

# ASX Announcement

8 May 2019



**Andromeda Metals Limited**  
ABN: 75 061 503 375

## Corporate details:

ASX Code: ADN

Cash: \$2.40 million  
(as at 31 March 2019)

Issued Capital:  
1,355,499,211 ordinary shares  
704,588,163 ADNOB options  
20,000,000 unlisted options

## Directors:

**Rhod Grivas**  
Non-Executive Chairman

**James Marsh**  
Managing Director

**Nick Harding**  
Executive Director and  
Company Secretary

**Andrew Shearer**  
Non-Executive Director

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## Increased Ounces in Updated Wudinna Gold Project Mineral Resource

### Summary

- Based on a new geological reinterpretation, an increased Mineral Resource for the Wudinna Gold Project located on the Eyre Peninsula in South Australia of 4.43 million tonnes at 1.5g/t gold for 211,000 ounces of gold is reported.
- The revised Mineral Resource covering the Barns, White Tank and Baggy Green deposits represents an increase of 5% in total contained gold and 15% in resource tonnes over the previous Mineral Resource estimate. All three deposits are located within 6kms of each other and remain open in multiple directions.
- The new Mineral Resource comprises 4.02 million tonnes at 1.5g/t gold for 193,000 ounces of Inferred Resource and 0.41 million tonnes at 1.4g/t for 18,000 ounces of Indicated Resource.
- The resource update was completed by the Joint Venture operator Cobra Resources PLC. Subject to funding, Cobra is planning to undertake an extensive exploration program at Baggy Green and other identified targets across the Wudinna Gold Project during the second half of 2019.

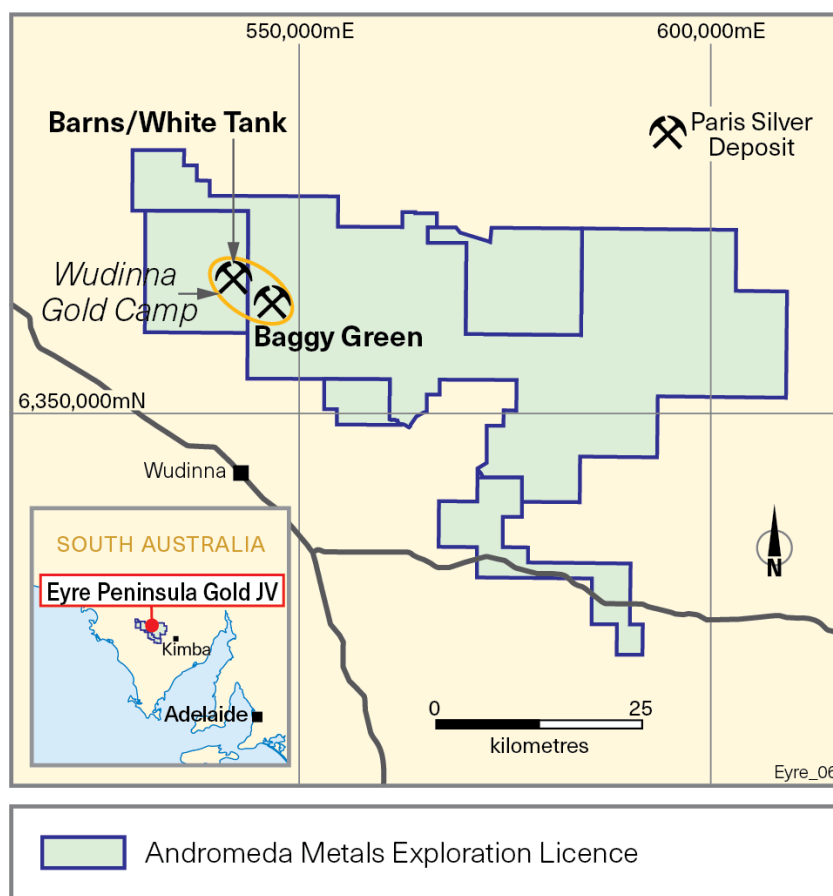
### Discussion

Andromeda Metals (ASX: ADN) has been provided with an updated Mineral Resource covering the Company's Wudinna Gold Camp on the Eyre Peninsula in South Australia which is under a Joint Venture with Lady Alice Mines Pty Ltd ("LAM") (refer ASX announcement dated 31 October 2017). LAM was acquired by London Stock Exchange Limited Cobra Resources PLC ("Cobra") on 6 March 2019 and as a consequence Cobra is now acting as the operator of the Joint Venture.

ADN's Managing Director James Mash commented, "It is a very positive development to have Cobra Resources undertaking new exploration at the Wudinna Gold Project while the current focus for Andromeda Metals remains the Poochera Halloysite-Kaolin Project".

## Deposit Descriptions

The Eyre Peninsula Gold Joint Venture comprises a 2,027km<sup>2</sup> land holding in the Gawler Craton. The Wudinna Gold Camp within the Joint Venture tenement holding comprises a cluster of gold prospects which includes the Barns, White Tank and Baggy Green deposits (refer Figure 1).



**Figure 1: Eyre Peninsula Gold Joint Venture location plan**

The Central Gawler Gold Province is a belt of gold-dominant mineralisation which formed approximately 1590 million years ago during the regionally extensive Hiltaba/GRV tectonothermal event. Gold mineralisation at the Barns, White Tank and Baggy Green deposits is hosted by variably deformed granodiorite/gneiss interpreted to belong to the Tunkillia Suite, a group of 1690Ma granitoids that form important host rocks in the Central Gawler Gold Province.

Interpreted mineralisation at Barns extends over an area of 400 mN by 250 mE and is up to 200 metres deep. Two lodes of flat-lying supergene mineralisation and 12 lodes of shallow dipping, fresh mineralisation have been interpreted.

At White Tank, the interpreted mineralisation extends for 250 mN by 150 mE and is up to 120 metres deep. One lode of flat-lying mineralisation and two shallow dipping lodes of mineralisation within fresh material have been interpreted.

The Baggy Green resource has two areas of mineralisation: within the south the interpreted mineralisation extends over an area of 200 mN by 400 mE and in the north it extends over an area of 150 mN by 300 mE. One lode of flat-lying supergene mineralisation and 13 shallow dipping lodes of mineralisation have been interpreted within the fresh material to a depth of 200 metres.

## Updated Mineral Resource

In 2018, LAM requested Optiro Pty Ltd (“**Optiro**”), a respected geological and mining consultancy group based in Perth, Western Australia, to investigate an alternative orientation to the interpreted mineralisation at Barns, White Tank and Baggy Green aligned with the strong regional northwest/southeast orientation observed in:

- Calcrete gold geochemical data;
- Regional gravity and magnetic data; and
- Structural interpretation of drill core data.

Variography indicated that the maximum continuity for the mineralisation at Barns is orientated along 305°, which is consistent with the regional orientation observed by LAM. LAM requested Optiro to re-model the mineralisation at Barns, White Tank and Baggy Green using this as the dominant orientation for the mineralisation and to develop alternative conceptual resource models.

In April 2019, Cobra requested Optiro to re-estimate the Barns, White Tank and Baggy Green resources incorporating this alternative interpretation and new variography. As a result, a revised Mineral Resource estimate for the Barns, White Tank and Baggy Green deposits has been calculated and is shown in table 1. A nominal cut-off grade of 0.3g/t gold has been used for interpretation of the mineralisation at Barns, White Tank and Baggy Green with the revised Mineral Resource. The Mineral Resource has been reported above a 0.5g/t gold cut-off grade to reflect current commodity prices and extraction by open pit mining.

Deposit	Classification	Tonnes (x1,000)	Grade (g/t Au)	Gold ounces
Barns	Indicated	410	1.4	18,000
	Inferred	1,710	1.5	86,000
	Total	2,120	1.5	104,000
White Tank	Inferred	280	1.4	13,000
Baggy Green	Inferred	2,030	1.4	94,000
<b>Total</b>		<b>4,430</b>	<b>1.5</b>	<b>211,000</b>

Note: inconsistencies in totals due to rounding

**Table 1: Revised Wudinna Gold Camp Mineral Resource**

The previous Mineral Resource was determined by Mining Plus Pty Ltd and was released to the market (*refer ADN ASX announcements dated 19 July 2016 (Barns) and 23 January 2017 (White Tank and Baggy Green)*) using the same cut-off grade of 0.5g/t gold. A 0.5g/t nominal grade was also used for mineral interpretations. A comparison of the two resource estimates is shown in table 2.

Deposit	Classification	2017			2019			Difference		
		Tonnes (x1,000)	Grade (g/t Au)	Gold ounces	Tonnes (x1,000)	Grade (g/t Au)	Gold ounces	Tonnes (x1,000)	Grade (g/t Au)	Gold ounces
Barns	Indicated	380	1.4	17,000	410	1.4	18,000	8%	0%	6%
	Inferred	1,730	1.6	90,000	1,710	1.5	86,000	-2%	-6%	-4%
	Total	2,110	1.6	107,000	2,120	1.5	104,000	0%	-6%	-3%
White Tank	Inferred	176	1.9	10,900	280	1.4	13,000	56%	-26%	19%
Baggy Green	Inferred	1,563	1.6	82,400	2,030	1.4	94,000	30%	-13%	12%
<b>Total</b>		<b>3,849</b>	<b>1.6</b>	<b>200,300</b>	<b>4,430</b>	<b>1.5</b>	<b>211,000</b>	<b>15%</b>	<b>-8%</b>	<b>5%</b>

**Table 2: Comparison of 2017 and 2019 Mineral Resource Estimates**

For Barns the global estimates are similar, with the 2019 estimate reporting a slightly higher tonnage and lower grade with a resultant decrease in gold ounces. Within the 2019 model a slightly higher proportion of

the resource has been classified as Indicated. The 2017 interpreted resource has a slightly larger lateral extent compared to the 2019 resource. While the alternative orientation has not significantly changed the global resource estimate at Barns, it does present alternative strategies for future exploration and potential resource extension.

At both White Tank and Baggy Green, there is additional tonnage at a lower grade, with an overall increase in contained gold ounces.

For the total Wudinna Gold Camp, the tonnage for the revised Mineral Resource has increased by 15% and the grade decreased by 8% for an overall increase in contained gold of 5%.

### **Further information on updated Mineral Resource**

A summary of attached JORC Table 1 (see Appendix 1) is provided below with respect to the Mineral Resources pursuant to the requirements of ASX listing rule 5.8.1.

**Geology** - the deposits are considered to be either a lode gold or intrusion related mineralisation related to the 1,590 Ma Hiltaba/GRV tectonothermal event. The gold mineralisation is associated with significant alteration of host rocks. Mineralisation interpretation was undertaken using a nominal cut-off grade of 0.3g/t gold, structural measurements from drill core, and regional orientations observed from calcrete gold geochemistry observed in calcrete gold geochemistry, magnetic and gravity data.

**Drilling method** – included aircore (AC), rotary air-blast (RAB), RC (reverse circulation), rotary hammer (RH) and diamond drilling. Hole diameter for AC was 90 mm. RC hole diameters were generally 4.5 to 5.5 inch with face sampling hammers employed. Diamond core was HQ/ NQ2 diameter. Data from the AC and RAB holes have not been used for resource estimation.

**Sampling and sub-sampling** - 1m drill chip samples were collected from AC, RC, RAB and RH drillholes. RC and many of the RH, AC and RAB samples have been riffle split if dry. Wet samples have been sub-sampled using trowels. Composite sample of 6 m were submitted for analysis and anomalous intersections were re-submitted for analysis of the 1 m samples. Core samples from diamond drillholes were collected based on geology and half core samples submitted for analysis. A 30 g or a 50 g charge was used for analysis. Pulverising was completed with P80 passing 75µm in preparation for analysis.

**Sample analysis method** - samples were analysed by fire assay with AAS finish. Some screen fire assays have been completed where coarse gold was suspected to be present.

**Estimation methodology** - the resource models for the Barns and White Tank deposits were constructed using a parent block size of 10mE by 10mN on 4m benches; the parent blocks were allowed to sub-cell down to 2mE by 2mN by 0.5mRL to more accurately represent the geometry and volumes of the weathering horizons and mineralisation domains. For Baggy Green, a parent block size of 20mE by 20mN by 5m was used and the parent blocks were allowed to sub-cell down to 4mE by 4mE by 1mRL. Gold block grades were estimated using ordinary kriging techniques, with search ellipses oriented within the plane of the mineralisation. Hard boundary conditions were applied for grade estimation into each of the mineralised domains (i.e. grade estimation for each domain used only the data that is contained within that domain).

**Density** - a total of 255 bulk density determinations have been undertaken at Barns on either historical or recent diamond drillholes and 185 bulk density determinations have been undertaken at Baggy Green on recent diamond drillholes. Average values were calculated using a combination of weathering and mineralisation. Density values assigned to the mineralised domains in the resource models range from 2.29t/m<sup>3</sup> to 2.73t/m<sup>3</sup>.

Resource classification - the Mineral Resources have been classified on the basis of confidence in geological and grade continuity and taking into account data quality (including sampling methods), data density and confidence in the block grade estimation, using the modelled grade continuity and conditional bias measures (slope of the regression) as criteria. Indicated Mineral Resources have been defined at Barns within the supergene mineralisation in areas where drill spacing is generally 20 mE by 50 mN or less. An Indicated classification was applied to four of the fresh lodes where the drill spacing is generally 20 mE by 50 mN or less and the resources are above 40 mRL. Inferred Mineral Resources have been defined in areas where an extension of mineralisation is supported by the drilling. The total Mineral Resources at White Tank and Baggy Green have been classified as Inferred.

Cut-off parameters - the Mineral Resource is reported above a 0.5 g/t gold cut-off grade.

Mining modifying parameters - planned extraction is by open pit mining and mining factors such as dilution and ore loss have not been applied.

Metallurgical factors - no metallurgical assumptions have been built into the resource models. Metallurgical testwork from material at Barns and Baggy Green indicated gold recoveries ranging from 94.3% to 99.3% and averaging 97.7% across all samples from a combination of conventional gravity and cyanide leaching.

### **Wudinna Gold Farm-in and Joint Venture**

The principal terms of the Wudinna Gold Farm-in and Joint Venture which was executed on 31 October 2017 between ADN and LAM include:

- LAM will sole fund \$2.1 million within 3 years of execution to earn a 50% equity position (Stage 1 earn-in).
- At the end of Stage 1, a joint venture can be formed, or alternatively LAM can spend a further \$1.65 million over a further two years (total funding of \$3.75 million over 5 years) to earn a 65% equity interest (Stage 2 earn-in).
- At the end of Stage 2, a joint venture can be formed, or alternatively LAM can spend a further \$1.25 million over a further 12 months (total funding of \$5.0 million over 6 years) to earn a 75% equity interest (Stage 3 earn-in).
- Once a joint venture is formed, the parties will contribute to further expenditure in accordance with their respective equity, or dilute using a standard dilution procedure.
- Should a party's equity fall below 5%, its equity will be compulsorily acquired by the other party at a price to be negotiated in good faith, or failing agreement, at a price determined by an independent valuer.
- LAM must meet the requisite statutory expenditure requirements to keep the project tenements in good standing.
- LAM will act as manager during the farm-in and thereafter while ever it holds at least 50% equity.

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### **Competent Person's Statement**

*Information in this announcement that relates to the Estimation and Reporting of Mineral Resources has been compiled by Mrs Christine Standing BSc Hons (Geology), MSc (Min Econs), MAusIMM, MAIG. Mrs Standing is a full-time employee of Optiro and has acted as an independent consultant on the Mineral Resource estimates for the Barns, White Tank and Baggy Green deposits. Mrs Standing is a Member of the Australian Institute of Geoscientists and the Australian Institute of Mining and Metallurgy and has sufficient experience with the style of mineralisation, deposit type under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mrs Standing consents to the inclusion in this report of the contained technical information relating to the Mineral Resource estimations in the form and context in which it appears. The detailed Mineral Resources estimation parameters per Table 1 of the JORC Code are set out in Appendix One of this release.*

### **Cautionary Statement**

*Readers should use caution when reviewing the exploration and historical production results presented and ensure that the Modifying Factors described in the 2012 Edition of the JORC Code are considered before making an investment decision.*

## APPENDIX 1 - JORC CODE, 2012 EDITION – TABLE 1

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul style="list-style-type: none"> <li>Aircore (AC), rotary air-blast (RAB), RC (reverse circulation), rotary hammer (RH) and diamond drilling has been used to obtain 6 m composite and 1 m samples which have been pulverised to produce sub samples for laboratory assay (nominal 50 g or 30 g charge for gold fire assay with AAS finish).</li> <li>Data from AC and RAB holes have not been used for resource estimation.</li> <li>Some samples have also been assayed for a suite of other elements using multi-acid digest of small weight charges finished with ICP-OES and ICP-MS).</li> <li>Some screen fire assays have been completed where coarse gold was suspected to be present.</li> <li>RC and many of the RH, AC and RAB samples have been riffle split if dry. Wet samples have been sub-sampled using trowels.</li> <li>Diamond core has been sawn in half, with half core submitted for assay.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Drill methods include AC, RH and RAB in unconsolidated regolith and aircore hammer in hard rock. Some shallow RC holes have been drilled in place of AC and RAB.</li> <li>Hole diameter for AC was 90 mm. RC hole diameters were generally 4.5 to 5.5 inch with face sampling hammers employed.</li> <li>Diamond core was HQ/ NQ2 diameter.</li> <li>Data from AC and RAB holes have not been used for resource estimation.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Qualitative assessment of sample recovery and moisture content of all drill samples has been recorded.</li> <li>Sample cyclone cleaned at end of each hole and as required to minimise down-hole and cross-hole contamination.</li> <li>Core recovery has not been calculated in early diamond holes. Core recovery has been recorded in the 2015 diamond drilling and was very high.</li> <li>No relationship is known to exist between sample recovery and grade.</li> <li>Results of three twinned RC and diamond core hole pairs indicates that RC samples may be under-sampling gold, as the diamond core holes returned between 30% and 70% higher grades for equivalent intervals.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul style="list-style-type: none"> <li>All drillholes have been geologically logged by on-site geologist, with lithological, mineralogical, weathering, alteration, mineralisation and veining information recorded. The drillholes have not been geotechnically logged, except for basic BPM and RQD on the three diamond drillholes completed in 2015.</li> <li>Geological logging is qualitative.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>Chip trays containing 2 m sub-samples from AC, RAB and RC drillholes have been collected and photographed at the completion of the drilling programme.</li> <li>100% of any reported intersections (and of all metres drilled) have been geologically logged.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>Diamond core has been sawn in half to present a ½ core assay sample. Duplicates have been ¼ core sawn.</li> <li>Samples from AC, RAB and “bedrock” RC holes have been collected initially as 6 m composites followed by 1 m re-splits. Many of the 1 m re-splits have been collected by riffle splitting.</li> <li>RC samples have been collected by riffle splitting if dry, or by trowel if wet.</li> <li>Recent RC sampling has been split by cone splitter (12.5% Split) and 1m samples through prospective zones have been submitted to the laboratory.</li> <li>Laboratory sample preparation included drying, crushing if ½ core, and pulverising of submitted sample to target of P80 at 75 µm.</li> <li>Pulverised samples have been routinely checked for size after pulverising.</li> <li>Laboratory analytical charge size included 30 g and 50 g standard sizes which are considered adequate for the material being assayed, although the presence of coarse gold was suspected in some samples based on variability in grade of multiply assayed samples.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>Standard laboratory analyses completed for gold (fire assay).</li> <li>The laboratory analytical methods used are considered to be total.</li> <li>For laboratory samples the Company introduced QAQC samples (standards and duplicates) at a ratio of one QAQC sample for every 22 to 24 drill samples. The laboratory additionally introduced QAQC samples (blanks, standards, checks).</li> <li>Both the Company and laboratory QAQC samples indicate acceptable levels of accuracy and precision have been established.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Company has submitted a substantial number of significant intersection as well as QAQC Standard and Blanks to a third Party “Umpire” laboratory.</li> <li>Three RC holes at Barns have been twinned with diamond holes. Results showed that grades were on average higher than the RC holes.</li> <li>At Baggy Green there has been 1 RC hole “twinned” with a diamond hole in 2015, Grades are comparable between holes.</li> <li>There have been no twinned holes completed at White Tank.</li> <li>The Company has not had umpire assay checks completed on any White Tank material but has verified the laboratory competencies with umpire checks from other nearby prospects (Barns and</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>Baggy Green). The competent person and another company geologist have checked the results as well.</p> <ul style="list-style-type: none"> <li>Andromeda Metals uses a Maxwell's Datashed database to store and validate its drilling data.</li> <li>No adjustments have been made to the laboratory assay data.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Drillhole collars have normally been pegged using DGPS with an accuracy of +/-0.5 m.</li> <li>Downhole surveys have been completed for deeper RC and diamond drillholes.</li> <li>The co-ordinate system used during the historic exploration programme was AMG84 Zone 53.</li> <li>Since this time the coordinates have been converted into MGA94 Zone 53 datum.</li> <li>Collar RLs have been created from a high resolution DTM, acquired from a geophysical survey.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drill lines at Barns have been drilled mainly on a 50 m section spacing with some sections having been drilled 25 m apart. Drillhole spacings on section vary but on average are in the order of 20 m apart.</li> <li>Drill lines at Baggy Green have been drilled mainly on a 50 m section spacing. Drillhole spacing on section vary but on average are in the order of 20 to 50 m apart.</li> <li>Drill lines at White Tank have been drilled mainly on a 50 m section spacing. Drillhole spacing on section vary but on average are in the order of 10 to 50 m apart.</li> <li>The assay data has been composited for resource estimation purposes.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Drill lines oriented east-west at Barns and Baggy Green.</li> <li>Drill lines initially oriented east-west then changed to northwest-southeast at White Tank.</li> <li>It remains unknown if internal mineralised structures exist at different orientations to the overall strike of mineralisation at Barns and Baggy Green.</li> <li>Evidence from a drill traverse with 10 m hole spacing is that high grade shoots of gold are present in the overall plane of mineralisation at White Tank.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Company staff collected or supervised the collection of all laboratory samples.</li> <li>Samples submitted to the laboratory samples have been transported by a local freight contractor.</li> <li>There exists no suspicion that the historic samples have been tampered with at any stage.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>There have been no external audits or reviews of the sampling techniques and data.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The Barns and White Tank deposits are within EL 5092 and is owned 100% by Peninsula Resources limited, a wholly owned subsidiary of Andromeda Metals Limited.</li> <li>The Baggy Green deposit is within EL5120, owned 100% by Peninsula Resources limited, a wholly owned subsidiary of Andromeda Metals Limited.</li> <li>Newcrest Mining Limited retains a 1.5% NSR royalty over future mineral production from both licences.</li> <li>The Barns and White Tank deposits are on Perpetual Leasehold land used for cereal cropping.</li> <li>Native Title is extinguished on Perpetual Leasehold land (Barns and White Tank).</li> <li>A Native Title Agreement has been negotiated with the NT Claimant and has been registered with the SA Government.</li> <li>Aboriginal heritage surveys have been completed over the Barns and White Tank deposit areas with no sites located in the immediate vicinity of the deposits.</li> <li>A Compensation Agreement is in place with the relevant agricultural landowner.</li> <li>Baggy Green is located within Pinkawillinnie Conservation Park. Native Title Agreement has been negotiated with the NT Claimant and has been registered with the SA Government.</li> <li>Aboriginal heritage surveys have been completed over the Baggy Green project area, with no sites located in the immediate vicinity.</li> <li>A Native Title Agreement is in place with the relevant Native Title party.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>On-ground exploration completed prior to Andromeda Metals' work was limited to 400 m spaced soil geochemistry completed by Newcrest Mining Limited over the Barns prospect.</li> <li>Other than the flying of regional airborne geophysics and coarse spaced ground gravity, there has been no recorded exploration in the vicinity of the Baggy Green deposit prior to Andromeda Metals' work.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The deposits are considered to be either a lode gold or intrusion related mineralisation related to the 1,590 Ma Hiltaba/GRV tectonothermal event.</li> <li>Gold mineralisation is associated with significant alteration of host rocks.</li> </ul>
<b>Drillhole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: <ul style="list-style-type: none"> <li>easting and northing of the drillhole collar</li> <li>elevation or RL (elevation above sea level in metres) of the drillhole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported for the Mineral Resources areas.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported for the Mineral Resources areas.</li> <li>Metal equivalent values have not been used.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.</i></li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported for the Mineral Resources areas.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported for the Mineral Resources areas.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported for the Mineral Resources areas.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported for the Mineral Resources areas.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> </ul>	<ul style="list-style-type: none"> <li>Infill and extensional drilling aimed at growing the resource and converting Inferred resources to Indicated resources is planned.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Data validation procedures used.</i></li> </ul>	<ul style="list-style-type: none"> <li>The drillhole database is managed in-house by company geologists using Maxwell's Datashed Data Management System.</li> <li>It has been validated by several company geologists and database administrators.</li> <li>Data has been imported from current and historical data files.</li> <li>Source data for historical drilling has been verified as being drilled by Andromeda Metals and imported directly into Datashed.</li> <li>Additional data validation, by Optiro, included checking for out of range assay data and overlapping or missing intervals.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> </ul>	<ul style="list-style-type: none"> <li>Mrs C Standing has not visited the Wudinna Gold Project. All drilling, sampling and geological logging on site was undertaken by Andromeda Metals personnel under the supervision of experienced geologist Mr C Drown.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>The weathering interpretation has been used to guide the segregation of the mineralisation into primary and supergene zones, which have been treated separately in the estimation.</li> <li>As the host lithology is relatively homogenous, this has not been used to guide the primary mineralisation interpretation.</li> <li>These resource estimates investigate an alternative interpretation to the 2016 (Barns) and 2017 (White Tank and Baggy Green) resource estimates.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul style="list-style-type: none"> <li>The Barns resource has an extent of 400 mN by 250 mE and is up to 200 m deep.</li> <li>The White Tank resource has an extent of 250mN by 150 mE and is up to 120 m deep.</li> <li>The Baggy Green resource has two areas of mineralisation with extents of 200 mN by 400 mE and 150 mN by 300 mE. The mineralisation extends to a depth of 200 m.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>Data analysis and estimation was undertaken using Snowden Supervisor and Datamine software.</li> <li>Drillhole sample data was flagged from mineralised interpretations.</li> <li>Mineralisation interpretation were extended to half the drill spacing and up to 15 m along strike.</li> <li>Sample data was composited to a 1 m downhole length.</li> <li>The data has a moderate to high coefficient of variation and high-grade outliers are present. Top-cut grades of 4 to 19 g/t gold were applied to the supergene mineralisation and 19 to 25 g/t gold to the fresh mineralisation. The top-cut grades were selected by examining histograms, log probability plots, population disintegration.</li> <li>The Mineral Resources were estimated by Mining Plus in 2016 (Barns) and 2017 (White Tank and Baggy Green). These resources were interpreted using a higher nominal cut-off grade and have different lateral extents and mineralisation continuity orientations. The global difference is small (5% more contained gold in the 2019 model) and the tonnage and grade variances for the individual deposits are consistent with the differences applied to the interpretation and resource estimation process.</li> <li>No assumptions have been made regarding the recovery of by-products.</li> <li>Only gold has been estimated.</li> <li>Gold mineralisation continuity was interpreted from variogram analyses to have along strike (or down-plunge) ranges of 26 m to 53 m, across strike (or down-dip) ranges of 42 m to 75 m and vertical (or perpendicular to the mineralisation plane) of 4.5 to 13 m.</li> <li>Grade estimation at Barns and White Tank was into parent blocks of 10 mE by 10 mN on 4 m benches and at Baggy Green was into a parent block of 20 mE by 20 mN on 5 m benches. Block</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>sizes were selected based on kriging neighbourhood analysis.</p> <ul style="list-style-type: none"> <li>Estimation was carried out using ordinary kriging at the parent block scale.</li> <li>The search ellipses were oriented within the plane of the mineralisation.</li> <li>Three estimation passes were used; the first search was based upon the variogram ranges in the three principal directions; the second search was two times the initial search and the third search was five to six times the second search, with reduced sample numbers required for estimation.</li> <li>At Barns, around 62% of the block grades were estimated in the first pass, 29% in the second pass and 9% in the third search pass. At White Tank, around 81% of the block grades were estimated in the first pass, 17% in the second pass and 2% in the third search pass. At Baggy Green, around 21% of the block grades were estimated in the first pass, 43% in the second pass and 35% in the third search pass.</li> <li>The estimated gold block model grades were visually validated against the input drillhole data, comparisons were carried out against the drillhole data and by northing, easting and elevation slices.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>Tonnes have been estimated on a dry basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Barns, Baggy Green and White Tank Mineral Resource estimates have been reported at a cut-off grade of 0.5 g/t gold, which is considered appropriate for the likely open pit mining method.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It 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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Planned extraction is by open pit mining.</li> <li>Mining factors such as dilution and ore loss have not been applied.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous.</i></li> </ul>	<ul style="list-style-type: none"> <li>No metallurgical assumptions have been built into the resource models.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the</i></li> </ul>	<ul style="list-style-type: none"> <li>No assumptions have been made regarding waste and process residue.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>mining and processing operation.</i>	
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>• <i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li>• <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A total of 255 bulk density determinations have been undertaken at Barns on either historical or recent drillholes.</li> <li>• The Barns deposit is 1 km north of White Tank and the bulk density determinations are considered valid for White Tank.</li> <li>• A total of 185 bulk density determinations have been undertaken at Baggy Green on either historical or recent drillholes.</li> <li>• Average values have been calculated from the dataset and applied to the resource model based on the oxidation/weathering state and lithologies in the area</li> <li>• Bulk density measurements were calculated by water displacement method.</li> <li>• Density values assigned to the resource model range from 2.52 t/m<sup>3</sup> to 2.73 t/m<sup>3</sup>.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Mineral Resources have been classified on the basis of confidence in geological and grade continuity and taking into account data quality, data density and confidence in the grade estimation (using the modelled grade continuity and the slope of the regression as criteria).</li> <li>• The Mineral Resources at White Tank and Baggy Green have been classified as Inferred.</li> <li>• Indicated Mineral Resources have been defined at Barns within four of the fresh mineralisation domains in areas where drill spacing is generally 20 mE by 50 m or less and the resources are above 40 mRL.</li> <li>• Inferred Mineral Resources have been defined at Barns in areas where extension of mineralisation is supported by the drilling.</li> <li>• The classification considers all available data and quality of the estimate and reflects the Competent Person's view of the deposit.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The 2019 Mineral Resource estimates for Barns, White Tank and Baggy Green have not yet been audited by an external party.</li> <li>• Optiro understands the SRK consulting will be reviewing the Mineral Resource estimates for Cobra Resources PLC.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The assigned classification of Indicated and Inferred reflects the Competent Person's assessment of the accuracy and confidence levels in the Mineral Resource estimate.</li> <li>• The statement relates to global estimates of tonnes and grade.</li> <li>• No production data exists for the Wudinna Project gold deposits.</li> </ul>