ASX Code: "THR"

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AIM & ASX Listings: Shares: THR

Directors: Michael Billing David Thomas Alastair Middleton Richard Bradey

Key Projects:

• Tungsten Molyhil NT Pilot Mountain USA

• Copper Kapunda SA Company Announcements Office ASX Securities Limited, 20, Bridge Street, Sydney, N.S.W. 2000

STRATEGIC DEVELOPMENT – AUSTRALIAN COPPER INTERESTS

The Board of Thor Mining Plc ("Thor" or the "Company") (AIM, ASX: THR), is pleased to announce the Company has signed a Memorandum of Understanding (MOU) (the "Agreement") for the vending of its interest in the Kapunda Copper Project into a new copper focused Company, Enviro Copper Limited ("Enviro Copper").

It is intended that Enviro Copper will seek a listing on a recognised securities exchange in the near term.

Highlights:

- Enviro Copper will be a new, copper focused entity which will hold earn in rights for up to 75% of both the **Kapunda Copper Project** and the **Moonta Copper Project**;
- Following the acquisition of the Kapunda and Moonta Copper Project interests Enviro Copper will aim to develop an expanded portfolio of low environmental impact Insitu Recovery ("ISR") copper opportunities, initially in South Australia;
- Thor Mining PLC to hold up to 30% equity in Enviro Copper prior to any listing activities and eligible Thor Mining Shareholders will hold first option to invest in any listing of the new entity;
- Enviro Copper Limited will have a portfolio comprising;
 - **Kapunda Copper Project**, hosting an ISR amenable Inferred Mineral Resource Estimate of 119,000 tonnes contained copper, also with Australian Government CRCP Grant funding of A\$2.85million to demonstrate feasibility;
 - Moonta Project, with an ISR amenable Exploration Target of between 238 Mt and 310 Mt at a grade range of 0.18% to 0.23% Copper (between 428,000 and 713,000 tonnes of contained copper). Exploration Targets are conceptual in nature and there has been insufficient exploration to define a Mineral Resource under the JORC Code and it is uncertain if further exploration will result in the determination of a Mineral Resource;
- A key strategic target will be the timely development of the Kapunda Copper Project into production, demonstrating the operational viability of ISR. This experience will then be applied at the larger scale Moonta Copper Project and to additional new project opportunities acquired by Enviro Copper;
- The new combined entity provides a strategic opportunity to build a large ISR focussed copper exploration, development and production business, initially in Australia;
- Further information to follow, in respect of the establishment of Enviro Copper and the important developments thereafter.

Page | 1

Mr Mick Billing, Executive Chairman, commented:

"The non-invasive production technique of In-situ Recovery of copper has the potential to co-exist without significant disruption to farming and once completed, have little to no impact on future agricultural land use. ISR is an extension of proven technology and has been in use since the 1960's. With recent technical advances ISR can now offer a lower footprint and is likely to find further application in mineral recovery fields because it can coexist with other land use activities."

"This is a very exciting development in our copper strategy, potentially adding significant scale to our copper interests by bringing the Moonta Copper Project together with our existing interest in the Kapunda Copper Project, into a potentially large ISR focussed copper business, initially in Australia."

"While Kapunda is comparatively more advanced, the Moonta project, albeit at an earlier stage, provides potential for a much larger, and longer-term copper production entity"

"The opportunity for eligible Thor Mining shareholders to have a priority investment opportunity in the new vehicle is seen as a core ingredient in the establishment and listing of this new entity."

"Also, through their shareholding in Thor Mining plc, shareholders we be able to see the demonstrable value of our interest in Enviro Copper and that value will be in our financial accounts as a tradable market valued asset, rather than as merely a project within the Company."

"Shareholders should expect a range of additional market updates in the near term in respect of the developments at Enviro Copper, and as we take steps forward at Molyhil and Pilot Mountain."

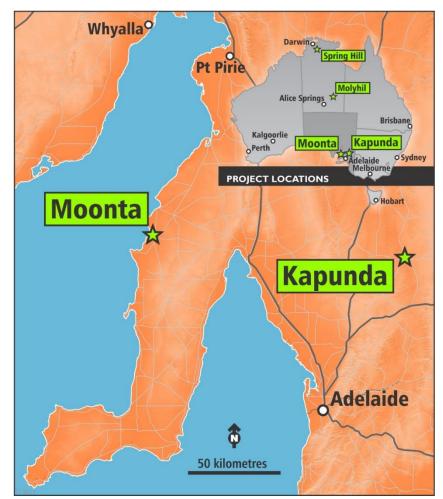


Figure 1: Moonta and Kapunda location map

Agreement

A Memorandum of Understanding (MOU), subject to a 90 day due diligence period, has been executed between Thor Mining, Environmental Copper Recovery Pty Ltd ("ECR") (holding earn-in rights to 75% of that part of the Kapunda Copper project amenable to ISR), and Environmental Metals Recovery Pty Ltd (holding earning rights, subject to due diligence, to 75% of Moonta copper project comprising the northern portion of exploration licence EL5984), for the merging of the respective interests, and the formation of Enviro Copper Limited, to hold and advance those interests.

Thor Mining PLC holds rights to a 60% interest in ECR for the consideration of A\$1.8million in project funding (A\$0.45 million funded to date). Under the MOU, Thor will relinquish its interest in ECR and acquire a 25%, pre-listing, interest in Enviro Copper for total funding of A\$0.6million (including funds already provided). Further Thor will hold the right to acquire a further 5% seed capital interest in Enviro Copper Limited for consideration of an additional A\$0.4 million.

The Agreement is conditional upon execution of a binding Farm-in and Joint Venture Agreement in respect of the Kapunda project, and also upon satisfactory due diligence in respect of the Moonta project acquisition from Andromeda Metals Limited (ASX: ADN) by Environmental Metals Recovery Pty Ltd (refer ADN announcement to ASX dated 19 December 2018).

Resources and Exploration Targets

The Enviro Copper Limited initial portfolio will be comprised of;

- **Kapunda Copper Project**, hosting an ISR amenable Inferred Mineral Resource Estimate of 119,000 tonnes contained copper, also with Australian Government CRCP Grant funding of A\$2.85million to demonstrate feasibility;
- **Moonta Copper Project**, with an ISR amenable Exploration Target* for the Moonta Copper Project in the range of 430,000 and 713,000 tonnes of contained copper;

Resource			Сорр	er
Mineralisation	Classification	MT	Grade %	Contained copper (t)
Copper Oxide	Inferred	30.3	0.24	73,000
Secondary copper sulphide	Inferred	17.1	0.27	46,000
	Total	47.4	0.25	119,000

 Table A: Kapunda Resource Summary 2018 (Reported on 12 February 2018)

Notes:

- Thor Mining PLC is earning up to a 45% equity in this resource, through earning up to 60% of ECR which has the right to earn in to 75% of that part of the Kapunda copper mine that is amenable to in-situ recovery techniques.
- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.
- The Company is not aware of any information or data which would materially affect this previously announced resource estimate, and all assumptions and technical parameters relevant to the estimate remain unchanged

Moonta Exploration Target

The Moonta project comprises steeply dipping zones of copper oxide mineralisation hosted within a deep weathering trough interpreted to extend over 11 kilometres strike length, and potentially beyond. The

prospect is entirely under sedimentary cover with variable amounts of geological data from drilling in addition to data from geophysical surveys. Copper mineralisation within the trough is in the order of 50 to 75 metres width with drill intersections in excess of 350 metres deep. In areas where there is enough drill information, grades appear to be in the order of 0.18 - 0.23% copper.

There is currently insufficient data for the estimation of a JORC compliant geological resource, so the following exploration target has been determined comprising three tiers on the basis of the varying amounts of available data.

Rank	Prospect	Exploration Target	
1	Wombat/Bruce	80-120Mt @ 0.18-0.23% Cu	Target based on 3D modelling of weathered trough and large number of drill intersections
Total Tier 1 Exploration Target		80-120Mt @ 0.18-0.23% Cu	
2	Six Ways	9-11Mt @ 0.18-0.23%Cu	Target areas were defined by the presence of ACM (Automatic Curve Matching of magnetic anomalies), presence of multiple drill intersections greater than 0.2% and intersection of significantly weathered interval in drill holes (>70m)
2	Bluetoungue	15-19Mt @ 0.18-0.23%Cu	
2	North Wallaroo	12-15Mt @ 0.18-0.23% Cu	
Total Tier 2 Exploration Target		38-45Mt @ 0.18-0.23% Cu	
3	Target 1	13-16Mt @ 0.18%Cu	
3	Target 2	4-6Mt @ 0.18-0.23%Cu	Target areas were defined
3	Target 3	20-24Mt @ 0.18-0.23%Cu	by the presence of ACM
3	Target 4	15-18Mt @ 0.18-0.23%Cu	(Automatic Curve Matching
3	Target 5	24-30Mt @ 0.18-0.23%Cu	magnetic anomaly) and coincident surface geochemical anomalies
3	Target 6	6-8Mt @ 0.18-0.23%Cu	
3	Target 7	16-19Mt @ 0.18-0.23%Cu	
3	Target 8	18-22Mt @ 0.18-0.23%Cu	
Total Tier 3 Exploration Target		120-145Mt @ 0.18-0.23% Cu	
Total Exploration Target All Categories		238 - 310Mt @ 0.18% - 0.23% Cu	

Table B: Moonta Exploration Target Summary*

Tier 1: Known modelled mineralisation

Tier 2: Known Mineralisation with drilling and geophysical support

Tier 3: Potential for Mineralisation shown by geophysical and geochemical responses

*Exploration Targets are conceptual in nature and there has been insufficient exploration to define a Mineral Resource under the JORC Code and it is uncertain if further exploration will result in the determination of a Mineral Resource.

The revised exploration target builds on the target announced by Andromeda Metals in their ASX release

of 20 July 2017 which introduced a new geological model for mineralisation in the northern section of the Moonta Project. This model which incorporates mineralised weathering troughs identifiable by a distinct geophysical signature, has been used to review the drilling, geochemical and geophysical data in the area. The reprocessing of existing geophysical data using different processing techniques combined with the new exploration model has generated several potentially prospective additional target areas.

The work required to confirm this target includes re logging drill holes, modelling of the trough dimensions from drill hole cross sections (where applicable), additional work to further determine ISR amenability which would include hydro geological studies and additional studies on lixiviant systems.

TIER 1 EXPLORATION TARGETS

Tier 1 Prospects have demonstrated copper mineralisation based upon existing quantitative data and updated geophysical interpretation using ACM (Automatic Curve Matching). Previous laboratory work suggests mineralisation in the troughs is considered to be amenable to ISR recovery.

The Wombat and Bruce deposits

(refer Andromeda Metals Limited ASX announcement of 20 July 2017)

The Wombat and Bruce prospects are located in the north of the project tenement, with Bruce one of several mineralised zones discovered at the Alford West prospect. Both deposits are characterised by deeply developed weathering troughs that extend for hundreds of metres below the surface. Figure 2 shows a cross section through the Wombat deposit illustrating the weathering trough at that deposit. The weathering troughs can be traced between drill sections and extend for the entire strike length of both deposits.

The rocks to both the north and south of the weathering troughs are fresh and impermeable, while the trough material is oxidised, porous and likely permeable. The majority of the weathered material contained in the troughs is mineralised. Wombat hole MPD-06-22 hit 174 metres at 0.20% copper, while WOMDD001 intersected 115 metres at 0.53% copper, with very few samples assaying less than 0.05% copper, a common internationally quoted lower cut-off grade used for ISR resources.

At Bruce, significant drill intersections of trough material include 115 metres at 0.27% copper in hole AWRC006, and 168 metres at 0.28% copper in hole DDH-132. Copper minerals observed in the weathering trough mineralisation include those typically seen in the weathered profile of copper sulphide deposits. These include chalcocite (Cu2S), native copper, rare copper carbonates, and a black oxide phase tentatively identified as tenorite (CuO). Chalcopyrite is present but rare.

3-dimensional models of the weathering troughs at both Wombat and Bruce were constructed using available drillhole data and tonnage ranges estimated by applying a density factor of 1.8 t/m3 to the model volumes. The 3-D models are restricted to the troughs where they fall below the water table and below the normal depth of weathering. Copper grade ranges were estimated by length weighted averaging of all assayed drill samples captured within the 3-D trough model volumes. No lower cut-off copper grade was employed.

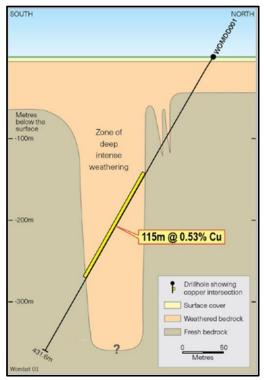


Figure 2`: Wombat section showing weathering trough.

The depth of the troughs is the least known variable. A single hole at Wombat has passed beneath the trough giving an indication of depth, however no holes pass below the Bruce trough. As currently modelled, the Wombat trough represents the larger of the two deposits, contributing approximately 70% of the Tier 1 Exploration Target tonnage. The estimated grades of both deposits are very similar. The Exploration Target tonnage and grade range is comparable to the resource metrics of international ISR copper projects.

While the weathering troughs at both Wombat and Bruce are fairly uniformly mineralised, there are internal zones of higher grade copper which may allow estimation of higher grade resources.

Preliminary Copper Solubility Testwork

A total of 24 composited samples of mineralised material from Wombat and Bruce troughs were submitted for a simple first pass acid solubility test. These tests provide substantial initial support for the potential of ISR in these deposits.

The composite samples were collected from Wombat diamond holes WOMDD001 and WOMDD002, and Bruce RC holes AWRC006 and AWRC008. Composited downhole lengths ranged between 5 and 10 metres, with the composites selected to give uniform coverage of the trough material where original assays confirmed the presence of copper mineralisation.

Acid soluble analyses were conducted on pulverized samples using 4% sulphuric acid agitated for 1 hour, with the solutions then read for copper. Soluble copper ranges up to 0.97% at Wombat and 0.48% at Bruce. Head assays using a total digest method were completed to allow calculation of copper recovered to the leaching solution. At Bruce the percentage of the total copper leached from each composite ranged from 41% to 56%, averaging 49%. At Wombat, soluble copper recoveries ranged from 0% to 65%, averaging 35%. Significant copper is leaching into solution after one hour, confirming it to be present in soluble mineral phases. Trialling of different leaching times and reagents, or the addition of reagents to assist copper solubility, are considered likely to improve the recoveries to solution. Drill hole assay data and acid drop tests on the weathered drill samples do not indicate the presence of non-copper bearing, acid consuming phases such as carbonate.

TIER 2 EXPLORATION TARGETS

Category 2 target areas were defined by the presence of ACM (Automatic Curve Matching of magnetic anomalies), the presence of mineralisation greater than 0.2% in drill holes (Air Core, RC, Auger and limited diamond drilling) and logged saprolite thickness > 70m. Average width of the weathered troughs was estimated at 60m (determined by interpreting drill hole cross sections where available) and these were

assumed to be sub vertical. Strike lengths were measured using Mapinfo software, vertical extent was limited to 250m (although geophysical modelling suggests potentially greater depth). Volumes were determined by multiplying the strike length by estimated zone thickness and vertical extent. Tonnage ranges were estimated by applying a density factor of 1.8 t/m3 to the model volumes. The 3-D models are restricted to the troughs where they fall below the water table and below the normal depth of weathering. Copper grade ranges used were assumed to be the same as for the Wombat and Bruce troughs. Copper grade ranges used were assumed to be the same as for the Wombat and Bruce troughs, with the ranges supported by the limited drilling data for these targets.

TIER 3 EXPLORATION TARGETS

Category 3 target areas were defined by the presence of ACM (Automatic Curve Matching magnetic anomaly) and coincident surface geochemical anomalies, which in Tier 1 and Tier 3 targets are confirmed to reflect underlying mineralisation. Average width of the weathered troughs are assumed to be similar to category 1 and 2 target areas due to the presence in the same geological environment, similar geophysical and geochemical responses and the troughs are assumed to be sub vertical. Strike lengths were measured using Mapinfo software, vertical extent was limited to 250m. Volumes were determined by multiplying the strike length by estimated zone thickness and vertical extent. Tonnage ranges were estimated by applying a density factor of 1.8 t/m3 to the model volumes. The 3-D models are restricted to the troughs where they fall below the water table and below the normal depth of weathering. Copper grade ranges used were assumed to be the same as for the Wombat and Bruce troughs, as there is insufficient drilling data to confirm grade ranges.

For further information, please contact:

THOR MINING PLC Mick Billing Executive Chairman +61 8 7324 1935

Competent Person's Report

The information in this report that relates to exploration results and Exploration Targets in Tiers 1, 2, and 3, is based on information compiled by Leon Faulkner, who holds a BSc in geology and who is a Member of The Australasian Institute of Geoscientists. Mr Faulkner is an employee of Environmental Metals Recovery Pty Ltd. He has sufficient experience which 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'. Leon Faulkner consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Updates on the Company's activities are regularly posted on Thor's website <u>www.thormining.com</u>, which includes a facility to register to receive these updates by email, and on the Company's twitter page @ThorMining.

About Kapunda

The Kapunda copper project is located approximately 90 kilometres north north-west of Adelaide in South Australia.

On 1 August 2017, Thor announced an agreement to earn up to 60% of a newly incorporated private Australian company, Environmental Copper Recovery SA Pty Ltd, initially via convertible loan notes of up to A\$1.8 million, which will be used to fund field test work and feasibility activities at Kapunda over the next 3 years.

In turn ECR has entered into an agreement to earn, in two stages, up to 75% of the rights over metals which may be recovered via in-situ recovery ("ISR") contained in the Kapunda deposit from Australian listed company, Terramin Australia Limited ("Terramin" ASX: "TZN").

For detail of the In-situ Recovery process, investors are invited to view the ECR website; <u>https://www.envirocopper.com.au/</u>.

In February 2018 Thor announced an Inferred JORC Resource Estimate for the Kapunda project, of 47.4 million tonnes (MT) grading 0.25% Cu, containing 119,000 tonnes of contained copper considered amenable to In-situ Recovery techniques.

For detail of the Resource Estimate Announcement, investors are invited to view the Thor website;

<u>http://www.thormining.com/-</u> /thor/lib/docs/asx%20releases/20180212%20ASX%20Kapunda%20Resource.pdf .

Subsequently, on 30 July 2018, the Company announced details of a CRC-P (Cooperative Research Centre) grant to the value of A\$2.85 million from the Australian Commonwealth Government for the Kapunda In-Situ Copper and Gold Recovery Trial.

About Moonta

The Moonta copper project forms part of exploration licence EL5984 and is located on the Yorke Peninsula in South Australia approximately 160 kilometres north north-east of Adelaide.

The licence area sits within the historical "copper triangle" of South Australia where high grade copper was mined and processed from the 1860's until the 1920's producing a reported 300,000 tonnes of copper.

The tenement is highly mineralised, and includes numerous historically mined deposits, as well as more recent copper discoveries, including the Bruce Zone at Alford West, and the Wombat deposit three kilometres to the west.

The Bruce and Wombat deposits are considered to have a number of critical attributes which may allow copper production via insitu recovery (ISR) techniques. Both deposits are characterised by deeply developed weathering troughs that extend hundreds of metres below surface. The rocks to both the north and south are fresh and impermeable while the trough material contains copper mineralisation that is oxidised, porous, and likely permeable, and is situated below both the water table and sea level. Both deposits remain open along strike, presenting opportunities to find further mineralisation in the trough extensions.

About Thor Mining PLC

Thor Mining PLC (AIM, ASX: THR) is a resources company quoted on the AIM Market of the London Stock Exchange and on ASX in Australia.

Thor holds 100% of the advanced Molyhil tungsten project in the Northern Territory of Australia, for which an updated feasibility study in August 2018¹ suggested attractive returns.

Adjacent Molyhil, at Bonya, Thor holds a 40% interest in deposits of tungsten, copper, and vanadium, including an Inferred resource for the Bonya copper deposit².

Thor also holds 100% of the Pilot Mountain tungsten project in Nevada USA which has a JORC 2012 Indicated and Inferred Resources Estimate³ on 2 of the 4 known deposits. The US Department of the Interior has confirmed that tungsten, the primary resource mineral at Pilot Mountain, has been included in the final list of Critical Minerals 2018.

Thor is also acquiring up to a 60% interest Australian copper development company Environmental Copper Recovery SA Pty Ltd, which in turn holds rights to earn up to a 75% interest in the mineral rights and claims over the resource³ on the portion of the historic Kapunda copper mine in South Australia recoverable by way of in situ recovery.

Thor has an interest in Hawkstone Mining Limited, an Australian ASX listed company with a 100% Interest in a Lithium project in Arizona, USA.

Finally, Thor also holds a production royalty entitlement from the Spring Hill Gold project⁵ of:

- *A\$6 per ounce of gold produced from the Spring Hill tenements where the gold produced is sold for up to A\$1,500 per ounce; and*
- A\$14 per ounce of gold produced from the Spring Hill tenements where the gold produced is sold for amounts over A\$1,500 per ounce.

<u>Notes</u>

- ¹ Refer ASX and AIM announcement of 23 August 2018
- ² Refer ASX and AIM announcement of 26 November 2018
- ³ Refer AIM announcement of 13 December 2018 and ASX announcement of 14 December 2018

JORC CODE, 2012 EDITION - TABLE 1

1.1 Section 1 Sampling Techniques and Data

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

Criteria	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 hand held XRF instruments, etc) These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	• Diamond, reverse circulation and aircore drilling was used to obtain samples which were pulverised to produce sub samples for lab assay for metals including copper.
Drilling Techniques	• Drill type (air 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 orientated and if so, by what method, etc).	 Drill methods included diamond coring, reverse circulation and aircore. Hole diameters varied for methods. Some diamond core was triple tubed. Face sampling hammers were used for RC holes.
Drill Sample Recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the sample. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of coarse/fine material. 	 Qualitative assessment of sample recovery and moisture content of all ADN drill samples was recorded. Sample recoveries for other company holes variably recorded. No relationship is known to exist between sample recovery and grade.

Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 All holes were geologically logged by on-site geologist, with lithological, mineralogical, weathering, alteration, mineralisation and veining information recorded. The holes have not been geotechnically logged. Geological logging is qualitative. Chip trays containing geological sub-samples are photographed at the completion of the drilling program. 100% of any reported intersections have been geologically logged.
Sub- sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub- sampling stages to maximise representativity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Diamond samples collected by sawing core in half. RC samples collected using splitter under cyclone if dry or by grab sample if wet. Aircore samples collected from bulk sample using a trowel. The majority of drill samples were wet. Laboratory sample preparation includes drying and pulverising of submitted sample to target of P80 at 75um. No ADN samples checked for size after pulverising failed to meet sizing target in the sample batches relevant to the report. Duplicate and standard samples were introduced into ADN sample stream by the Company, while the laboratory completed double assays on many samples. QAQC measures undertaken by other companies not generally known. Both ADN and laboratory introduced QAQC samples indicate acceptable analytical accuracy. Laboratory analytical charge sizes are standard sizes and considered adequate for the material being assayed.

Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and mode, reading times, calibration factors applied and their derivation, etc. Nature and quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 For ADN samples standard laboratory analyses completed for copper (4 acid digest with ICP-AES) and over range (>1%) copper (4 acid digest with AA finish). The laboratory analytical methods are considered to be total. For laboratory samples ADN introduced QA/QC samples at a ratio of one QA/QC sample for every 24 drill samples. The laboratory additionally introduced QA/QC samples (blanks, standards, checks) at a
		 ratio of greater than 1 QA/QC sample for every 5 drill samples. Both the Company introduced and laboratory introduced QA/QC samples indicate acceptable levels of accuracy and precision have been established.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical or electronic) protocols. Discuss any adjustment to assay data. 	 A Company geologist calculated the list of intersections appearing in Table 1 of the report. A sub-set of these intersections have been checked by the Competent Person. No twinned holes were drilled in the program the subject of the report. No adjustments have been made to the laboratory assay data.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Drill hole collars for ADN and PD/RM holes were pegged using DGPS with an accuracy of +/- 0.5 metres. WMC/NBH and Amalg holes appear to have been pegged by surveyor from a local grid. Downhole surveys were completed on all RC and diamond holes using a compass based instrument. GDA94 (Zone 53) Collar RLs are estimates based upon a high resolution DTM acquired as part of an historical airborne geophysical survey. Historical collar locations have been either digitised from reports.

Data spacing and distribution	 Data spacing for reporting of Exploration Results Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classification applied. Whether sample compositing has been applied. 	 At Wombat and Bruce most holes are drilled on 100m spaced lines at 25 metre intervals. The data spacing is considered sufficient to allow confident interpretation of the weathering troughs. No sample compositing has been applied.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 Drill lines oriented north-south across E-W trending lodes. The angle of incidence at the Bruce Zones is not considered to result in biased sampling. At Wombat the drill lines are oriented approximately NW-SE.

Sample security	• The measures taken to ensure sample security.	 Measures for non ADN drilled holes unknown. ADN samples were transported and delivered to the laboratory by Company staff.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data	• No audits completed.

1.1 Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section may apply to this section)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements of material issues with third parties such as joint ventures, overriding royalties, native titles interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area. 	 The area the subject of this report falls within EL 5984, which is 100% owned by Peninsula Resources limited, a wholly owned subsidiary of Andromeda Metals Limited. There are no non govt royalties, historical sites or environmental issues. Underlying land title is Freehold land which extinguishes native title. EL 5984 is in good standing.
Exploration done by other parties	• Acknowledgement and appraisal of exploration by other parties.	 The general area the subject of this report has been explored in the past by various companies including Western Mining Corporation, North Broken Hill, Amalg Resources, and Phelps Dodge/Red Metal. The Company has reviewed past exploration data generated by these companies.
Geology	• Deposit type, geological setting and style of mineralisation.	Deposits in the general region are considered to be of Iron Oxide Copper Gold affinity, related to the 1590Ma Hiltaba/GRV tectonothermal event. Cu-Au-Mo-Pb mineralisation is structurally controlled and associated with significant metasomatic alteration of host rocks.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: Easting and northing of the drill collar Elevation or RL (Reduced Level – elevation above sea level in meters) of the drill collar. Dip and azimuth of the hole. Down hole length and interception depth. Hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly 	• The required information on drill holes that have intersections within the wireframe used to determine a Exploration Target tonnage and grade range are included in Table 2 of the report. Tabulated intersections were calculated using weighted average intersections in Micromine.

Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/ or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in some detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Intersections are calculated by simple averaging of 1m assays. (There are a handful of sub-1m intervals within historical diamond holes which have been weighted accordingly. No metal equivalents are reported.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 The disposition of the weathering troughs is described in the report. The footnote to Table 2 advises that the intersections are downhole lengths.
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 plans and sections with scales appear as Figures 1 to 6 in the report. A tabulation of intersections appears as Table 2 of the 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.	• The criteria used to determine if an intersection is listed in Table 2 is if it is within the "closed" trough wireframe which was used to determine the Exploration Target.
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, ground water, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• There is no other meaningful or material exploration data that has been omitted from the report.
Further work	 The nature and scale of planned further work (eg tests of lateral extensions or depth extensions or large scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	• Further work may involve further technical studies including lixiviant optimisation, permeability studies, possibility of recovering cobalt and gold etc.