillhole.<br>• No sample compositing has been used for drilling completed by Artemis. All results reported are the result of 1 metre downhole sample intervals. |
| *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.*<br>• *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.* | • Drillholes were located in order to intersect the target at an angle perpendicular to strike direction. As the target structures were considered to be steep to moderately dipping and moderately plunging, most Artemis drillholes were angled at -55 or -60 degrees. |
| *Sample security* | • *The measures taken to ensure sample security.* | • The chain of custody is managed by the supervising geologist who places calico |

| | JORC Code explanation | Commentary |
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| | | 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 clearly labelled with: Artemis Resources Ltd, Address of laboratory, Sample ID range<br>• Samples were delivered by Artemis personnel to the transport company in Karratha on pallets.<br>• The transport company then delivers the samples directly to the laboratory. |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | • Data is validated upon up-loading into the master database. Any validation issues identified are investigated prior to reporting of results. |

## 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 |
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| *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.*<br>• *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.* | • RC drilling by Artemis was carried out on M47/161 – 100% owned by Artemis Resources Ltd. This tenement forms a part of a broader tenement package that comprises the West Pilbara Project.<br>• This tenement is in good standing and no known impediments exist (see map provided in this report for location). |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | • The most significant work to have been completed at Radio Hill is by Fox Resources, who mined the deposit from 2004-2008. |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | • The Radio Hill project covers the historic Radio Hill Ni-Cu orebody hosted within a layered mafic intrusive body.<br>• Sulphide mineralisation predominantly consists of Pyrrhotite, Pentlandite and Chalcopyrite. |
| *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:*<br>○ *easting and northing of the drill hole collar*<br>○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>○ *dip and azimuth of the hole*<br>○ *down hole length and interception depth*<br>○ *hole length.*<br>• *If the exclusion of this information is* | • Collar information for all drillholes reported is provided in the body of this report. |

| Criteria | JORC Code explanation | Commentary |
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| | *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.* | |
| *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.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • All intervals reported are composed of 1 metre down hole intervals and are therefore length weighted.<br>• No upper or lower cut-off grades have been used in reporting results.<br>• No metal equivalent calculations are quoted for exploration results. |
| *Relationship between mineralisation widths and intercept lengths* | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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').* | • 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.<br>• 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. |
| *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.* | • Appropriate maps and sections are available in the body of this report. |
| *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.* | • Reporting of results in this report is considered balanced. |
| *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.* | • Targeting for the RC drilling completed by Artemis was based on compilation of historic mining and exploration data<br>• There is no other relevant data to report on. |
| *Further work* | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or* | • The results at the Radio Hill Ni-Cu project indicate further drilling to infill drilling by earlier companies and verify the accuracy |

| Criteria | JORC Code explanation | Commentary |
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| | *large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | of this drilling and sampling as well as elsewhere on the tenement to extend the resources is warranted. |

## Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

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| *Database integrity* | • *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.*<br>• *Data validation procedures used.* | • 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.<br>• The historic Fox data is stored in an SQL database front ended by proprietary software with built in and customized validation procedures. The Artemis data is exported from self-validating drill hole log spreadsheets into Micromine and validated via Micromine built in validation procedures. Additional validation is by visual inspection of the data in 3D. |
| *Site visits* | • *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>• *If no site visits have been undertaken indicate why this is the case.* | • Two representatives from AM&A (A. Maynard & P. Jones) have visited the site to observe the logistics and geology recently in preparation of this report. Most recently the author visited the Radio Hill mine on 20 July 2018. |
| *Geological interpretation* | • *Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.*<br>• *Nature of the data used and of any assumptions made.*<br>• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*<br>• *The use of geology in guiding and controlling Mineral Resource estimation.*<br>• *The factors affecting continuity both of grade and geology.* | • The geological interpretation is based on a relatively dense grid of drill holes and experience gained by previous workers during underground mining so the geological interpretation is considered to be reliable.<br>• There are no other reasonable geological interpretations based on the available data and information.<br>• The resource model was confined by wireframes based on the drill intercept grades and geological interpretation.<br>• The mineralisation is controlled by the geology, i.e. lithologies and structures, with interpretations supported by drillhole data, previous mining activities and outcrop within existing open pits. |
| *Dimensions* | • *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.* | • The mineralisation is not properly closed off along strike or down dip.<br>• The modelled portion of the deposit is 250m long x 100m wide while the total deposit as drilled by earlier companies is approximately 1,250m long x 200m wide. |
| *Estimation and modelling techniques* | • *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum* | • The resource modelling was done with MineMap © software by interpolating grades into a digital block model using an Inverse Distance Squared (ID2) algorithm confined by wire framing of the (0.5 * Cu% + Ni%) |

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| | *distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*<br>• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*<br>• *The assumptions made regarding recovery of by-products.*<br>• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*<br>• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*<br>• *Any assumptions behind modelling of selective mining units.*<br>• *Any assumptions about correlation between variables.*<br>• *Description of how the geological interpretation was used to control the resource estimates.*<br>• *Discussion of basis for using or not using grade cutting or capping.*<br>• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.* | mineralised zones with 50m search radii along and across strike and 10m up and down dip.<br>• AM&A considers that these modelling parameters are appropriate for an Indicated resource of the type and style of mineralisation being modelled.<br>• Previous estimates pre-date JORC 2012 and have been estimated using methods appropriate to the times i.e. not JORC 2012<br>• Cobalt will be produced, probably as a by-product in the Cu or Ni concentrates, and so is included in the resource estimate.<br>• The current resource estimate (as stated elsewhere) has been depleted for past mining.<br>• No estimates have been made of non-value components<br>• The block model block size is 5 x 5 x 5, sample intervals of 1m were used within the mineralisation wireframes. 80 RC drill holes inform the estimate. The majority of the drilling is on a nominal 20m x 20m pattern with some holes located to properly drill below the Fox drop-cut.<br>• As stated elsewhere this is a global resource so no SMU modelling has been undertaken.<br>• Correlations between variables were not used to estimate variable values.<br>• The interpreted geological boundaries are hard boundaries for estimation purposes. This is confirmed by boundary analysis.<br>• The model results have been validated visually comparing block grades to adjacent drill holes. |
| | • *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.* | • All tonnes and grades are on a dry basis.<br>• The bulk densities are determined from down-hole density logging. |
| *Cut-off parameters* | • *The basis of the adopted cut-off grade(s) or quality parameters applied.* | • The resource modelling was confined by wire framing of the (0.5 * Cu% + Ni%) >0.5% mineralised zones. This total metal cut-off was chosen to define the mineralised envelope because the copper and nickel are strongly associated with each other in both the disseminated and vein lodes and are both economically recoverable with a weighting reflecting their approximate relative LME metal prices and metallurgical recoveries. The ratio of the combined Cu and Ni grades >0.5% was used to determine modelling limits since this is an approximation of the economic lower cut-off for open pit mining. This 0.5% grade also produces a robust continuous wireframe.<br>• The resource estimate is quoted at a 0.0% Cu lower cut-off within the wireframe. The basis for this in an internal report earlier this year estimating milling costs through the Radio Hill plant. |

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| *Mining factors or assumptions* | • *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It 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.* | • 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. |
| *Metallurgical factors or assumptions* | • *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.* | • The Radio Hill ore was successfully recovered and saleable concentrates produced by Fox at the processing plant already on site.<br>• It is expected that the Radio Hill plant could successfully recover the fresh sulphide copper and nickel mineralisation as saleable concentrates.<br>• It is assumed that both the Cu and Ni are recoverable as saleable concentrates and will have metallurgical recoveries of ~80%. |
| *Environmen-tal factors or assumptions* | • *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable 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 greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.* | • 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.<br>• 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. |
| *Bulk density* | • *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.*<br>• *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 alteration zones within the deposit.*<br>• *Discuss assumptions for bulk density* | • Bulk densities obtained from down-hole logging of 27 RC drill holes in the Artemis 2018 drilling program were modelled using the same parameters used to model the grades. A default bulk density of 3.1 was used in the cells beyond the search radii. |

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| | *estimates used in the evaluation process of the different materials.* | |
| *Classification* | • *The basis for the classification of the Mineral Resources into varying confidence categories.*<br>• *Whether appropriate account has been taken of all relevant factors (ie 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).*<br>• *Whether the result appropriately reflects the Competent Person's view of the deposit.* | • 80 RC drill holes inform the estimate. The majority of the drilling is on a nominal 20m x 20m pattern with some holes adjusted to properly drill below the Fox drop-cut.<br>• The resource was classified by AM&A as Indicated based on the spacing of the drilling and quality of the data used in the estimation.<br>• AM&A believes that this classification to be appropriate. |
| *Audits or reviews* | • *The results of any audits or reviews of Mineral Resource estimates.* | • No audits or reviews of the Mineral Resource Estimates have been made. Alternate models were generated by AM&A using Inverse Distance Cubed and different search radii and these confirmed the reported results. |
| *Discussion of relative accuracy/ confidence* | • *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource 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.*<br>• *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.*<br>• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.* | • The drill hole spacing is adequate to provide sufficient confidence in modelling 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.<br>• All quoted estimates are global for the deposit.<br>• Previous mine production has been properly accounted for in the resource model. |