

6 August 2018

## ISSUED CAPITAL

Ordinary Shares: 528M

## DIRECTORS

NON-EXECUTIVE CHAIRMAN:  
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6 August 2018

For Immediate Release

## Mt Magnet Resource & Reserve Increases

### Highlights

- Maiden open pit Mineral Resource for Eridanus of **146koz Au**, 84% of which is in the Indicated Resource category
- 25% increase in overall Mineral Resource for Shannon to **115koz Au**
- 8% increase underground Mineral Resource for Hill 60 to **50koz Au**
- Maiden underground Ore Reserve for Shannon of **54koz Au**
- Maiden underground Ore Reserve for Hill 60 of **24koz Au**

Ramelius Resources Limited (**ASX:RMS**) is pleased to announce new increases in Mt Magnet's Hill 60 and Shannon Mineral Resources, a maiden open pit Mineral Resource at Eridanus and maiden underground Ore Reserves at Hill 60 and Shannon. New drilling for the deposits was conducted from late 2017 to June 2018, as detailed in ASX Releases covering the last three Quarterly Activities Reports and an Exploration announcement in March 2018.

Managing Director, Mark Zeptner said: "Our exploration team continues to deliver new discoveries and life extensions at our Mt Magnet Operations, with the mix of bulk open pit and high-grade underground ore feed providing an optimal production profile through the mill. Pleasingly, our strategic tenement position continues to yield positive results, with a discovery cost of approximately \$40 per resource ounce over the last 12 months, thereby justifying our continued investment into exploration in the region."

"We clearly have a plan to be a mid-tier gold producer in the short to medium term and, combined with Vivien and Edna May, we are forecasting to produce in excess of 200,000 ounces again in FY2019 at healthy margins. Our presentation at the Diggers and Dealers Conference in Kalgoorlie this week will further outline our mid-tier gold producer vision", said Mr Zeptner.

As a further exploration update, recent geotechnical diamond holes at Hill 60 returned strong results confirming the lode position and grade. Intersections are:

- 7.0m at 5.2 g/t Au from 210m in GXDD0064
- 7.5m at 6.1 g/t Au from 168m in GXDD0065

The annual 2018 Resources & Reserves Statement will be released by the end of September 2018.

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## MT MAGNET OPERATIONS

The Mt Magnet project, located in the Murchison region of WA, is a significant gold producer comprising of multiple deposits mined by underground and open pit methods for over 100 years. Current mining operations are centred on the Cosmos Mine Area (Milky Way, Stellar, Stellar West & Shannon open pits) and the Water Tank Hill underground (refer Figure 1).

Significant exploration and resource definition drilling has been conducted at the Shannon, Hill 60 and Eridanus deposits since late 2017 (see ASX Releases, "December 2017 Quarterly Activities Report", 30/01/2018, "Exploration & Resource Development Update", 9/03/2018 & "March 2018 Quarterly Activities Report", 30/04/2018, "June 2018 Quarterly Activities Report", 30/07/2018), generating the new resources and reserves reported below.

Eridanus is a new discovery at Mt Magnet and demonstrates that shallow historic drill coverage can miss deposits. It is located between the historic Lone Pine and Theakston pits, 1.5km south of Shannon and around 6km south-west of the Checker processing plant. Hill 60 is 500m south of the operating St George/Water Tank Hill underground mine.



Figure 1: Mt Magnet key mining & exploration areas

## MINERAL RESOURCES

Table 1: Mineral Resources

Deposit	Category	Tonnes	Grade g/t Au	Ounces Au
Eridanus	Indicated	2,840,000	1.3	123,000
	Inferred	690,000	1.1	23,000
	<b>Total</b>	<b>3,530,000</b>	<b>1.3</b>	<b>146,000</b>
Shannon	Indicated	480,000	5.0	77,000
	Inferred	290,000	4.2	39,000
	<b>Total</b>	<b>770,000</b>	<b>4.7</b>	<b>115,000</b>
Hill 60	Indicated	200,000	4.4	28,000
	Inferred	160,000	4.3	22,000
	<b>Total</b>	<b>360,000</b>	<b>3.3</b>	<b>50,000</b>

Figures rounded to the nearest 10,000 t, 0.1 g/t Au and 1,000 oz Au. Rounding errors may occur.

### Mineral Resource Commentary

The Mineral Resource estimates were generated using the existing Mt Magnet drillhole dataset, plus significant new drilling conducted by Ramelius over the past 6 to 12 months. Most of drilling at Shannon and Eridanus is new.

Ramelius' new drilling includes:

- Eridanus - 134 RC holes for 19,260m and 5 diamond holes for 889m
- Shannon - 83 RC holes for 17,005m and 4 diamond holes for 926m
- Hill 60 - 21 RC holes for 4,777m and 2 diamond holes for 554m

Drill spacing is generally 25m x 25m, expanding to 25m x 50m at depth. Drilling was conducted using a Strike Drilling KWL700 RC rig and a Westralian Diamond Drilling KL900 diamond core rig. Several core holes were HQ size for geotechnical investigation, with the remainder being NQ size.

RC sub-samples and sawn half core were assayed by Fire Assay to 0.01ppm at a Perth commercial laboratory. Appropriate QAQC samples accompanied primary sample batches. Drillhole data was validated and extracted from the database.

Eridanus is a new deposit. It is hosted within felsic porphyritic intrusive units. Mineralisation occurs predominantly as a zone of stockwork style veins, hosted in an east-west orientated granodioritic intrusive. In the mineralised zone, the host granodiorite has undergone extensive sericite – carbonate alteration and includes quartz and quartz-tourmaline veins. A partially remobilised supergene zone is interpreted in the transitional weathered zone at 25-50m depth. The upper oxidised zone rock (20-30m deep) is completely depleted.

The Shannon mineralised lode is typically 2 - 8m thick and strikes north at around 015°. It dips east at an average of 40 to 50°. The lode is broadly lenticular and narrows to the south. A quartz, +/- tourmaline vein, or veins, occur in the core zone, with the vein zone generally between 1 - 4m thick. Wall rock alteration comprises of silica-sericite and disseminated pyrite. Lower grade strike extents appear to be more of a shear with 10-20% quartz veining present.

The Shannon lode is hosted within a variably porphyritic dacite unit. At the north end, it appears to terminate at the contact with an ultramafic unit. Fresh rock occurs at 40-65m below surface.

Hill 60 is a steeply dipping lode hosted by a ferruginous chert/BIF unit. The stratigraphy and lode strike north and dip west at around 65°. Footwall and hangingwall lithologies comprise of ultramafic and mafic units, respectively. Gold mineralisation is associated with weak (1%) to strong (35%) pyrrhotite and minor pyrite alteration, where the primary bedded magnetite in the BIF has been replaced by sulphides. The BIF unit varies in width from 2-12m and the mineralisation is generally 2-6m wide and can vary in position from the FW to mid-BIF to HW positions.



Interpretation was carried out by the internal resource team using Micromine geological software. A geological interpretation is generated first and generally forms the basis of the grade domains used in the estimation. Interpretation is carried out in section. Section spacings are Eridanus – 25m, Shannon – 12.5m and Hill 60 – 10m. Shannon and Hill 60 are interpreted hard bounded lode envelopes (>1-2g/t). The Eridanus supergene zone is a grade bounded (>0.5g/t) envelope and the granodiorite fresh rock stockwork is an unconstrained stockwork style zone.

In all models, samples were grouped by domain, composited to 1m intervals and evaluated. Top cuts were applied and search ellipses generated using interpreted mineralisation continuity. Estimation was by domain using Inverse Distance squared.

Parent block sizes used were 10m E x 5m N x 5m RL for Eridanus and 5m E x 10m N x 5m RL for Shannon and Hill 60 with a minimum subcell of 25%. Estimation is restricted to parent cells. Resource classification was applied based on geological and grade continuity, drill hole spacing, estimation variance and likely economic viability. Contiguous Indicated and Inferred envelopes were generated and used to apply classifications. Eridanus resources have been generated for evaluation by open-pit mining and are reported above 0.6 g/t Au to a maximum depth of 150m. Shannon and Hill 60 resources are reported above 2g/t.

Detailed information is given in JORC Table 1 attached below.

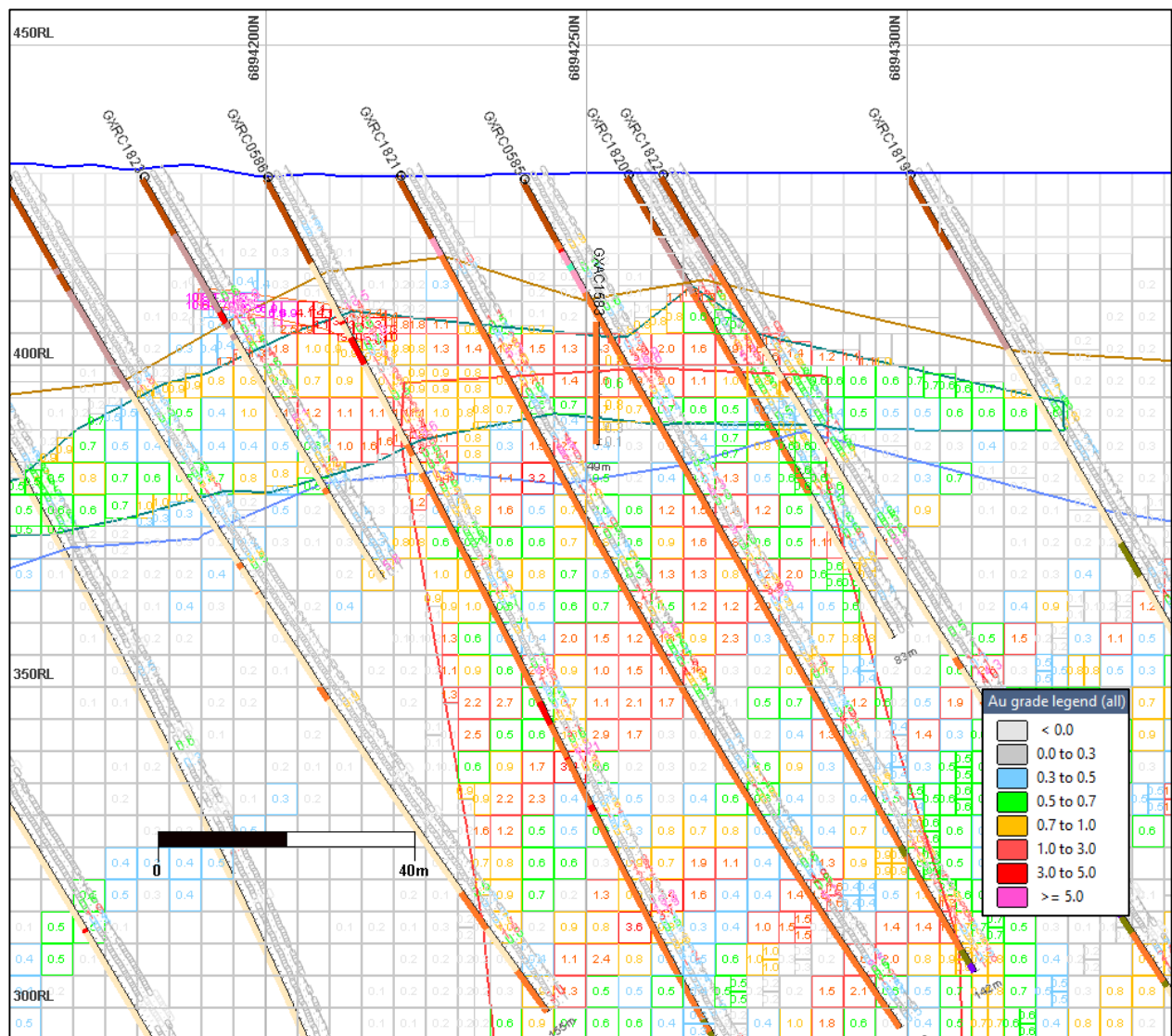


Figure 2: Eridanus cross-section 576700E - Resource block model by Au grade, oxidation surfaces and drilling

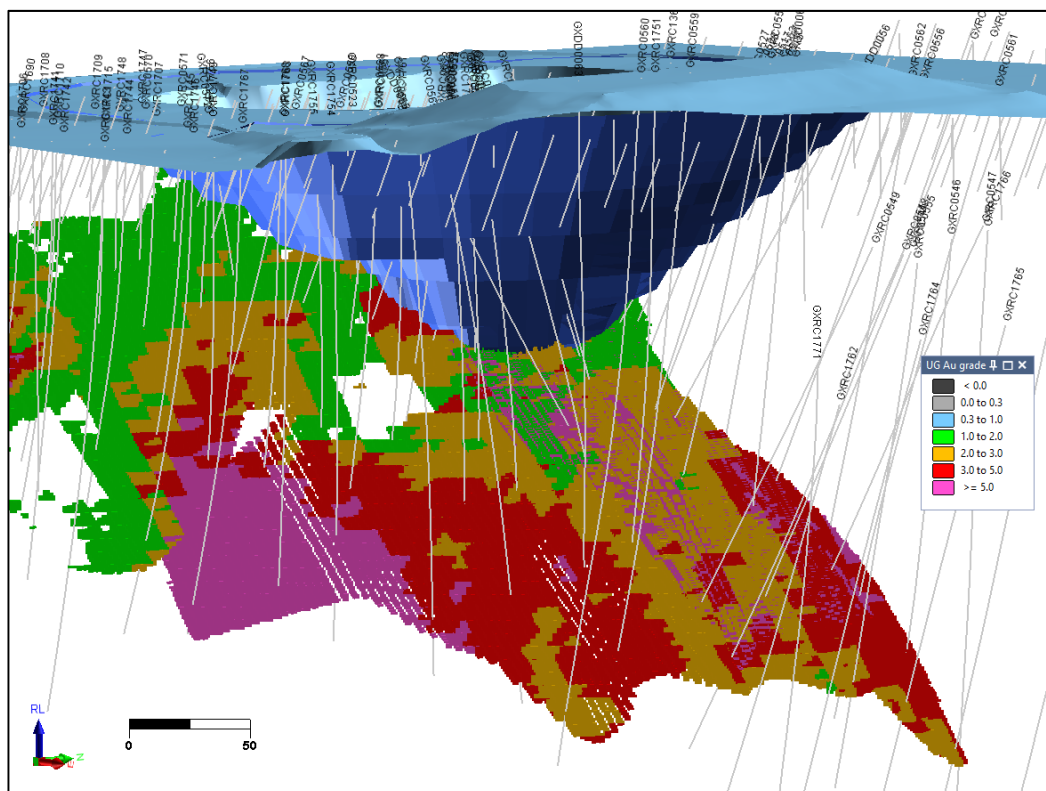


Figure 3: Shannon, view to NW - Resource block model by Au grade and drilling

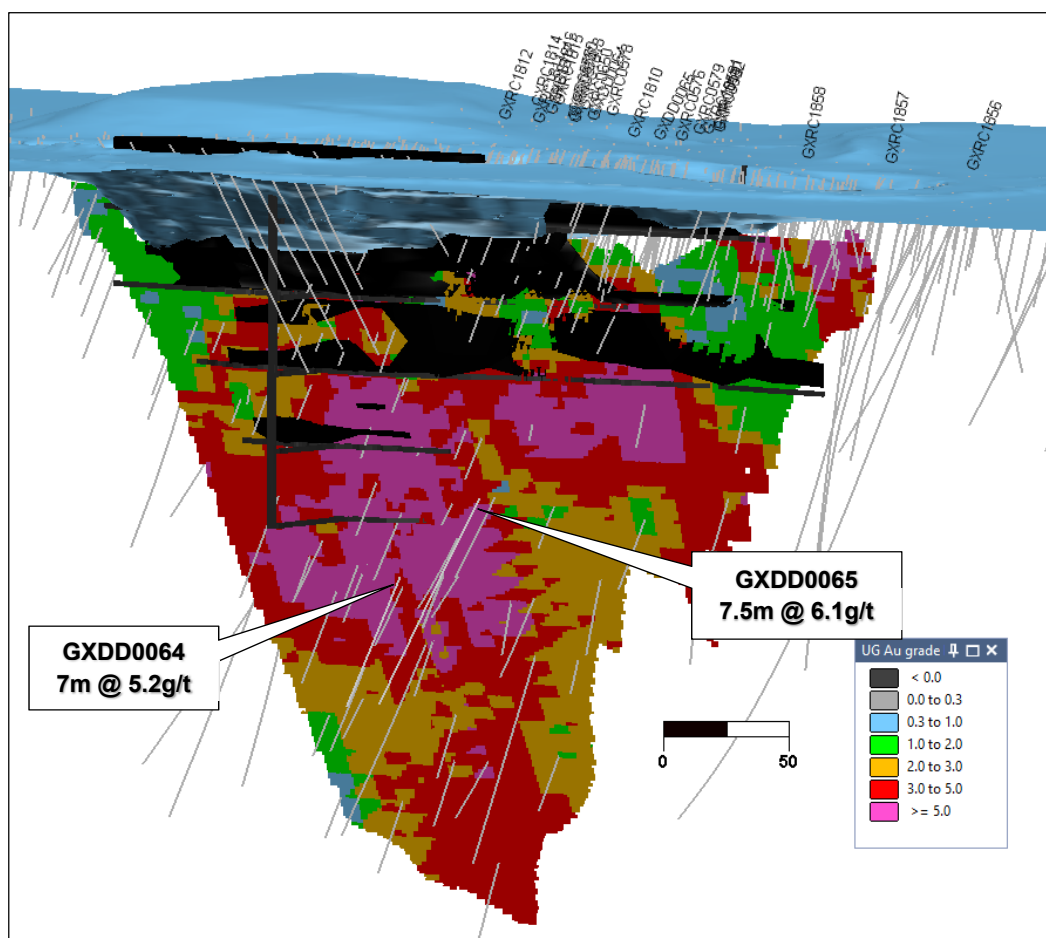


Figure 4: Hill 60, view to SW - Resource block model by Au grade, historic workings and drilling

## Hill 60 Drilling

Two new Hill 60 drill results were received for recent geotechnical diamond holes. The holes strongly confirm the modelled lode positions and grade. Gold mineralisation closely relates to sulphide altered BIF, with between 2 to 20% pyrrhotite and minor pyrite present. Intercept locations are shown in Figure 4.

Hole ID	Easting	Northing	RL	Az/Dip	F/Depth (m)	From (m)	To (m)	Interval (m)	g/t Au
GXDD0064	581,753	6,894,404	436	87/-55	279	210	217	7.0	5.15
GXDD0065	581,784	6,894,465	431	90/-52	275	168	175.5	7.5	6.06

Reported gold assay intersections are reported above a nominal 1g/t cutoff. Gold determination was by Fire Assay using a 50gm charge with AAS finishes and a lower limit of detection of 0.01 ppm Au. True widths of the mineralised intersection are ~80% of the reported downhole intersection. Coordinates are MGA94-Z50.

## **ORE RESERVES**

Table 2: Ore Reserves

Mine	Category	Tonnes	Grade g/t Au	Ounces Au
Shannon	Probable	324,000	5.2	54,000
Hill 60	Probable	209,000	3.5	24,000

Figures rounded to the nearest 10,000 t, 0.1 g/t Au and 1,000 oz Au. Rounding errors may occur.

## Ore Reserve Commentary

Ore Reserves are based on Indicated Resources only. Ore Reserves have been generated by internal and external mining consultancy design studies using appropriate cost, geotechnical, dilution, cut-off grade and recovery parameters.

The Ore Reserves utilise a gold price of A\$1,650/oz.

The Shannon Underground Ore Reserve is based on an underground mine that has been designed below the Shannon open pit (refer Figure 5). Underground access will be developed via a portal within the Shannon open pit, along with ventilation and escapeway accesses. Ore drives levels will be developed at level intervals of between 12.5m and 15m. Stope production will utilise a combination of benching and long hole open stoping. Cemented rock fill and in-situ pillars will provide hanging wall support and dilution control. Capital and operating costs are based on current on-site mining contractor rates and other budgeted administration and processing costs use current budget costs. Powerlines and minor surface infrastructure has been incorporated.

Hill 60 Underground Ore Reserve is based on an underground mine that has been designed below the historical Hill 60 open pit and underground workings (refer Figure 6). The Hill 60 production stopes are accessed by a link drive between the existing St George/Water Tank Hill decline. A primary ventilation and secondary egress drive will also be developed to link to existing St George/Water Tank Hill mine. Ore drives will be developed at a sublevel spacing of 20m. Stope production will utilise a combination of benching and long hole open stoping. Cemented and uncemented rock fill and in-situ pillars will provide hanging wall support and dilution control. Capital and operating costs are based on current on-site mining contractor rates and other budgeted administration and processing costs. Existing St George/Water Tank Hill surface and underground infrastructure will be utilised for Hill 60 Underground, with no additional infrastructure required.

Processing will utilise the currently operating Mt Magnet (Checker) processing plant. Further information is given in JORC Table 1 below.

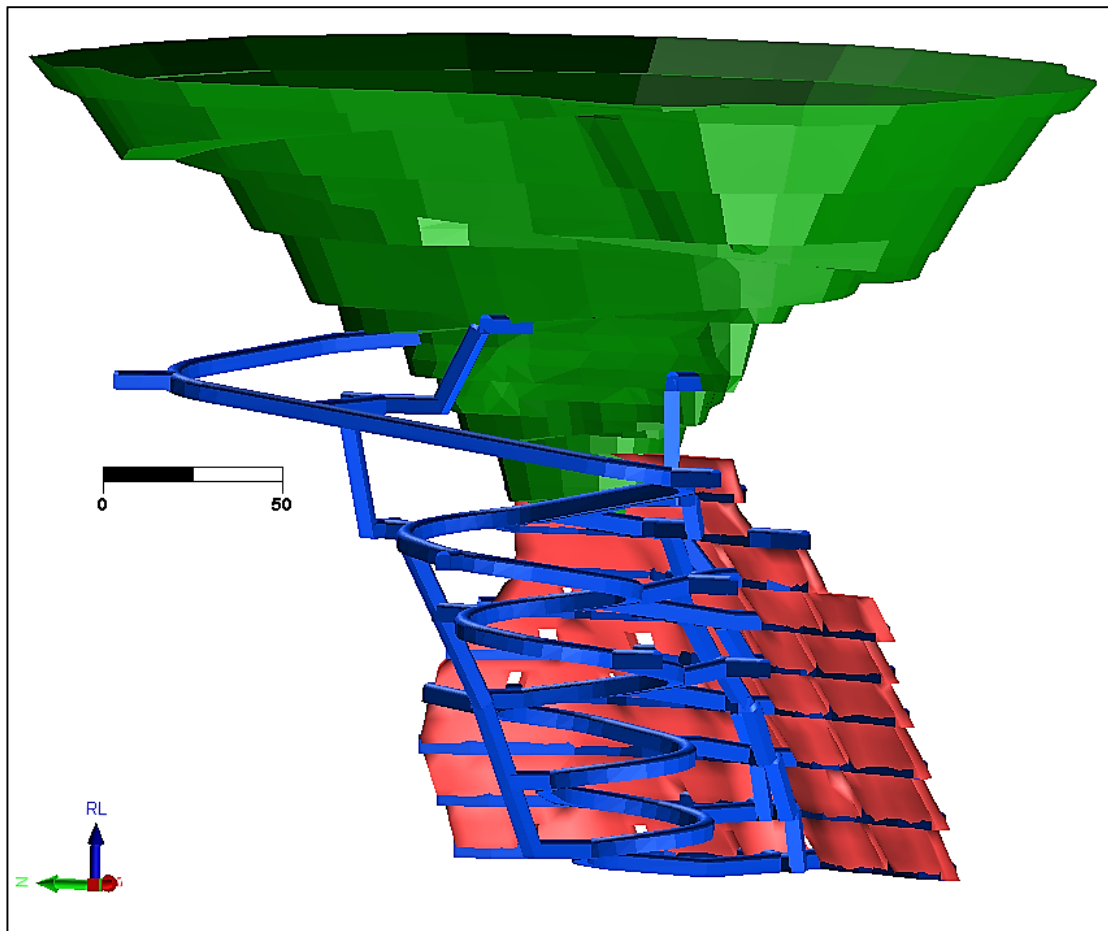


Figure 5: Shannon oblique looking NE - open pit and underground design

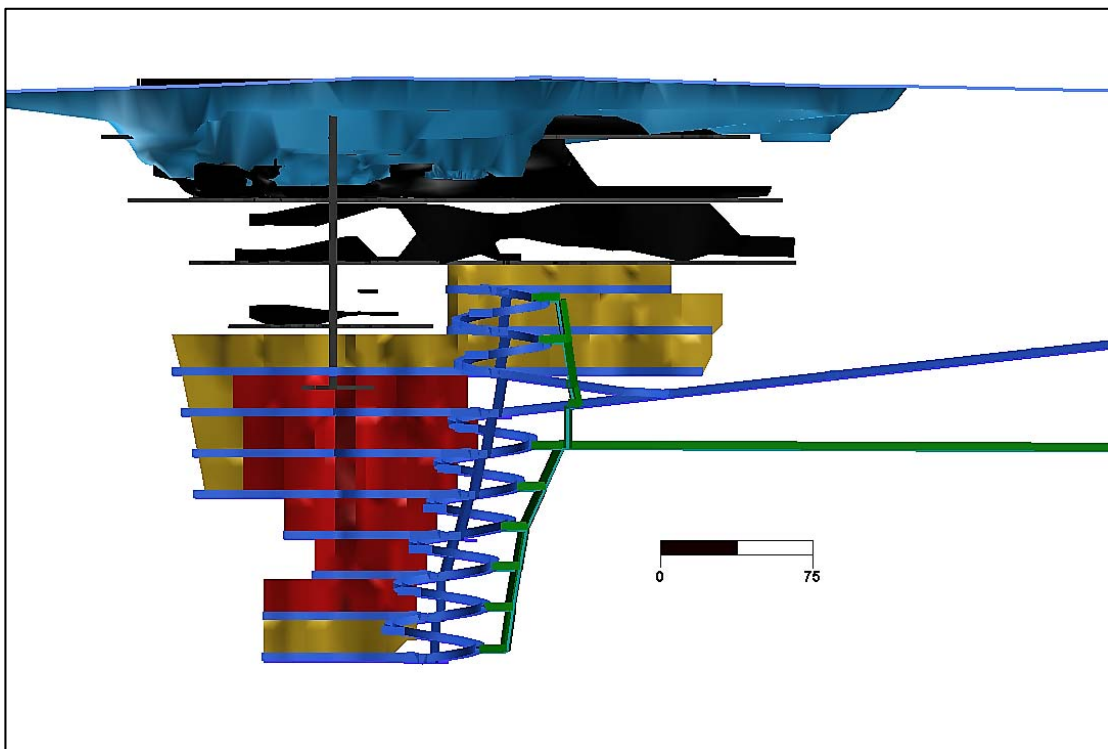


Figure 6: Hill 60 longsection looking W - existing pit, old workings and underground design (red = Ore Reserve, yellow = Inferred Resources)

## COMPETENT PERSONS

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Rob Hutchison, a Competent Person and Member of The Australasian Institute of Mining and Metallurgy. Rob Hutchison is a full-time employee of the company. Rob Hutchison had sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Rob Hutchison consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

The information in this report that relates to Ore Reserves is based on information compiled by Duncan Coutts, a Competent Person and Member of the Australasian Institute of Mining and Metallurgy. Duncan Coutts is a full-time employee of the company. Duncan Coutts has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Duncan Coutts consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## ABOUT RAMELIUS

Ramelius owns and operates the Mt Magnet, Edna May and Vivien gold mines, all in Western Australia (refer Figure 7).

Ore from high-grade Vivien underground mine, located near Leinster, is trucked to the Mt Magnet processing plant where it is blended with ore from both underground and open pit sources.

The Edna May operation, purchased from Evolution Mining Limited in October 2017, is currently a single open pit operation feeding an adjacent processing plant.

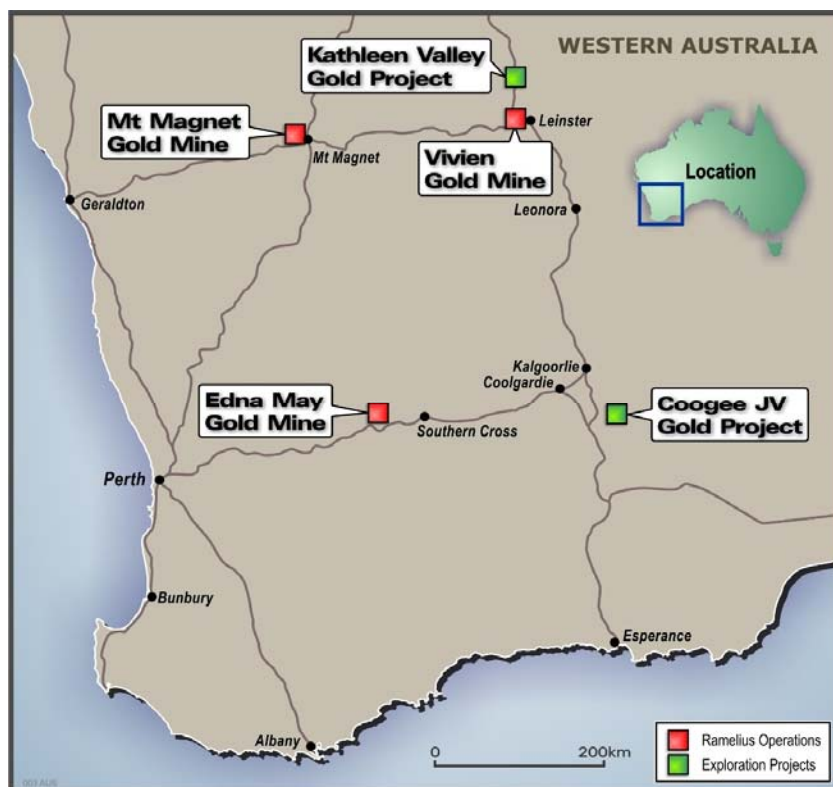


Figure 7: Ramelius' Operations & Development Project Locations



## JORC Table 1 Report – Eridanus, Shannon & Hill 60

### Section 1 Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	<p>Sampled by RC drilling as 1m samples and sub-sampled using a cone splitter to produce ~3kg sub-samples. Occasional wet samples were collected in polyweave bag, allowed to dry and subsequently riffle split to produce ~3kg sub-sample.</p> <p>Drillhole locations were designed to cover the spatial extents of the interpreted mineralisation. 1m intervals or geologically selected 0.3-1.3m intervals were sampled from diamond drill core which was sawn into half for sampling.</p> <p>Drill hole locations were designed to allow for spatial spread across the interpreted mineralised zone.</p>
<b>Drilling techniques</b>	<p>RC Drilling was completed using best practice 5 ¾" face sampling RC drilling hammers. Diamond drilling engaged HQ triple-tube in oxide zones and HQ or NQ core sizes in competent rock. Core was orientated using Boart Longyear TruCore™ system.</p> <p>All core was marked up, orientated and photographed as part of logging process by Ramelius personnel.</p> <p>At Eridanus minor historical RAB &amp; Aircore drilling may be included in upper zones, but mainly fails to reach the depth of mineralisation.</p> <p>The majority of drilling at Shannon is new and historic drilling is only within and just below the mined pit. Ramelius have completed 83 RC holes and 4 diamond holes.</p> <p>The majority of drilling at Eridanus is new and historic drilling predominantly relates to shallow, vertical AC drilling. Ramelius have completed 54 AC, 125 RC and 6 diamond holes (including 1 RC tail).</p> <p>Around half the drilling at Hill 60 is new and historic drilling is only within and just below the mined pit. Ramelius have completed 21 RC holes and 2 diamond holes.</p>
<b>Drill sample recovery</b>	<p>RC drillholes samples were visually inspected by the supervising geologist to ensure adequate clean sample recoveries were achieved.</p> <p>Occasional zones of poor sample return are recorded in the database and cross checked once assay results are received from the laboratory to ensure no misrepresentation of sampling intervals has occurred. Excellent RC and diamond drill recovery is reported from all RC and diamond holes.</p> <p>No indication of sample bias is evident or has been established.</p>
<b>Logging</b>	<p>All drill samples are geologically logged on site by RMS geologists. Details on the host lithologies, deformation, dominant minerals including sulphide species and alteration minerals plus veining are recorded relationally (separately). Geotechnical logging is performed by both RMS geologists and geotechnical consultants for rock quality characterization.</p> <p>Drillhole logging of chips or core is qualitative on visual recordings of rock forming minerals and estimates of mineral abundance.</p> <p>For all new holes, the entire length of drillholes are geologically logged. For historic drillholes, the logging has been obtained from previous drilling databases, where available.</p>
<b>Sub-sampling techniques and sample preparation</b>	<p>Duplicate samples are collected, as a minimum, every 25<sup>th</sup> sample from the drill chips.</p> <p>Dry RC 1m samples are riffle split to 3kg as drilled and dispatched to Australian Laboratory Services in Perth. Any wet samples are recorded in the database as such and allowed to dry before splitting and dispatching to. Orientated diamond core was half core sawn before sampling and dispatched to Australian Laboratory Services (ALS) in Perth.</p> <p>The samples are considered appropriate to represent mineralization.</p> <p>All samples are pulverized prior to splitting in the laboratory to ensure homogenous samples with 85% passing 75um. 200gm is extracted by spatula that is used for the</p>

Criteria	Commentary
	<p>50gm charge on standard fire assays.</p> <p>All samples submitted to the laboratory are sorted and reconciled against the submission documents. In addition to duplicates a high-grade or low-grade standard is included every 25<sup>th</sup> sample, a controlled blank is inserted every 100<sup>th</sup> sample.</p> <p>The sample size is considered appropriate for the type, style, thickness and consistency of mineralization.</p>
<b>Quality of assay data and laboratory tests</b>	<p>The fire assay method is designed to measure the total gold in the sample. A standard 50g charge is fired followed by acid digestion and measurement by AAS.</p> <p>No field analyses of gold grades are completed. Quantitative analysis of the gold content and trace elements is undertaken in a controlled laboratory environment.</p> <p>Industry best practice is employed with the inclusion of duplicates and standards as discussed above and used by Ramelius as well as the laboratory. All Ramelius standards and blanks are interrogated to ensure they lie within acceptable tolerances.</p> <p>Additionally, sample size, grind size and field duplicates are examined to ensure no bias to gold grades exists.</p> <p>Interlaboratory cross-check analysis using duplicate samples has also been conducted by MinAnalytical Laboratories in Perth.</p>
<b>Verification of sampling and assaying</b>	<p>Alternative Ramelius personnel have inspected the chips and diamond core in the field to verify the correlation of mineralised zones between assay results and lithology, alteration and mineralisation.</p> <p>All holes are digitally logged in the field and all primary data is forwarded to Ramelius' Database Administrator (DBA) in Perth where it is imported into Datashed. Assay data is electronically merged when received from the laboratory. The responsible project geologist reviews the data in the database to ensure that it is correct and has merged properly and that all the drill data collected in the field has been captured and entered in to the database correctly.</p> <p>The responsible geologist makes the DBA aware of any errors and/or omissions to the database and the corrections (if required) are corrected in the database immediately.</p> <p>No adjustments or calibrations are made to any assay data.</p>
<b>Location of data points</b>	<p>Hole collars are picked up using a high accuracy DGPS survey.</p> <p>All down hole surveys are collected using downhole electronic single shot or north seeking gyro surveying techniques provided by the drilling contractors (Reflex GYRO™) with subsequent azimuth correction for grid north.</p> <p>All holes are picked up in MGA94 – Zone 50 grid coordinates.</p> <p>Topographic control is established from DTM survey control bases.</p>
<b>Data spacing and distribution</b>	<p>For Eridanus the resource definition pattern is generally 25m x 25m spacing and ranges to 25m x 50m at depth. Hill 60 and Shannon is typically drilled on a 25m x 30m pattern. This resource spacing is considered adequate to define the geological and grade continuity of mineralization.</p> <p>No sample compositing has been applied within key mineralised intervals in RMS drilling. Historical drilling contains some data that was collected as 2m or 4m composites.</p>
<b>Orientation of data in relation to geological structure</b>	<p>The drilling is drilled as orthogonal as possible to the interpreted orientation of the target horizon. Drilling at Shannon and Hill 60 is across the lodes. At Eridanus, a variable quartz vein stockwork is present and drilling may be parallel to some veins. Several holes have been drilled at orthogonal angles and no bias has yet been identified.</p>
<b>Sample security</b>	<p>Chain of custody is managed by Ramelius to ensure appropriate level of sample security.</p> <p>Samples are stored on site and transported by Beattie Haulage from Mt Magnet and delivered directly to the assay laboratory in Perth, whereupon the laboratory checks the physically received samples against Ramelius' sample submission/dispatch notes.</p>

Criteria	Commentary
<b>Audits or reviews</b>	No external audits have been completed to date.

## Section 2 Reporting of Exploration Results

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<p>The results reported in this report are on established, granted Mining Leases at Mount Magnet, all owned 100% by Ramelius Resources Limited.</p> <p>At this time all the tenements are in good standing. There are no known impediments to obtaining a license to operate in the area.</p>
<b>Exploration done by other parties</b>	<p>Previous work consists of significant drilling and mining conducted by previous owners including WMC, Hill 50 Gold NL and Harmony Gold</p>
<b>Geology</b>	<p>All drill targets are orogenic structurally controlled Archean gold deposits Eridanus is hosted in intermediate composition intrusives (granodiorite, feldspar-porphyrific intrusive, diorite) of the Boogardie Formation. Primary mineralisation is mostly confined to an ~075° trending, sub vertical granodiorite intrusive ~60m in thickness. The main granodiorite body has intruded earlier porphyritic units. Both intrusives have subsequently been intruded by narrow (typically several metres to &lt;10m) dolerite and diorite dyke. Gold mineralisation is related stockwork style quartz veins, disseminated sulphides and sericite alteration. Veins in core appear to have an overall northly trend but display a wide range of orientations.</p> <p>Shannon is hosted in porphyritic felsic intrusive units of the Boogardie Formation. Mineralisation is confined to 40-50° east dipping, 2-8m thick vein/shear zone. Gold mineralisation is related quartz veins, disseminated sulphides and silica-sericite alteration.</p> <p>The Hill 60 lode is a mineralised banded chert (originally a fine grained siliceous sedimentary bed containing abundant interbedded ferruginous and shaley layers which are now represented by bands of magnetite and magnetite-chlorite schist. In places the banded chert grades longitudinally into magnetite-chlorite schist and documented historical observations claim that, particularly in the upper levels (oxide zone), rich shoots of ore have been found in these schistose lenses, which have provided easy access for mineralizing fluids. Gold mineralisation generally occurs in the more dilatant zones where the banded iron/ chert is more than 5 metres wide and does not seem to be controlled by folding or faulting.</p>
<b>Drill hole Information</b>	<p>Drillholes have been reported in a number of previous ASX releases by Ramelius over the past 10 months (with the exception of two Hill 60 diamond holes in this report). Easting and northing are given in MGA94 coordinates as defined in the Attachments. RL is AHD.</p> <p>Dip is the inclination of the hole from the horizontal. Azimuth is reported in magnetic degrees as the direction the hole is drilled. MGA94 and magnetic degrees vary by &lt;1° in the project area.</p> <p>Down hole length is the distance measured along the drill hole trace. Intersection length is the thickness of an anomalous gold intersection measured along the drill hole trace. Hole length is the distance from the surface to the end of the hole measured along the drill hole trace.</p>

Criteria	Commentary
<b>Data aggregation methods</b>	Exploration drilling results are generally reported using a 0.5 g/t Au lower cut-off (as described above and reported in the Attachments) and may include up to 2m of internal dilution. Grades are weighted by sample interval. No metal equivalent reporting is used or applied.
<b>Relationship between mineralisation widths and intercept lengths</b>	The intersection length is measured down the length of the hole and is not usually the true width. True widths generally range between 70-80% of reported intercepts. True widths are noted within the intercept tables.
<b>Diagrams</b>	Representative example maps and sections are included in the text and in previous reports.
<b>Balanced reporting</b>	All drillhole intercepts completed by RMS are reported. Only new holes are reported in this release. Other drilling has been released previously.
<b>Other substantive exploration data</b>	No other exploration data that has been collected is considered meaningful and material to this report.
<b>Further work</b>	Future exploration includes further drilling along strike and down dip of mineralised structures and further diamond core drilling.

### Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
<b>Database integrity</b>	Data has been sourced from the RMS drillhole database using the Datashed system. Validation checks were conducted for overlapping intervals, duplicate assays, EOH depth and negative or zero assay values.
<b>Site visits</b>	The Competent Person has visited the site and confirmed observations available in drill cuttings and surface features.
<b>Geological interpretation</b>	For Eridanus, Shannon and Hill 60, the confidence in the geological interpretations is good. The geometry and nature of mineralisation is similar to corresponding neighboring deposits, or are extensions of known adjacent structures. Data used include new drilling assays and geological logging and minor historic logging and assay information. No alternate interpretation envisaged for each of the areas. Geological boundaries are used to control the shape and distribution of Au in the mineralised structures. A geological model was produced for each deposit and incorporated into the resource model. Hill 60 and Shannon are discrete lode style narrow veins that are hosted in a non mineralised country rock. Eridanus has a number of mineralised domains, the main ones being a stockwork veined felsic intrusive body and a partial supergene zone sitting directly above. There are also several discrete vein or lithology (dolerite) hosted ore structures.
<b>Dimensions</b>	Eridanus – main granodiorite host unit is 330m long with ~075° strike, 200m down dip, ~60m wide and contains dominant NNW and subordinate NNE quartz vein set with wide dip variation. Shannon - 130 - 150m N-S strike, 110m down dip, 2-8m thick lode zone dipping east around 45°. Hill 60 - 380m N-S strike, 350m down dip, 3-6m thick zone, steep west dipping (65°) lode



<b>Estimation and modelling techniques</b>	<p>Deposits were estimated using geological software using ID2 methods inside mineralisation domains. The estimation method is appropriate for the deposit type. Previous models existed for all deposits.</p> <p>Only gold is estimated.</p> <p>No known deleterious elements present.</p> <p>Parent cell of 10mE x 5mN x 5mRL (Edna May) or 5mE x 10mN x 5mRL (Shannon &amp; Hill 60). Sub-celling to minimum size of 20% used at topographic and mineralisation boundaries. Parent cell estimation only. Parent blocks reflect likely SMU size.</p> <p>Domains were statistically analysed and assigned appropriate search directions, top-cuts and estimation parameters.</p> <p>For Shannon and Hill 60 grade estimation is constrained within hard bounded lode ore domains. For Eridanus the main felsic intrusive host is estimated as a mixed domain with highly variable stockwork mineralisation. The supergene and smaller vein and dolerite domains are hard bounded grade domains.</p> <p>All samples were composited within ore domains to 1m lengths.</p> <p>Top cuts were applied to domains after review of grade population characteristics. Top cuts range from 10g/t for the Eridanus felsic stockwork domain to 70g/t for the Shannon high grade quartz vein domain.</p> <p>Validation included visual comparison against drillhole grades.</p>
<b>Moisture</b>	Tonnages are estimated on a dry basis for all deposits.
<b>Cut-off parameters</b>	The cut-offs used are appropriate for the bulked low-grade mining method used for Eridanus and reported above 0.6 g/t. Hill 60 and Shannon are reported above a 2.0g/t cut-off.
<b>Mining factors or assumptions</b>	<p>Resources are reported on the assumption of mining by conventional open pit method for Eridanus and UG methods for Shannon and Hill 60.</p> <p>Parent block size is regarded as an SMU equivalent. The Eridanus model will be regularized for pit evaluations.</p>
<b>Metallurgical factors or assumptions</b>	A 92% recovery factor is used and is based on and established Mt Magnet recovery data
<b>Environmental factors or assumptions</b>	<p>No significant issues with waste rock or tailings</p> <p>Ore treatment and tailings generation will occur at the current Mt Magnet Checkers mill</p>
<b>Bulk density</b>	<p>Density values are adopted from recent testwork on diamond drill holes completed at Eridanus. Density measurements were completed on the geotechnical diamond core holes using the weight in air/weight in water method. They have been assigned by geological and weathering domains.</p> <p>At the Shannon and Hill 60 deposits, density values are adopted from recent testwork on the nearby Milky Way deposit and established Mt Magnet values. Density measurements were completed on the geotechnical diamond core holes using the weight in air/weight in water method. They have been assigned by geological and weathering domains.</p>
<b>Classification</b>	<p>The resources at each of the deposits have been classed as Indicated or Inferred categories based on geological and grade continuity and drill hole spacing.</p> <p>The resource classification accounts for all relevant factors.</p> <p>The classification reflects the Competent Person's view.</p>
<b>Audits or reviews</b>	No audits or reviews conducted.
<b>Discussion of relative accuracy/ confidence</b>	<p>Confidence in the relative accuracy of the estimates is reflected by the classifications assigned.</p> <p>The estimate is a global estimate.</p> <p>Some historic production data is available for Shannon and Hill 60.</p>

## Section 4 Estimation and Reporting of Ore Reserves – Shannon & Hill 60

Criteria	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	Shannon February 2018 resource and Hill 60 May 2018 resource used as described above. Only Indicated Resource category used. Mineral Resources are reported inclusive of Ore Reserves.
<b>Site visits</b>	The Competent Person is a full-time employee of Ramelius Resources Ltd and has made multiple site visits. Visits have confirmed understanding of reserve work
<b>Study Status</b>	Ore Reserves have been generated after studies appropriate to the deposit type, mining method and scale conducted over the last six months and are at Feasibility level for Shannon underground and Prefeasibility level for Hill 60 underground. Mining studies have been carried out both internally and using external consultants with appropriate geotechnical, hydrological, equipment and mining method information.
<b>Cut-off Parameters</b>	For Shannon underground, a total cut-off grade of 3.0g/t and a marginal stoping cut-off grade of 2.0g/t were calculated. These cut-off grades were used to determine the economic vertical extent and lateral extent of stoping panels respectively. For Hill 60 underground, a total cut-off grade of 3.0g/t and a marginal stoping cut-off grade of 2.0g/t were calculated. These cut-off grades were used to determine the economic vertical extent and lateral extent of stoping panels respectively.
<b>Mining factors or assumptions</b>	All ore mining for Shannon underground and Hill 60 underground will be carried by underground methods.  Shannon underground will be accessed via a 5.5mW x 5.5mH portal and decline at 1:7 gradient from the Shannon open pit with associated ore access development and other required capital (ventilation, dewatering, escapeway development). Ore drives will be developed at a nominal 4.5mW x 4.8mH at spacings between 12.5m and 15m. Stope production will utilize a combination of benching and long hole open stoping. Cemented rock fill and in-situ pillars will provide hanging wall support and dilution control. A minimum stope width of 3m was assumed and mining factors of 20% dilution (0g/t) and 95% recovery has been applied to all stope areas.  Hill 60 underground will be accessed via a 5.5mW x 5.5mH link drive from the existing St George/Water Tank Hill decline. A nominal 4.5mW x 4.8mH vent/egress drive will provide primary ventilation connection into the existing St George/Water Tank Hill primary ventilation circuit and egress network. Ore drives will be developed at a nominal 4.5mW x 4.8mH dimension and 20m sublevel spacing. Stope production will utilize a combination of benching and long hole open stoping. Cemented and uncemented rock fill and in-situ pillars will provide hanging wall support and dilution control. A minimum stope width of 3m was assumed and mining factors of 25% dilution (0g/t) and 95% recovery has been applied to all stope areas.
<b>Metallurgical factors or assumptions</b>	Ore from Shannon and Hill 60 underground will be processed using conventional CIL/CIP gold milling at the existing Mt Magnet Checkers Mill. Mt Magnet recoveries of 95% have been applied to both Shannon and Hill underground ore reflecting slightly better recoveries seen for higher grade ore. No deleterious elements are present.
<b>Environmental</b>	Environmental studies for Shannon underground are complete. Environmental Studies for Hill 60 are well progressed. Mining Approvals are being prepared but not yet submitted.

	Both underground mines are located within active mining areas.
<b>Infrastructure</b>	Infrastructure for Shannon underground includes extension of an existing site 11kV powerline and associated surface substation, contractor workshop and diesel fueling facility. All other infrastructure requirements are existing at Mt Magnet. All Hill 60 underground infrastructure requirements are catered for by the current Water Tank Hill/St George underground mine.
<b>Costs</b>	Capital and operating costs for Shannon and Hill 60 undergrounds have been derived from existing site costs and existing contract mining unit rates where possible. Rates have been applied within site scheduling and costing spreadsheets. Processing and site administration costs are based on budgeted costs and are supported by historical operating costs. Road haulage of ore is based on existing contract haulage rates. Cost models use Australian dollars. No penalties or specifications are applicable. State royalty of 2.5% used.
<b>Revenue Factors</b>	Revenue is calculated using a gold price of \$1,650/oz.
<b>Market Assessment</b>	Doré is sold direct to the Perth Mint at spot price. Silver credits were not included in financial evaluations.
<b>Economic</b>	No NPV has been calculated due to the relatively short project life of ≈2.0 years.
<b>Social</b>	Stakeholders have been consulted and negotiations remain in progress.
<b>Other</b>	Project commencement remains subject to regulatory approvals.