

### Cobra Resources PLC Wudinna Gold Project - Mineral Resource Update May 2019 - Technical Report Final



#### J\_2386

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May 2019

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Doc Ref:

190507\_J2386\_CobraRL\_Wudinna\_MRE\_May2019\_Final.docx

Print Date: 7 May 2019

Number of copies:

Optiro: 1

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#### 1. EXECUTIVE SUMMARY

At Cobra Resources PLC's request, Optiro Pty Ltd (Optiro) has prepared updated Mineral Resource estimates for the Barns, White Tank and Baggy Green deposits. These deposits are within the Wudinna Gold Project, located in the Eyre Peninsula of South Australia approximately 25 km north of the township of Wudinna.

Gold mineralisation at the Wudinna Project is associated with a large hydrothermal alteration halo within granodiorite. At Baggy Green, the host rocks are visibly altered and sheared in and around the mineralised zone. Mineral Resources were estimated by Mining Plus Pty Ltd (Mining Plus), for Andromeda Metals Limited (the owner of the project), in 2016 for the Barns deposit and in 2017 for the White Tank and Baggy Green deposits.

In 2018, Lady Alice Mines Pty Ltd (LAM), a joint venture party, requested Optiro 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
- 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 remodel 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.

A nominal cut-off grade of 0.3 g/t gold was used for interpretation of the mineralisation at Barns, White Tank and Baggy Green. Optiro provided preliminary resource estimates for Barns, Baggy Green and White Tank which were based on the interpretation of a series of stacked lodes with an overall strike consistent with the regional northwest orientation and a shallow dip to the southwest. Since then, Optiro obtained the weathering surfaces and density data used by Mining Plus and has updated the preliminary resource models with these data. In addition, two horizons of supergene mineralisation have been interpreted within the saprolite material at Barns that replaced three of the previously interpreted dipping lodes.

Interpreted mineralisation at Barns extends over and area of 400 mN by 250 mE and is up to 200 m 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 m 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 m.

The resource models for the Barns and White Tank deposits were constructed using a parent block size of 10 mE by 10 mN on 4 m benches; the parent blocks were allowed to sub-cell down to 2 mE by 2 mN by 0.5 mRL to more accurately represent the geometry and volumes of the weathering horizons and mineralisation domains. For Baggy Green a parent block size of 20 mE by 20 mN by 5 m was used and the parent blocks were allowed to sub-cell down to 4 mE by 4 mE by 1 m RL. 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).



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 from the complete dataset by Mining Plus using a combination of weathering and mineralisation. Density values assigned to the mineralised domains in the resource models range from 2.29 t/m<sup>3</sup> to 2.73 t/m<sup>3</sup>.

The mineralisation at Barns, White Tank and Baggy Green has been classified as Indicated and Inferred in accordance with the guidelines of the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves, 2012 (the JORC Code). 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.

The likelihood of eventual economic extraction was considered in terms of possible open pit mining and results from metallurgical testwork. 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.

The Mineral Resource estimate, as at March 2019, for the Barns, White Tank and Baggy Green deposits is reported in Table 1.1. This has been classified and reported in accordance with the guidelines of the JORC Code. The Mineral Resources have been reported above a 0.5 g/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
	Indicated	410	1.4	18,000
Barns	Inferred	1,710	1.5	86,000
	Total	2,210	1.5	104,000
White Tank	Inferred	280	1.4	13,000
Baggy Green	Inferred	2,030	1.4	94,000
То	tal	4,430	1.5	211,000

Table 1.1 Mineral Resource estimates, using alternative interpretation and reported above a cut-off grade of 0.5 g/t gold

Note: inconsistencies in totals due to rounding

For the Wudinna Gold Project, comparison of the 2017 and 2019 resource estimates indicates the tonnage has increased by 15% and the grade decreased by 8% for an overall increase in the contained gold by 5%. For Barns the global estimates are similar, with the 2019 estimate reporting a slightly higher tonnage and lower grade, for a decrease of 3% in gold ounces. Within the 2019 model a slightly higher proportion of the resource has been classified as Indicated. 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, the 2017 resource estimates plot on the grade-tonnage curves as estimated in 2019, but at higher cut-off grades of almost 1 g/t gold. This is in-line with the lower cut-off grade that was used for the mineralisation interpretations in 2019. For both deposits this has resulted in additional tonnage at a lower grade, with an overall increase in contained gold ounces.



#### 2. INTRODUCTION

#### 2.1. PROJECT LOCATION

Optiro Pty Ltd (Optiro) has provided assistance to Cobra Resources PLC (Cobra Resources) with updated Mineral Resource estimates for the Barns, White Tank and Baggy Green deposits. These deposits are within the Wudinna Gold Project, located in the Eyre Peninsula of South Australia approximately 25 km north of the township of Wudinna (Figure 2.1).

The Wudinna Gold Project is 100% owned by Andromeda Metals Limited (previously Adelaide Resources Limited). On 31 October 2017, Andromeda Metals Limited (Andromeda Metals) executed a binding Heads of Agreement with Lady Alice Mines Pty Ltd (LAM) to form the Wudinna Gold Farm-in and Joint Venture.



#### Figure 2.1 Wudinna Gold Project location (Andromeda Metals, 2017b)

#### 2.2. PREVIOUS WORK AND SCOPE OF CURRENT WORK

Mineral Resource were estimated by Mining Plus Pty Ltd (Mining Plus), for Andromeda Metals, in 2016 for the Barns deposit (Coventry, 2016a) and in 2017 for the White Tank and Baggy Green deposits (Coventry, 2016b), as summarised in Table 2.1.

Metallurgical testing has been conducted on samples from both the Barns and Baggy Green deposits. A combination of conventional gravity and cyanide leaching indicated gold recoveries ranging from 94.3% to 99.3%, averaging 97.7% across all samples (Andromeda Metals, 2017a).



		Cut-off	off Indicated Inferred						Total			
Deposit	Mineralisation	g/t Au	Tonnes	g/t Au	Ounces	Tonnes	g/t Au	Ounces	Tonnes	g/t Au	Ounces	
	Supergene	0.5	380,000	1.4	17,000	230,000	1.3	10,000	610,000	1.4	27,000	
Barns	Primary	0.5	-	-	-	1,500,000	1.7	80,000	1,500,000	1.7	80,000	
	Total	0.5	380,000	1.4	17,000	1,730,000	1.6	90,000	2,110,000	1.6	107,000	
Baggy	Primary	0.5	-	-	-	1,563,000	1.6	82,400	1,563,000	1.6	82,400	
Green	Total	0.5	-	-	-	1,563,000	1.6	82,400	1,563,000	1.6	82,400	
14/h:to	Supergene	0.5	-	-	-	43,000	1.4	1,900	43,000	1.4	1,900	
white	Primary	0.5	-	-	-	133,000	2.1	9,000	133,000	2.1	9,000	
тапк	Total	0.5	-	-	-	176,000	1.9	10,900	176,000	1.9	10,900	
	Total		380,000	1.4	17,000	3,469,000	1.6	183,300	3,849,000	1.6	200,300	

 Table 2.1
 Wudinna Gold Project Mineral Resources as at 2017 (Andromeda Metals, 2017a)

For the Barns deposit, Mining Plus interpreted the mineralisation on the east-west drill sections. Flatlying supergene mineralisation was interpreted and, below the saprolite horizon, a series of steeply dipping lodes (with a flexure at depth resulting in a shallower dip), with a north-south strike direction were interpreted.

Mining Plus stated that they "reviewed the applicability of a shallower dip to the mineralisation" and that "although this was equally as valid as the current model in places, the continuity was not as robust". One of Mining Plus's recommendations for Barns (Coventry, 2016a) and both Baggy Green and White Tank (Coventry, 2016b) was to "investigate alternative mineralisation interpretations focussing on continuity in plan view as there are numerous inflection points and changes in direction which may be removed by altering the interpretation".

Optiro's directive from LAM was to investigate an alternative orientation to the interpreted mineralisation at Barns, White Tank and Baggy Green. The alternative Mineral Resource estimates for the Barns, Baggy Green and White Tank deposits have been guided by Mr David Clarke of LAM. LAM noted a strong northwest/southeast orientation in:

- calcrete gold geochemical data
- regional gravity and magnetic data
- structural interpretation of drill core data.

Variography was used to investigate the mineralisation (>0.2 g/t gold) at Barns and this indicated that the maximum continuity for the mineralisation is orientated along 305° (Optiro, 2018a), 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.

Optiro provided preliminary mineralisation estimates for Barns, Baggy Green and White Tank which were based on the interpretation of a series of stacked lodes with an overall strike consistent with the regional northwest orientation and a shallow dip to the southwest. The preliminary figures were reported in 2018 (Optiro, 2018a and 2018b).

Since then, Optiro obtained the weathering surfaces and density data used by Mining Plus and has updated the preliminary resource models with this data. In addition, two horizons of supergene mineralisation have been interpreted within the saprolite material at Barns that replaced three of the previously interpreted dipping lodes.

Optiro's report documents the data sources, assumptions and methodologies used for the Barns, White Tank and Baggy Green Mineral Resource estimates. The databases developed by Mining Plus (Coventry, 2016a and Coventry, 2016b) were used for these resource estimates and this report should be read in conjunction with the reports prepared by Mining Plus, which provide background information on the input data used for the Mineral Resource estimates.



#### 3. GEOLOGY

The following summary of the regional and local geology of the Wudinna Gold Project has been extracted from Drown (2003),

Surface exposure of basement lithologies in the Wudinna district is scarce due to extensive Quaternary cover and deep weathering. High metamorphic grade Archaean Sleaford Complex dominates the eastern part of the district, while 1,690 to 1,680 Ma Tunkillia Suite occurs in the west. The Sleaford Complex largely comprises felsic paragneiss, mafic granulite and rare carbonate and magnetite-rich units. The Tunkillia Suite includes moderately to strongly deformed granodioritic gneiss at Little Pinbong Rockhole located just to the northeast of the Barns deposit.

The dominant host rock is a granodiorite with a primary mineral assemblage of plagioclase, K-feldspar phenocrysts, quartz and biotite, with accessory apatite, allanite, magnetite and zircon. Contained within the host granodiorite are large blocks of country rock of unknown stratigraphic affiliation. Block lithologies include quartzite and gneiss, with individual blocks ranging up to several tens of metres.

Intruding the above lithologies are undeformed thin mafic dykes which vary in width from several centimetres to over five metres. The occurrence of these dykes appears to be restricted to the alteration halo associated with the gold mineralisation. Structural measurements from drill core show them to dip shallowly to moderately to the west. Some of these dykes appear to be unaffected by the hydrothermal event, but many have been altered to chlorite-sericite-pyrite rich rocks and host gold mineralisation.

The regolith comprises a veneer of aeolian sand which rarely exceeds two metres in depth, underlain by weathered bedrock up to 50 m thick. Weathering is lateritic in nature and comprises a welldeveloped 'pallid' white clay zone above coloured saprolite. Iron-rich pisolites and iron mottling in the uppermost part of the weathered bedrock profile may represent a poorly developed ferruginous cap. Gold is almost entirely depleted in the pallid zone and upper parts of the saprolite.

Gold mineralisation at Barns is associated with a large hydrothermal alteration halo. Within the host granodiorite the outermost alteration comprises a propylitic alteration zone where primary biotite is altered to chlorite, the composition of primary plagioclase becomes albite, and iron sourced from accessory magnetite and possibly biotite is oxidised and forms a red dusting. Epidote is common and may form from the calcium lost from the plagioclase during albitisation. The propylitic altered rocks display fine scale micro-fracturing which has allowed ingress of hydrothermal fluids. At Baggy Green, the host rocks are visibly altered and sheared in and around the mineralised zone. Alteration phases include biotite, chlorite, sericite and possibly hydrothermal magnetite. Gold occurs as free grains which can be panned from drill samples.



#### DATA FOR MINERAL RESOURCE ESTIMATION 4.

Optiro has used the databases developed by Mining Plus and provided with the Barns, Baggy Green and White Tank resource models.

Mining Plus reports that Andromeda Metals has assumed all responsibility for the logging, sampling, analytical and QAQC protocols currently in place and used historically at the Barn, White Tank and Baggy Green and has accepted full responsibility for the bulk density values. Weathering surfaces were supplied to Mining Plus by Andromeda Metals (Coventry, 2016a and 2016b).

#### 4.1. DRILLHOLE DATA

Details of the drilling and sampling programmes for the Barns, White Tank and Baggy Green deposits are included in the Mining Plus reports (Coventry, 2016a and 2016b). The summaries included in the JORC Table Sections 1 and 2 (Appendix F) have been extracted from these reports and Andromeda Metal's announcements (2016 and 2017).

Optiro used the drillhole databases provided by Mining Plus as part of the project handover to Andromeda Metals. For the Barns project area, which includes White Tank, the data was imported from the following files:

- 1606\_COLLAR.csv
- 1606\_SURVEY.csv
- 1606 ASSAY.csv •
- 1606\_LITHO.csv.

For the Baggy Green project area, the data was imported from the following files:

- MO\_CALLAR.csv
- MP\_SURVEY.csv •
- MP\_ASSAY.csv
- DH\_Lithology.xls.

Optiro validated the drillhole data using standard Datamine checks and found no erroneous data. The database for Barns and White Tank contains data from aircore (AC), reverse circulation (RC and RCP), rotary hammer (RH) and diamond (DD) drillholes (Table 4.1). The AC holes are located to the north and east, and outside of the defined Mineral Resources at Barns and White Tank. The Baggy Green database contains data from AC, DD, RC, RH and rotary air blast (RAB). The AC and RAB drillholes are located to the north and outside of the defined resources at Baggy Green. Data from RH drillholes was included in the resource estimates and the quality of this data was considered for resource classification.

Deposit area	Drill type	Number of drillholes	Metres drilled
	AC	65	3,195.2
	DD	7	1,328.4
Barns and White Tank	RC and RCP	102	9,882.5
	RH	153	8,653.
	Total	327	23,059.0
	AC	114	4,907.2
	DD	3	541.
De seu Creen	RC and RCP	69	7,738.
Baggy Green	RH	94	3,780.6
	RAB	5	137
	Total	285	17,104.8

#### Table 4.1



Drillholes at Barns have been drilled mainly on a 50 m section spacing with some sections having been drilled 25 m apart. On-section drillhole spacing varies but within the central area is generally at a 20 m spacing (Figure 4.1). At White Tank the holes have been drilled on a 50 m section spacing with on-section spacing from 10 m to 50 m (Figure 4.1). Drillholes at Baggy Green are on a 50 m section spacing and on-section spacing ranges from 20 m to 50 m (Figure 4.2).

### Figure 4.1 Location of drillholes coloured by drilling method and interpreted extent of resource (grey) at Barns (north) and White Tank (south)









Mining Plus undertook a review of the different drilling methods. At Barns, Mining Plus concluded that as the "mean grade for the different drilling types compares well and the small number of data points means that any bias found will be immaterial in the final MRE". At Baggy Green, Mining Plus concluded that there is a bias but as the "RC drilling methods account for almost 85% of mineralised composites used in the estimation..... the difference in grade will have the effect of lowering the overall grade very slightly" and that "the small number of data points means that any bias found is immaterial in the final MRE".

#### 4.2. TOPOGRAPHICAL DATA

The following topographical data for the Barn area (including White Tank) and the Baggy Green area, (included by Mining Plus as part of the project handover to Andromeda Metals) were used to constrain the resource models:

- Barns\_DTM.00t
- BG\_topo\_DTM.00t.



#### 4.3. BULK DENSITY

Mining Plus reported that a total of 255 bulk density determinations were undertaken at Barns on either historical or recent diamond drillholes and 185 bulk density determinations were undertaken at Baggy Green on recent diamond drillholes. Average values were calculated from the complete dataset by Mining Plus (Coventry 2016a and 2016b). These average values (Table 4.2) were applied by Mining Plus to the resource estimates and the average values determined at Barns were used for White Tank (located 1 km to the south of Barns).

Table 4.2	Average bulk density (Coventry 2016a and 2016b)
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Deposit area	Weathering	Density t/m <sup>3</sup>
	Oxide	1.51
Darma	Transitional	2.52
Barris	Fresh	2.68
	Mineralisation	2.70
	Weathered waste	1.95
	Supergene mineralisation	2.29
Baggy Green	Fresh mineralisation	2.73
	High grade fresh mineralisation	2.76
	Fresh waste	2.70

#### 4.4. QUALITY ASSURANCE AND QUALITY CONTROL (QAQC)

Quality assurance and quality control (QAQC) data was not provided to Optiro and has not been reviewed. The comments included in the JORC Table 1 data compiled by Andromeda Metals (Adelaide Resources, 2016 and Andromeda Metals, 2017a), and reproduced in Appendix F, have been considered for classification of the Mineral Resources, which have been classified as Indicated at best.



#### 5. INTERPRETATION AND DOMAINING

#### 5.1. WEATHERING

Weathering /oxidation surfaces were provided as part of the Mining Plus data package which had been generated by Andromeda Metals from the drillhole database. For Barns, the following surfaces were used to delineate boundaries between topography, Quaternary sands, a barren 'pallid' zone, saprolite and saprock:

- Barns\_base\_of\_cover.dxf
- Barns\_base\_of\_pallid\_zone.dxf
- Barns\_base\_of\_saprolite
- Barns\_base\_of\_saprock.

At White Tank the following files were used to delineate boundaries between topography, base of cover and base of oxidation:

- WT\_base\_of\_cover.00t
- WT\_TOFR.00t.

At Baggy Green the following files were used to delineate boundaries between topography, base of complete oxidation and top of fresh material:

- BG\_BOCO.00t
- BG\_TOFR.00t.

#### 5.2. MINERALISATION

Probability plots were used to examine the gold data at the Barns and White Tank area and at the Baggy Green area. For both areas an inflection in the data distributions was noted at approximately 0.3 g/t gold (Figure 5.1). A nominal cut-off grade of 0.3 g/t gold was therefore used for interpretation of the mineralisation at Barns, White Tank and Baggy Green.



Figure 5.1 Probability plot of gold data from 0.1 to 10 g/t gold (Barns and White Tank – left, Baggy Green - right)



Optiro rotated the data at Barns so sections could be generated perpendicular to 305°. Optiro examined the data in 3D with the assistance of David Clarke of LAM and, from this review, a shallow dip to the south-west was interpreted. Optiro used a mineralisation indicator grade of 0.3 g/t gold to interpret a series of mineralised horizons (15 in total) that dip shallowly to the southwest and plunge shallowly to the northwest (Optiro, 2018a and 2018b).

Following provision of the weathering surfaces, Optiro modified the Barns interpretation during 2019 to include two lodes of flat-lying supergene mineralisation (domains 1 and 2). These replaced three of the dipping lodes that were interpreted close to surface. The interpretations of the other 12 fresh lodes (domains 4 to 15) were extended to surface and then trimmed to the base of the lower supergene by sequential coding of the drillhole data and block model (Figure 5.2).



Figure 5.2 3D view of mineralisation at Barns (looking north)

Mineralisation has been intersected at White Tank and in the area surrounding Barns (to the west and south) and it was found that the alternative orientation (305° strike and shallow dip to the south-west) could be applied to the mineralisation in these areas. Three mineralised horizons were interpreted at White Tank (domains 11, 12 and 13). Two of the horizons (domains 12 and 13) have orientations that are consistent with the orientation interpreted at Barns and the upper mineralised horizon, above the base of weathering, has been interpreted to be sub-horizontal supergene mineralisation (Figure 5.3).



Figure 5.3 3D view of mineralisation at White Tank (looking north)



Two areas of mineralisation have been identified within the southern area of the Baggy Green Project. LAM reviewed structural data from oriented drill core from these two areas and their analysis of this data indicated that the mineralisation dipped shallowly to the northeast and may have a shallow plunge to the northwest. This orientation was used to guide the mineralisation interpretation and Optiro used a mineralisation indicator grade of 0.3 g/t gold to interpret a series of mineralised horizons at Baggy Green. Within the southern resourse area, a flay-lying horizon of mineralisation (domain 3) was interpreted above the base of oxidation and an additional 13 domains (4 to 8 and 11 to 18) of dipping mineralisation were interpreted (Figure 5.4).





Surfaces were generated through the centre of each of the interpreted mineralised domains at Barns, White Tank and Baggy Green and the dip and dip direction of these surfaces were determined. These surfaces were used to control the orientation of the search ellipse for grade estimation (as discussed in Section 9).



#### 6. STATISTICAL ANALYSIS

#### 6.1. COMPOSITING

The Barns data was coded within the 15 interpreted mineralised horizons. Within the mineralised horizons, 97% of the assays have been taken over sample intervals of 1 m or less and so the coded data and was composited to 1 m intervals. The White Tank data was coded within the three mineralised horizons. Within the mineralised horizons all of the assays have been taken over sample intervals of 1 m and so down-hole compositing of the data was not required. Within the mineralised horizons at Baggy Green, 94% of the assays have been taken over sample intervals of 1 m or less and so the coded data and was composited to 1 m intervals.

#### 6.2. DATA ANALYSIS

Summary statistics of the 1.0 m coded composites were generated for gold within the interpreted mineralisation domains: these are included in Appendix A. As many of the domains have sparse data, the domains were grouped by weathering and orientation for statistical and geostatistical analysis of the data within each deposit area. Essentially data within the dipping domains within the fresh material at Barns (domains 4 to 15), White Tank (domains 12 and 13) and Baggy Green (domains 4 to 8 and 11 to 18) were combined for each deposit area and the data within the supergene domains at Barns (domains 1 and 2) were combined.

Histograms and probability plots of the gold data within each of the groups of mineralised domains and the statistical parameters are included in Appendix A.

The distributions of the gold data within each of the domain groupings are skewed and have moderate to high coefficients of variation (CV) of 1.48 to 3.70. Top-cut analysis was undertaken to identify outlier grades and to reduce the CV. The top-cut grades were selected by examining histograms, log probability plots, population disintegration and population statistics before and after top-cutting (mainly the mean and coefficient of variation). The influence of this on the raw and top-cut data for each deposit area are documented in Table 6.1 to Table 6.3.

Domoin	Тор-	Deveentile	Number		Mean		Stand	ard Dev	viation	Coeffi	cient of v	ariation
Domain	cut	Percentile	cut	Un-cut	Cut	Diff%	Un-cut	Cut	Diff%	Un-cut	Cut	Diff%
Supergene (1 and 2)	10	99.0%	2	1.36	1.32	-2.7%	2.00	1.80	-10.3%	1.48	1.36	-7.8%
Fresh (4 to 15)	25	99.4%	4	1.65	1.58	-4.3%	3.86	3.09	-19.9%	2.33	1.95	-16.3%

Table 6.1 Barns - top-cut analysis and grades applied for capping of the data geostatistical analysis
---

Table 6 2	White Tank, ton out analysis and grades applied for capping of the data geostatistical analysis

Domain	Тор-	Dorcontilo	Number		Mean		Stand	ard Dev	viation	Coeffi	cient of <b>v</b>	variation
Domain	cut	Percentile	cut	Un-cut	Cut	Diff%	Un-cut	Cut	Diff%	Un-cut	Cut	Diff%
Supergene (11)	19	99.8%	1	1.33	1.31	-1.4%	3.04	2.93	-3.8%	2.29	2.23	-2.4%
Fresh (12 and 13)	19	99.1%	2	1.85	1.56	-15.8%	5.27	2.72	-48.64	2.84	1.74	-38.6%

#### Table 6.3 Baggy Green - top-cut analysis and grades applied for capping of the data geostatistical analysis

Domain	Тор-	Dercentile	Number		Mean		Stand	lard Dev	/iation	Coeffi	cient of <b>v</b>	variation
Domain	cut	Percentile	cut	Un-cut	Cut	Diff%	Un-cut	Cut	Diff%	Un-cut	Cut	Diff%
Supergene (3)	4	96.8%	2	1.59	1.00	-36.9%	4.13	0.85	-79.5%	2.60	0.85	-67.5%
Fresh (4 to 8 and 11 to 18)	25	98.8%	4	1.94	1.56	-20.0%	7.19	3.29	-54.3%	3.70	2.11	-42.9%



#### 7. VARIOGRAPHY

Variogram analysis was undertaken to determine mineralisation continuity within the groups of mineralised domains at Barns, White Tank and Baggy Green. A normal scores transformation was applied, and the variance parameters were back-transformed for grade estimation. Strike directions were interpreted from horizontal variogram fans and dip directions were interpreted from the across-strike variogram fans. Dip plane variogram fans were examined to determine if there was a plunge component to the mineralisation orientation.

The mineralisation within the fresh lodes at Barns was interpreted to have a strike of 305° and a dip of -15° to the southwest. The mineralisation continuity within the mineralised horizons was interpreted from variogram analyses to have ranges of 75 m in the down dip (-15° towards 205°), 26 m down plunge (-3° towards 295°) and 13 m perpendicular to the dip plane. Within the supergene domains (1 and 2) the mineralisation was interpreted to be flay-lying with continuity ranges of 96 m along strike, 42 m across strike and 6 m in the vertical orientation.

The White Tank The mineralisation continuity within the lower fresh domain (13) was interpreted from variogram analyses to have ranges of 56m down plunge (-3° towards 295°), 44 m down dip (-15° towards 205°) and 4.5 m perpendicular to the dip plane. These continuity parameters were applied for grade estimation of the other two domains

At Baggy Green the mineralisation continuity within the mineralised domains was interpreted from variogram analyses to have ranges of 60 m down dip, 35 m down plunge and 10 m perpendicular to the dip plane.

For grade estimation, the search ellipses and variogram parameters were oriented within the plane of the mineralisation of each mineralised domain using Datamine's dynamic anisotropy methodology.

The variogram fans, directional variograms and interpreted models are included in Appendix B and a variogram summary (with the back-transformed variances) is included in Table 7.1.

Deposit	Direction		Direction		Nugget effect	Sill 1	Range 1 (m)	Sill 2	Range 2 (m)	Sill 3	Range 3 (m)
Damaa	1	0°→030°			20		42				
Barris (Supergene)	2	0°→120°	0.44	0.21	9	0.35	96	-	-		
(Supergene)	3	-90°→360°			6		6				
D a ma a	1	-15°→205°			75		75		75		
Barris (Freeb)	2	3°→115°	0.45	0.16	7	0.20	7	0.19	26		
(Fresh)	3	75°→215°			1		2.5		13		
	1	15°→025°			35		44				
White Tank	2	-3°→295°	0.54	0.34	56	0.12	56	-	-		
	3	75°→215°			4.5		4.5				
Dear	1	-17°→088°			27		60				
вадду	2	17°→172°	0.40	0.36	10	0.24	35	-	-		
Green	3	-65°→220°			2		5				

Variogram summary



#### 8. KRIGING NEIGHBOURHOOD ANALYSIS

Kriging neighbourhood analysis (KNA) was conducted to optimise the block size and the kriging parameters used for grade estimation. For Barns and White Tanks, this analysis used the gold variography for domains 4 to 15 at Barns and for Baggy Green the variography for domain 13 was used.

A series of estimates were run with varying block sizes and the kriging efficiency (KE) and slope of regression (RS) values were calculated in each case. Once the optimum block size was selected, a second series of estimates were run for a range of minimum and maximum sample numbers, a third series to examine the influence of the search ranges and then a final series for the discretisation parameters.

For Barns, block sizes of 5 m, 10 m, 15 m, 20 m and 25 m in the easting direction (X) and in the northing direction (Y), and 2 m and 4 m in the vertical direction (Z) were tested. These results (Appendix C) indicated a small increase in the kriging efficiency and regression slope with decreasing block size. A parent block size of 10 mE by 10 mN by 4 mRL was selected.

For Baggy Green, block sizes of 10 m, 15 m, 20 m, 25 m and 30 m in the easting direction (X) and in the northing direction (Y) and 2.5 m and 5 m in the vertical direction (Z) were tested. These results (Appendix C) indicated a small decrease in the kriging efficiency and regression slope with increasing block size from 10 m to 20 m and then a decrease in the kriging efficiency with increasing block size. There is also a significant decrease in the number of negative kriging weights with increasing block size. A parent block size of 20 mE by 20 mN by 5 mRL was selected to accommodate the changes to kriging efficiency, regression slope and number of negative kriging weights.

The influence of the number of informing samples on the estimate was tested. For this analysis, the block size for Barns was set to 10 mE by 10 mN by 4 mRL and the block size for Baggy Green was set to 20 mE by 20 mN by 5 mRL. The sample numbers were varied between 2 and 30. Based on the results of this analysis (Appendix C), for Barns the minimum and maximum numbers of samples were selected to be 6 and 16, respectively for search passes 1 and 2 with the minimum number of samples reduced to 3 for the third search pass. For Baggy Green, the minimum and maximum numbers of samples were selected to be 6 and 12, respectively for search passes 1 and 2 with the minimum number of samples were selected to 3 for the third search pass.

The influence of using the search ellipse was investigated for a range of block sizes. Testing used a search with the same dimensions as the maximum variogram ranges and with a half and double the variogram ranges. For Barns and Baggy Green, the results were the same for each of these scenarios and a search ellipse with the same dimensions as the maximum variogram ranges was selected.

The influence of the block discretisation level on the estimate was also tested. For this analysis, the block size was set to 10 mE by 10 mN by 4 mRL for Barns and 20 mE by 20 mN by 5 mRL for Baggy Green, the number of informing samples was set to the optimal parameters and the discretisation varied from 4 to 6 for each of X, Y and Z. The quality of the block estimate was found to be relatively insensitive to the discretisation level (Appendix C). The discretisation was set to 4 X by 6 Y by 6 Z.



#### 9. GRADE ESTIMATION AND MODEL VALIDATION

#### 9.1. BLOCK MODEL PARAMETERS

Optiro constructed block models for Barns and White Tank using parameters determined from the KNA for Barns. Block models were generated for Barns and White Tank using a parent block size of 10 mE by 10 mN on 4 m benches. The parent blocks were allowed to sub-cell down to 2 mE by 2 mN by 0.5 mRL to more accurately represent the geometry and volumes of the mineralisation horizons.

Optiro constructed a block model for Baggy Green using parameters determined from the KNA for Baggy Greens. A block model was generated for Baggy Green using a parent block size of 20 mE by 20 mN on 5 m benches. The parent blocks were allowed to sub-cell down to 4 mE by 4 mN by 1 mRL to more accurately represent the geometry and volumes of the mineralisation horizons

Details of the model parameters are provided in Appendix D.

#### 9.2. DENSITY

Optiro assigned density values to the resource models based on weathering and mineralisation. The density values are the same as used by Mining Plus, except that the slightly higher density (of  $2.76 \text{ t/m}^3$ ) for the high-grade mineralisation at Baggy Green was not applied. Optiro assigned a density of  $2.73 \text{ t/m}^3$  to domains 4 to 18 at Baggy Green.

#### Table 9.1 Average bulk density assigned to the mineralised domains in the resource models

Deposit area	Weathering	Density t/m <sup>3</sup>
Darns and White Tank	Transitional	2.52
Barns and white fank	Mineralisation	2.70
Deggy Creen	Supergene mineralisation	2.29
Baggy Green	Fresh mineralisation	2.73

#### 9.3. GRADE ESTIMATION

Gold block grades were estimated at Barns, White Tank and Baggy Green using ordinary kriging (OK) techniques with the variogram parameters been included as Table 7.1. The search ellipses were oriented within the plane of the mineralisation using Datamine's dynamic anisotropy methodology. Grades were estimated into the parent blocks and details of the key estimation parameters are provided in Appendix D. Hard boundaries were applied between all mineralisation domains.

A three-pass search was used, whereby the ellipse dimensions for the first search correspond to the mineralisation continuity ranges interpreted from the variogram analysis. Expanded searches were used for the second and third passes, with reduced sample numbers applied for the third search pass (see Appendix D). The percentages of parent blocks estimated in each search pass are listed in Table 9.2.

#### Table 9.2 Percentage of parent blocks estimated in each search pass for each domain

Deposit	Search 1	Search 2	Search 3
Barns	62%	29%	9%
White Tank	81%	17%	2%
Baggy Green	21%	43%	35%



#### 9.4. MODEL VALIDATION

Optiro validated the grade models by:

- visual comparison of the drillholes and blocks
- comparing the mean input grade with the estimated block grade
- examining trend plots of the input data and estimated block grades.

Visual validation of the block models was carried out by examining cross-section, long-section and plan views of the drillhole data and the estimated block grades. These indicate good correlation of the estimated block grades with the input drillhole data for all three deposits.

The gold block estimates were statistically validated against the informing composites on a whole-ofdomain basis. The mean estimated grade of the blocks was compared to the input data mean of the declustered data for the groups of domains at Barns (Table 9.5), the domains at White Tank and the groups of domains at Baggy Green. The differences at Barns, where some of the resources are classified as Indicated (Section 10) are 6% for the supergene and 5% for the fresh mineralisation. At White Tank the differences are 1% to 13% (Table 9.4) and at Baggy Green the differences are 8% to 19% (Table 9.5). The resources at White Tank and Baggy Green have been classified as Inferred (Section 10).

#### Table 9.3 Barns - global comparison of mean input data and block grade

Group	1	2
Domains	1 and 2	4 to 15
Mean - raw input data	1.36	1.65
Mean - top-cut data	1.32	1.58
Mean - top-cut and declustered data	1.34	1.44
Mean - estimated block grades	1.26	1.51
% difference - declustered data and block mean	-6%	5%

#### Table 9.4 White Tank - global comparison of mean input data and block grade

Domains	11	12	13
Mean - raw input data	1.3	0.53	1.93
Mean - top-cut data	1.29	0.53	1.62
Mean - top-cut and declustered data	1.39	0.55	1.16
Mean - estimated block grades	1.3	0.62	1.17
% difference - declustered data and block mean	-6%	13%	1%

#### Table 9.5 Baggy Green - global comparison of mean input data and block grade

Group	1	3	3
Domains	3	4 to 8	11 to 18
Mean - raw input data	1.59	1.22	2.4
Mean - top-cut data	1.00	1.22	1.75
Mean - top-cut and declustered data	0.91	1.2	1.45
Mean - estimated block grades	0.98	1.34	1.72
% difference - declustered data and block mean	8%	12%	19%

Grade trend profiles were constructed to assess any global bias, average grade conformance and to detect any obvious estimation issues. The trend plots were examined in the easting, northing and elevation directions, and are included in Appendix E. The validation plots indicate that there is generally good correlation between the input grades and the block grades. As expected, the model grades are smoother than the input data, particularly for the elevation validation plots.



#### **10. CLASSIFICATION AND RESOURCE REPORTING**

#### 10.1. CLASSIFICATION

The mineralisation at Barns, White Tank and Baggy Green has been classified as Indicated and Inferred in accordance with the guidelines of the JORC Code (2012). Table 1 criteria of the JORC Code and supporting comments are listed in Appendix F. 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 bock 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 domains 5, 8, 9 and 10 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 extension of mineralisation is supported by the drilling. The classification is illustrated in Figure 10.1.

The Mineral Resources at White Tank and Baggy Green have been classified as Inferred.



Figure 10.1 Plan of drillholes and the classified resource model (green= Indicated, blue = Inferred) – top all domains and bottom fresh domains only



#### **10.2. MINERAL RESOURCE STATEMENT**

The Mineral Resource estimate, as at March 2019, for the Barns, White Tanks and Baggy Green deposits is reported in Table 10.1. This has been classified and reported in accordance with the guidelines of the JORC Code (2012). The Mineral Resources have been reported above a 0.5 g/t gold cut-off grade to reflect current commodity prices and likely mining options. The Mineral Resource has been reported at a range of cut-off grades and grade tonnage curves are included as Figure 10.2.

Deposit	Classification	ation Tonnes Gra (x1,000) (g/t		Gold ounces	
	Indicated	410	1.4	18,000	
Barns	Inferred	1,710	1.5	86,000	
	Total	2,210	1.5	104,000	
White Tank	Inferred	280	1.4	13,000	
Baggy Green Inferred		2,030	1.4	94,000	
То	tal	4,430	1.5	211,000	

#### Table 10.1 Mineral Resource estimates, using alternative interpretation and reported above a cut-off grade of 0.5 g/t gold

Note: inconsistencies in totals due to rounding

#### Figure 10.2 Grade and tonnage curves for a range of cut-off grades





#### 10.3. COMPARISON WITH PREVIOUS MINERAL RESOURCES

Mineral Resource were estimated by Mining Plus, for Andromeda Metals in 2016 for the Barns deposit (Coventry, 2016a) and in 2017 for the White Tank and Baggy Green deposits (Coventry, 2016b). These are reported above a cut-off grade of 0.5 g/t gold in Table 10.2.

		Cut-off	Ir	ndicate	ł	In	ferred		Total		
Deposit	Mineralisation	g/t Au	Tonnes	g/t Au	Ounces	Tonnes	g/t Au	Ounces	Tonnes	g/t Au	Ounces
	Supergene	0.5	380,000	1.4	17,000	230,000	1.3	10,000	610,000	1.4	27,000
Barns	Primary	0.5	-	-	-	1,500,000	1.7	80,000	1,500,000	1.7	80,000
	Total	0.5	380,000	1.4	17,000	1,730,000	1.6	90,000	2,110,000	1.6	107,000
Baggy	Primary	0.5	-	-	-	1,563,000	1.6	82,400	1,563,000	1.6	82,400
Green	Total	0.5	-	-	-	1,563,000	1.6	82,400	1,563,000	1.6	82,400
14/h :+ a	Supergene	0.5	-	-	-	43,000	1.4	1,900	43,000	1.4	1,900
white	Primary	0.5	-	-	-	133,000	2.1	9,000	133,000	2.1	9,000
тапк	Total	0.5	-	-	-	176,000	1.9	10,900	176,000	1.9	10,900
Total		380,000	1.4	17,000	3,469,000	1.6	183,300	3,849,000	1.6	200,300	

 Table 10.2
 Wudinna Gold Project Mineral Resources as at 2017 (Andromeda Metals, 2017a)

A comparison of the 2017 and 2019 resource estimates is included in Table 10.3 and in the gradetonnage curves included in Figure 10.3. For Barns the global estimates are similar, with the 2019 estimate reporting a slightly higher tonnage and lower grade for a decrease of 3% in gold ounces. Within the 2019 model a slightly higher proportion of the resource has been classified as Indicated. As illustrated in Figure 10.4, 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 Water Tank and Baggy Green, the Mining Plus resource estimates plot on the grade-tonnage curves as estimated in 2019, but at higher cut-off grades of almost 1 g/t gold. This is in-line with the lower cut-off grade that was used for the mineralisation interpretations in 2019 (i.e. a nominal cut-off grade of 0.3 g/t gold in 2019 compared to 0.5 g/t gold in 2017). For both deposits this has resulted in additional tonnage at a lower grade, with an overall increase in contained gold ounces. The 2019 interpreted resource for White Tank has a larger lateral extent compared to the 2017 resource (Figure 10.5) and the lateral extent of the 2017 interpreted resource at Baggy Green is larger than the 2019 resource interpretation (Figure 10.6).

For the overall Wudinna Project the tonnage has increased by 15% and the grade decreased by 8% for an overall increase in the contained gold by 5%.

		2017			2019			Difference		
Deposit	Classification	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
	Indicated	380	1.4	17,000	410	1.4	18,000	8%	0%	6%
Barns	Inferred	1,750	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	1,560	1.6	84,000	2,030	1.4	94,000	30%	-13%	12%
То	tal	3,850	1.6	200,300	4,430	1.5	211,000	15%	-8%	5%

Table 10.3 Comparison of 2017 and 2019 resource estimates reported above a cut-off grade of 0.5 g/t gold.



#### Figure 10.3

3 Grade-tonnage curves for a range of cut-off grades and Mining Plus resource estimates above a 0.5 g/t cut-off grade







Figure 10.4 Barns – drillhole collar location and extent of 2019 resource model (green) and 2017 resource model (red outline)







#### Figure 10.6 Baggy Green – drillhole collar location and extent of 2019 resource model (green) and 2017 resource model (red outline)



#### **11. REFERENCES**

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# Appendix A Statistical parameters, histograms and probability plots



#### **BARNS- BY DOMAIN**

	Statistic	1	2	4	5	6	7	8	9	10	11	12	13	14	15
	Samples	60	110	14	33	46	18	46	79	76	78	58	43	59	21
1	Vinimum	0.01	0.01	0.10	0.01	0.01	0.26	0.04	0.02	0.00	0.01	0.01	0.02	0.01	0.29
Ν	Maximum	14.93	9.32	4.41	13.25	6.08	11.14	26.00	19.75	19.46	57.95	31.35	25.73	22.10	3.72
	Mean	1.20	1.44	1.06	1.91	1.03	2.39	1.94	1.85	1.46	2.03	1.68	1.76	1.33	0.93
Stand	dard deviation	2.41	1.75	1.08	3.29	1.44	2.79	3.94	3.14	2.65	6.79	4.16	4.26	3.00	0.79
Coeffic	ient of variation	2.00	1.22	1.02	1.72	1.39	1.17	2.03	1.69	1.81	3.35	2.48	2.41	2.27	0.84
	Variance	5.80	3.07	1.16	10.80	2.07	7.80	15.5	9.85	7.02	46.15	17.32	18.11	9.03	0.62
9	Skewness	4.54	2.49	2.55	2.69	2.28	2.19	5.37	3.89	4.75	7.54	6.61	4.93	6.02	2.48
Geo	metric mean	0.42	0.76	0.72	0.61	0.42	1.45	0.86	0.78	0.47	0.60	0.64	0.69	0.51	0.74
	10 <sup>th</sup>	0.04	0.25	0.19	0.03	0.03	0.32	0.15	0.11	0.03	0.10	0.12	0.14	0.08	0.34
	20 <sup>th</sup>	0.16	0.33	0.33	0.30	0.14	0.62	0.31	0.26	0.17	0.23	0.24	0.30	0.20	0.42
	30 <sup>th</sup>	0.34	0.46	0.36	0.35	0.28	0.92	0.42	0.43	0.32	0.35	0.32	0.37	0.36	0.45
	40 <sup>th</sup>	0.43	0.57	0.53	0.49	0.34	1.01	0.64	0.63	0.40	0.44	0.65	0.48	0.45	0.51
ile	50 <sup>th</sup>	0.63	0.77	0.65	0.54	0.45	1.09	1.03	0.89	0.50	0.57	0.81	0.74	0.58	0.61
ent	60 <sup>th</sup>	0.69	1.12	1.01	0.85	0.55	1.50	1.25	1.27	0.75	0.73	1.01	0.90	0.77	0.81
erce	70 <sup>th</sup>	0.91	1.62	1.18	1.37	0.82	1.67	1.40	1.70	1.29	0.99	1.22	1.24	1.01	0.93
Pe	80 <sup>th</sup>	1.24	2.08	1.35	2.23	1.61	3.49	2.07	2.08	2.29	1.28	1.65	1.52	1.32	1.36
	90 <sup>th</sup>	2.48	2.95	1.55	3.61	2.95	5.58	3.38	3.19	3.41	2.83	2.80	2.22	2.21	1.59
	95 <sup>th</sup>	3.18	5.47	2.47	10.55	3.97	6.92	5.50	5.91	4.58	6.51	3.40	3.60	4.69	1.86
	97.5 <sup>th</sup>	7.93	7.16	3.44	12.10	5.64	9.03	6.90	10.90	6.87	8.13	6.15	12.5	5.77	2.75
	<b>99</b> <sup>th</sup>	12.72	8.32	4.02	12.79	5.99	10.3	17.32	16.00	11.51	24.52	16.89	20.34	12.76	3.33

#### BARNS – BY GROUP

Statistic	1	2
Samples	170	571
Minimum	0.01	0.00
Maximum	14.93	57.95
Mean	1.36	1.65
Standard deviation	2.00	3.86
Coefficient of variation	1.48	2.33
Variance	4.02	14.89
Skewness	3.70	8.16
Geometric mean	0.62	0.63
10 <sup>th</sup>	0.08	0.12
20 <sup>th</sup>	0.31	0.26
30 <sup>th</sup>	0.41	0.37
40 <sup>th</sup>	0.53	0.51
<u>e</u> 50 <sup>th</sup>	0.67	0.70
60 <sup>th</sup>	0.94	0.93
<b>2</b> 70 <sup>th</sup>	1.24	1.29
<b>a</b> 80 <sup>th</sup>	1.88	1.81
90 <sup>th</sup>	2.87	3.13
95 <sup>th</sup>	5.21	5.77
97.5 <sup>th</sup>	7.21	9.74
99 <sup>th</sup>	9.90	19.55

#### BARNS





#### **BARNS - DECLUSTERED DATA**





#### WHITE TANK

Stat	tistic	11	12	13
Sam	nples	47	14	118
Mini	imum	0.07	0	0.01
Maxi	imum	19.85	2.01	54.65
M	ean	1.3	0.53	1.93
Standard	deviation	3.01	0.59	5.46
Coefficient	of variation	2.31	1.11	2.82
Vari	ance	9.08	0.35	29.76
Skev	vness	5.51	1.75	8.22
Geomet	ric mean	0.64	0.23	0.77
	10 <sup>th</sup>	0.27	0.01	0.20
	20 <sup>th</sup>	0.32	0.08	0.34
	30 <sup>th</sup>	0.37	0.14	0.44
	40 <sup>th</sup>	0.51	0.28	0.53
e	50 <sup>th</sup>	0.56	0.35	0.67
snti	60 <sup>th</sup>	0.60	0.44	0.83
ir ce	70 <sup>th</sup>	0.85	0.49	1.14
Pe	80 <sup>th</sup>	1.19	0.61	1.97
	90 <sup>th</sup>	1.84	1.29	4.21
	95 <sup>th</sup>	2.87	1.75	6.05
	97.5 <sup>th</sup>	7.00	1.88	7.18
	99 <sup>th</sup>	14.21	1.96	18.35

#### WHITE TANK



#### WHITE TANK - DECLUSTERED DATA

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#### **BAGGY GREEN – BY DOMAIN**

Statistic	3	4	5	6	7	8	11	12	13	14	15	16	17	18
Samples	62	48	25	10	3	10	8	21	35	16	14	53	7	7
Minimum	0.11	0.19	0.08	0.32	0.39	0.16	0.06	0.30	0.22	0.30	0.30	0.05	0.41	0.31
Maximum	30.61	7.54	8.14	1.08	0.80	2.97	0.89	97.30	27.08	54.10	11.55	6.66	2.36	0.69
Mean	1.59	1.29	1.59	0.55	0.58	0.85	0.52	5.13	2.18	6.20	1.97	1.15	0.93	0.44
Standard deviation	4.13	1.53	2.37	0.27	0.21	0.89	0.27	21.12	4.55	14.18	2.95	1.29	0.69	0.13
Coefficient of variation	2.60	1.19	1.49	0.49	0.36	1.04	0.53	4.12	2.09	2.29	1.50	1.12	0.74	0.29
Variance	17.09	2.35	5.62	0.07	0.04	0.79	0.07	446	20.72	201.1	8.72	1.67	0.47	0.02
Skewness	6.28	2.86	1.90	1.05	0.77	1.97	-0.32	4.58	5.12	3.08	3.01	2.76	1.87	1.07
Geometric mean	0.81	0.85	0.70	0.49	0.55	0.59	0.41	0.61	1.11	1.53	1.11	0.79	0.77	0.43
10 <sup>th</sup>	0.33	0.33	0.15	0.32	0.39	0.16	0.06	0.31	0.40	0.34	0.38	0.38	0.41	0.31
20 <sup>th</sup>	0.44	0.42	0.32	0.33	0.39	0.35	0.22	0.33	0.45	0.44	0.50	0.43	0.42	0.31
30 <sup>th</sup>	0.54	0.50	0.37	0.33	0.39	0.38	0.34	0.35	0.57	0.60	0.62	0.49	0.45	0.32
40 <sup>th</sup>	0.62	0.57	0.43	0.34	0.42	0.39	0.37	0.39	0.81	0.66	0.65	0.54	0.50	0.39
<b>e</b> 50 <sup>th</sup>	0.72	0.67	0.48	0.36	0.47	0.45	0.41	0.43	0.93	0.79	0.76	0.69	0.62	0.42
<b>1</b> 60 <sup>th</sup>	0.81	0.85	0.60	0.52	0.51	0.51	0.59	0.48	1.15	1.30	0.88	0.86	0.76	0.43
<b>70<sup>th</sup></b>	1.01	1.23	0.83	0.60	0.57	0.70	0.68	0.55	1.51	2.29	1.15	1.01	0.92	0.45
<b>ط</b> 80 <sup>th</sup>	1.37	1.71	1.21	0.72	0.64	0.71	0.72	0.59	2.41	3.19	2.59	1.43	1.06	0.49
90 <sup>th</sup>	1.88	2.43	5.75	0.85	0.72	1.90	0.77	0.93	3.43	12.90	3.41	2.08	1.51	0.56
95 <sup>th</sup>	3.17	3.91	6.75	0.97	0.76	2.44	0.83	1.63	5.10	31.30	6.22	4.13	1.93	0.63
97.5 <sup>th</sup>	8.06	6.47	7.29	1.02	0.78	2.70	0.86	47.09	9.27	42.70	8.88	5.07	2.15	0.66
99 <sup>th</sup>	20.12	7.31	7.80	1.06	0.79	2.86	0.88	77.22	19.95	49.54	10.48	6.02	2.27	0.68

### BAGGY GREEN – BY GROUP (1= DOMAIN 3, 2 = SOUTH DOMAINS 4 TO 8, 3 = NORTH DOMAINS 11 TO 18)

Statistic	1	2	3
Samples	62	96	161
Minimum	0.11	0.08	0.05
Maximum	30.61	8.14	97.30
Mean	1.59	1.22	2.40
Standard deviation	4.13	1.67	9.15
Coefficient of variation	2.60	1.36	3.82
Variance	17.09	2.78	83.69
Skewness	6.28	2.77	8.44
Geometric mean	0.81	0.73	0.85
10 <sup>th</sup>	0.33	0.32	0.34
20 <sup>th</sup>	0.44	0.35	0.42
30 <sup>th</sup>	0.54	0.43	0.47
40 <sup>th</sup>	0.62	0.50	0.54
<u>ຍ</u> 50 <sup>th</sup>	0.72	0.58	0.65
<b>1</b> 60 <sup>th</sup>	0.81	0.71	0.83
<b>2</b> 70 <sup>th</sup>	1.01	0.89	1.01
<b>4</b> 80 <sup>th</sup>	1.37	1.47	1.54
90 <sup>th</sup>	1.88	2.71	3.01
95 <sup>th</sup>	3.17	5.19	4.55
97.5 <sup>th</sup>	8.06	6.95	11.43
99 <sup>th</sup>	20.12	7.56	37.62

#### **BAGGY GREEN**







#### **BAGGY GREEN - DECLUSTERED DATA**





### Appendix B Variogram fans and interpreted models

#### BARNS – GROUP 1



#### **BARNS – GROUP 2**



#### WHITE TANK



#### **BAGGY GREEN**





### Appendix C Kriging Neighbourhood Analysis

#### BARNS

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#### **BAGGY GREEN**





### Appendix D Block model and estimation parameters



	Block model and estimation parameters for Barns					
Param	eter	Value				
Resource estimate date		March 2019				
Software		Datamine				
Estimation method		Ordinary kriging				
Section spacing		25 m to 50 m				
On section spacing		10 m to 50 m				
Mineralisation orientatio	Two flat lying ho 12 stacked sheet shallow dip to th	Two flat lying horizons of supergene mineralisation 12 stacked sheets of fresh mineralisation with NW strike, shallow dip to the SW				
Block model extent	Easting	542,000 mE	-	542,600 mE		
	Northing	6,365,800 mN	-	6,366,400 mN		
	Elevation	-100 mRL	-	160 mRL		
Block size	Parent	X – 10 m	Y – 10 m	Z – 4 m		
	Sub-cell	X – 2 m	Y – 2 m	Z – 0.5 m		
Density		Supergene mineralisation – 2.52 t/m <sup>3</sup> Fresh mineralisation – 2.7 t/m <sup>3</sup>				
RESCAT		2 = Indicated 3 = Inferred				
Compositing interval		1 m downhole				
Discretisation		4 X by 6 Y by 6 Z				
Domains 1 and 2						
Search 1 (minimum, maximum samples)		42 m by 96 m by	<sup>,</sup> 6 m (6, 16)			
Search 2 (minimum, maximum samples)		Two times Search 1 (6, 16)				
Search 1 (minimum, maximum samples)		Five times Search 2 (3, 16)				
Domains 4 to 15						
Search 1 (minimum, may	kimum samples)	75 m by 26 m by 13 m (6, 16)				
Search 2 (minimum, may	(imum samples)	Two times Searc	h 1 (6, 16)			
Search 1 (minimum, may	kimum samples)	Five times Search 2 (3, 16)				



	Block model and estimation parameters for White Tank					
Param	eter	Value				
Resource estimate date	March 2019					
Software	Datamine					
Estimation method		Ordinary kriging				
Section spacing		25 m to 50 m				
On section spacing		10 m to 50 m				
		A flat lying horiz	on of supergen	e mineralisation		
Mineralisation orientation	on	Two horizons of	fresh mineralis	ation with SW strike, dip		
		to the NW				
Block model extent	Easting	542,300 mE	-	542,650 mE		
	Northing	6,364,900 mN	-	6,365,250 mN		
	Elevation	-100 mRL	-	160 mRL		
Block size	Parent	X – 10 m	Y – 10 m	Z – 4 m		
	Sub-cell	X – 2 m	Y – 2 m	Z – 0.5 m		
Density		Supergene mineralisation – 2.52 t/m <sup>3</sup>				
Density		Fresh mineralisa	tion – 2.7 t/m <sup>3</sup>			
RESCAT		3 = Inferred				
Compositing interval		1 m downhole				
Discretisation		4 X by 6 Y by 6 Z				
Domains 11, 12 and 13						
Search 1 (minimum, max	kimum samples)	44 m by 56 m by 4.5 m (6, 16)				
Search 2 (minimum, max	kimum samples)	Two times Searc	:h 1 (6, 16)			
Search 1 (minimum, max	kimum samples)	Six times Search 2 (3, 16)				



	Block model and estimation parameters for Baggy Green					
Param	eter	Value				
Resource estimate date		March 2019				
Software		Datamine				
Estimation method		Ordinary kriging				
Section spacing		Approximately 50 m				
On section spacing		10 m to 50 m				
		One flat lying horizons of supergene mineralisation				
Mineralisation orientation	on	13 stacked sheets of fresh mineralisation with EW strike,				
		and shallow dip to the N, resulting plunge to NW				
Block model extent	Easting	546,500 mE - 547,100 mE				
	Northing	6,362,750 mN - 6,363,250 mN				
	Elevation	-75 mRL - 130 mRL				
Block size	Parent	X – 20 m Y – 20 m Z – 5 m				
	Sub-cell	X - 4 m Y - 4 m Z - 1 m				
Density		Supergene mineralisation – 2.29 t/m <sup>3</sup>				
Density		Fresh mineralisation – 2.73 t/m <sup>3</sup>				
RESCAT		3 = Inferred				
Compositing interval		1 m downhole				
Discretisation		4 X by 6 Y by 6 Z				
All domains						
Search 1 (minimum, max	kimum samples)	60 m by 35 m by 5 m (6, 12)				
Search 2 (minimum, max	kimum samples)	Two times Search 1 (6, 12)				
Search 1 (minimum, max	kimum samples)	Six times Search 2 (3, 12)				



### Appendix E Validation plots

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#### WHITE TANK





#### **BAGGY GREEN**





### Appendix F JORC Code Table 1 Criteria

The table below summaries the assessment and reporting criteria used for the Barns, White Tank and Baggy Green Mineral Resource estimates and reflects the guidelines in Table 1 of *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the JORC Code, 2012). Data included in Sections 1 and 2 has been extracted from Adelaide Resources Limited, 2016 and Andromeda Metals Limited, 2017a.

SECTION 1	SAMPLING	TECHNIQUES	AND DATA

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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> <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>
Drilling techniques	<ul> <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> <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>
Drill sample recovery	<ul> <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> <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>



Criteria	JORC Code explanation	Commentary
Logging	<ul> <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> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <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> <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>
Sub-sampling techniques and sample preparation	<ul> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <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>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <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>



Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul> • Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource	<ul> <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 Baggy Green). The competent person and another company geologist have checked the results as well.</li> <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> <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> </ul>
	<ul> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <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>
Data spacing and distribution	<ul> <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> <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>
Orientation of data in relation to	<ul> <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> </ul>	<ul> <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</li> </ul>



Criteria	JORC Code explanation	Commentary
geological structure	<ul> <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> <li>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>
Sample security	• The measures taken to ensure sample security.	<ul> <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>
Audits or	• The results of any audits or reviews of	There have been no external audits or
reviews	sumpling techniques and data.	reviews of the sampling techniques and data.

#### SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <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> <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 deposits.</li> <li>A Compensation Agreement is in place with the relevant agricultural landowner.</li> <li>Baggy Green is located with the NT Claimant and has been negotiated with the NT Claimant and has been negotiated with the NT Claimant and has been registered with the Agreement has 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> </ul>



Criteria	JORC Code explanation	Commentary
		A Native Title Agreement is in place with the relevant Native Title party
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	<ul> <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>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <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>
Drillhole Information	<ul> <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:</li> <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>	<ul> <li>Exploration results are not being reported for the Mineral Resources areas.</li> </ul>
Data aggregation methods	<ul> <li>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.</li> </ul>	<ul> <li>Exploration results are not being reported for the Mineral Resources areas.</li> <li>Metal equivalent values have not been used.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.</li> </ul>	<ul> <li>Exploration results are not being reported for the Mineral Resources areas.</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Relevant diagrams have been included within the Mineral Resource report main body of text.</li> <li>Exploration results are not being reported for the Mineral Resources areas.</li> </ul>
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.	• Exploration results are not being reported for the Mineral Resources areas.



Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	• Exploration results are not being reported for the Mineral Resources areas.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	<ul> <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
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul> <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>
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	<ul> <li>Mrs C Standing has not visited the Wudinna Gold Project.</li> </ul>
Geological interpretation	<ul> <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 arade and aeology.</li> </ul>	<ul> <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>
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.	<ul> <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>

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	<ul> <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 about correlation between variables.</li> <li>Discussion 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> <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 cutoff grade and have different letteral 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 m Eby 10 mN on 4 m benches and at Baggy Green was into a parent block of 20 m E by 20 mN on 5 m benches. Block sizes were selected based on kriging neighbourhood analysis.</li> <li>Estimation was carried out using ordinary kriging at the parent block scale.</li> <li>The eserch ellipses were oriented within the plane of the mineralisation.&lt;</li></ul>



Criteria	JORC Code explanation	Commentary
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the	<ul> <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> <li>Tonnes have been estimated on a dry basis.</li> </ul>
Cut-off	moisture content.	The Parns, Paggy Green and White Tank
parameters	or quality parameters applied.	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.
Mining factors	<ul> <li>Assumptions made regarding possible</li> </ul>	Planned extraction is by open pit mining.
or assumptions	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.	<ul> <li>Mining factors such as dilution and ore loss have not been applied.</li> </ul>
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.	<ul> <li>No metallurgical assumptions have been built into the resource models.</li> </ul>
Environmental 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.	<ul> <li>No assumptions have been made regarding waste and process residue.</li> </ul>



Critoria	IOPC Code explanation	Commentary
Criteria	Jore code explanation	commentary
Bulk density Classification	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> <li>The basis for the classification of the Mineral Resources into varying confidence</li> </ul>	<ul> <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> <li>The Mineral Resources have been classified on the basis of confidence in geological and</li> </ul>
	<ul> <li>categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>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>
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	<ul> <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>
Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <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>