RAMELIUS RESOURCES

ASX RELEASE

ACN 001 717 540
ASX code: RMS

30 June 2020

ISSUED CAPITAL
Ordinary Shares: 806M

DIRECTORS
NON-EXECUTIVE CHAIRMAN:
Kevin Lines
MANAGING DIRECTOR:
Mark Zeptner
NON-EXECUTIVE DIRECTORS:
Michael Bohm
David Southam
Natalia Streltsova

COMPANY SECRETARY:
Richard Jones

www.rameliusresources.com.au
ramelius@rameliusresources.com.au

RAMELIUS RESOURCES LIMITED

Registered Office
Level 1, 130 Royal Street
East Perth WA 6004
Tel +61 8 9202 1127
PO Box 6070
East Perth, WA 6892

30 June 2020

RAMELIUS EXTENDS LIFE OF MINE PLAN BY 34% TO 1.45Moz

HIGHLIGHTS

- New **1.45Moz** Au Life-of-Mine Plan (**LOMP**) primarily across **6 years** to FY2026, with a tail out to FY2028, which is **34%** higher than previous
- Average All-in Sustaining Costs (**AISC**) over life of mine at **A$1,250 - A$1,350/oz**
- LOMP consists predominantly of Ore Reserves and Indicated Mineral Resources with only **12%** of gold produced from Inferred Resources#
- Penny Gold Project Pre-Feasibility Study (**PFS**) results indicating production of **230koz** at an **AISC of A$703/oz**, development commencing Dec Qtr 2021
- Additional year of mine life from Vivien now included in FY2021
- Eridanus Stage 2 cut-back included to reflect larger open pit out to FY2023
- Eridanus underground included based on Preliminary Scoping Study work, from FY2024, with further studies ongoing
- Tampia Gold Project (90% owned) capital costs significantly reduced based on Feasibility Study results, with production commencing in FY2022
- Work commenced on Galaxy/Morning Star underground options, mill expansion project at Mt Magnet and re-visit of the Stage 3 open pit at Edna May
- A$25-30M exploration budget allocated for FY2021, spread across the portfolio

Ramelius Resources Limited (**ASX:RMS**) (**"Ramelius", "the Company"**) is pleased to provide a further update to its LOMP, along with associated updated Mineral Resource and Ore Reserve positions for the Penny Gold Project, from its portfolio of assets located in Western Australia (refer Figure 11).

This new mine plan confirms the Ramelius' ability to produce in excess of **1.4Moz** gold at an average AISC of **A$1,250 - A$1,350/oz** over a six year mine life with the potential to deliver further resource extensions from current operations, whilst retaining the ability to also grow through acquisition.

In addition, Ramelius has incorporated the results of the PFS for the Company's newly acquired Penny Gold Project south-east of Mt Magnet in Western Australia. The study has demonstrated exceptional grade and margins that promise to return significant cashflows to the Company from late FY2022.

Ramelius Managing Director, Mark Zeptner, said "*Building on last year's landmark result of over 1Moz contained within a detailed mine plan, the forward outlook of almost 1.5Moz following a record production year in FY20, is a very pleasing result for Ramelius. It is a further testament to the work done by all our team that we can articulate a longer term plan with production scale, strong margins and an achievable approach to reserve replacement that gives us confidence that this visibility around mine life can be extended going forward.*"

The Company advises it will hold a teleconference to provide investors, analysts and media an opportunity to discuss this update. The teleconference will be held at 11am AEST, 30 June 2020 with details provided at the end of this ASX Release.

#Cautionary Statement: The Life of Mine plan contains Inferred Mineral Resources, refer to bottom page 3

UPDATED LIFE OF MINE PLAN PROFILE

Figure 1 below outlines annual production targets and the relative contributions to group gold production from the Mt Magnet and Edna May production centres, with the Penny Gold Project highlighted as part of the Mt Magnet profile. Group gold production in the FY2021 year is now predicted to be higher (270koz) than previously estimated (250koz).

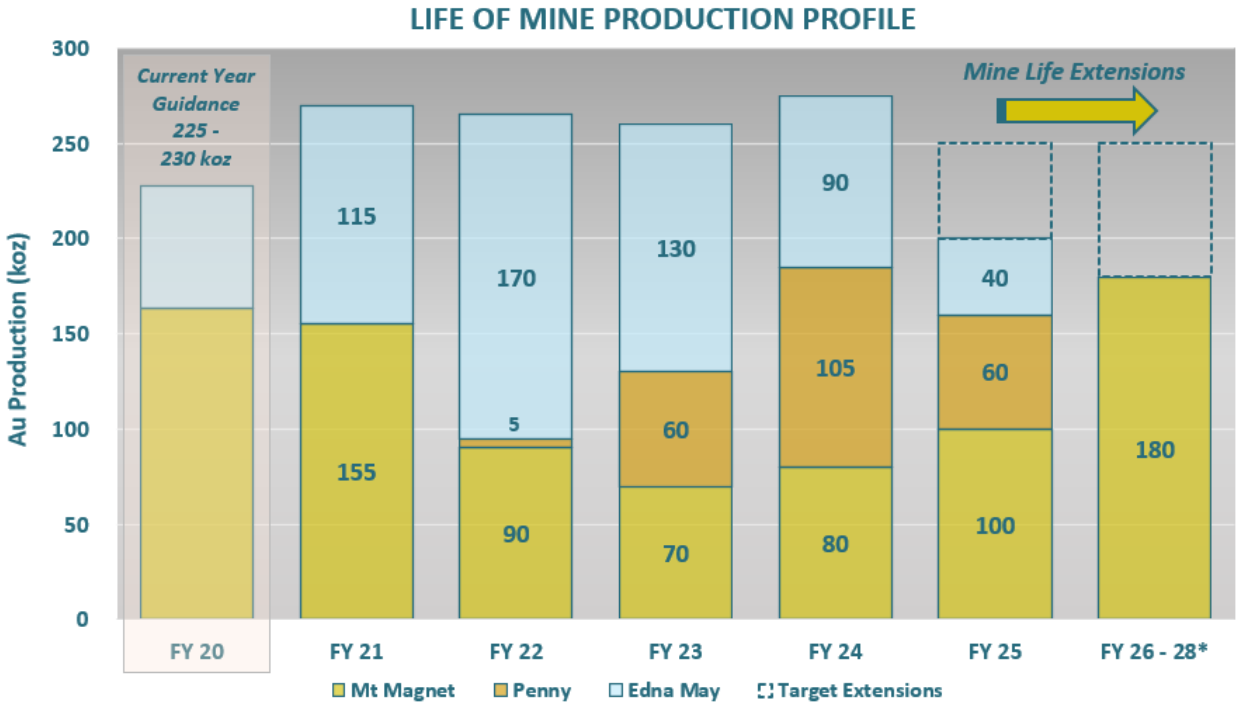

Figure 1 – Ramelius Group Production profile

Table 1 below outlines ranges for group gold production, AISC, capital expenditure and exploration expenditure expectations per financial year:

Table 1 – Gold Production, AISC per Ounce and Capex

	FY2021[1]	FY2022	FY2023	FY2024	FY2025	FY2026+	Total / Average
Production (koz)	260 - 280	255 - 275	250 - 270	265 - 285	190 - 210	170-190	**1,450**
AISC (A$/oz)	1,230 - 1,330	1,325 - 1,425	1,200 - 1,300	1,100 - 1,200	1,100 - 1,200	1,750 - 1,850	**1,250 - 1,350**
Capital (A$M)	55 - 65	35 - 45	40 - 50	15 - 25	20 - 30	0 – 10 pa	**175 - 245**
Exploration (A$M)	25 - 30	20 - 25	20 - 25	20 - 25	20 - 25	10 - 15 pa	**135 - 175**
TOTAL (A$M)	80 - 95	55 - 70	60 - 75	35 - 50	40 - 55	10 - 25 pa	**310 - 420**

[1]A breakdown of Quarterly gold production by individual source, AISC, Capital & Exploration requirements for FY2021 will be provided in June 2020 Quarterly Activities Report, as per the Company's normal reporting practice.

*Years FY2026 to FY2028 currently contain primarily low-grade stockpiles at Mt Magnet that will be processed at end of the current mine life. Production for the three years gradually tails off, with FY2026 at 100koz, FY2027 at 50koz and FY2028 at 30koz.

Mt Magnet Processing

The milling profile for Mt Magnet over the life of mine plan sees a continued mix of base load, large tonnage open pit ore sources of Eridanus and Morning Star and high grade underground mines such as Vivien, Hill 60, Shannon and the Penny Gold Project. Detailed scheduling has been completed to ensure a balance between high and low grade feed sources as well as oxide, transitional and fresh material to ensure optimal milling rates. The processing plant runs consistently at a rate of 1.9–2.0Mtpa.

Edna May Processing

The throughput rate at Edna May is expected to reduce from its current 2.7Mtpa nameplate capacity to a 2.1Mtpa rate to accommodate the need for a finer grind (125um) for the Tampia ore, which will become the base load ore feed from the start of FY2022. The reduction in throughput will be more than offset by a significant increase in average grade through the mill. The historical 1.0–1.2g/t Edna May open cut material will be replaced by higher grade Marda (2.0 g/t) and Tampia (2.5 g/t) material.

ORE RESERVE & MINERAL RESOURCE CONTRIBUTION TO GROUP LIFE OF MINE PLAN #

The new LOMP is based predominantly on Ore Reserves with a small contribution from Mineral Resources that, in the view of Ramelius, are likely to be converted to Ore Reserves in the future (refer Figure 2).

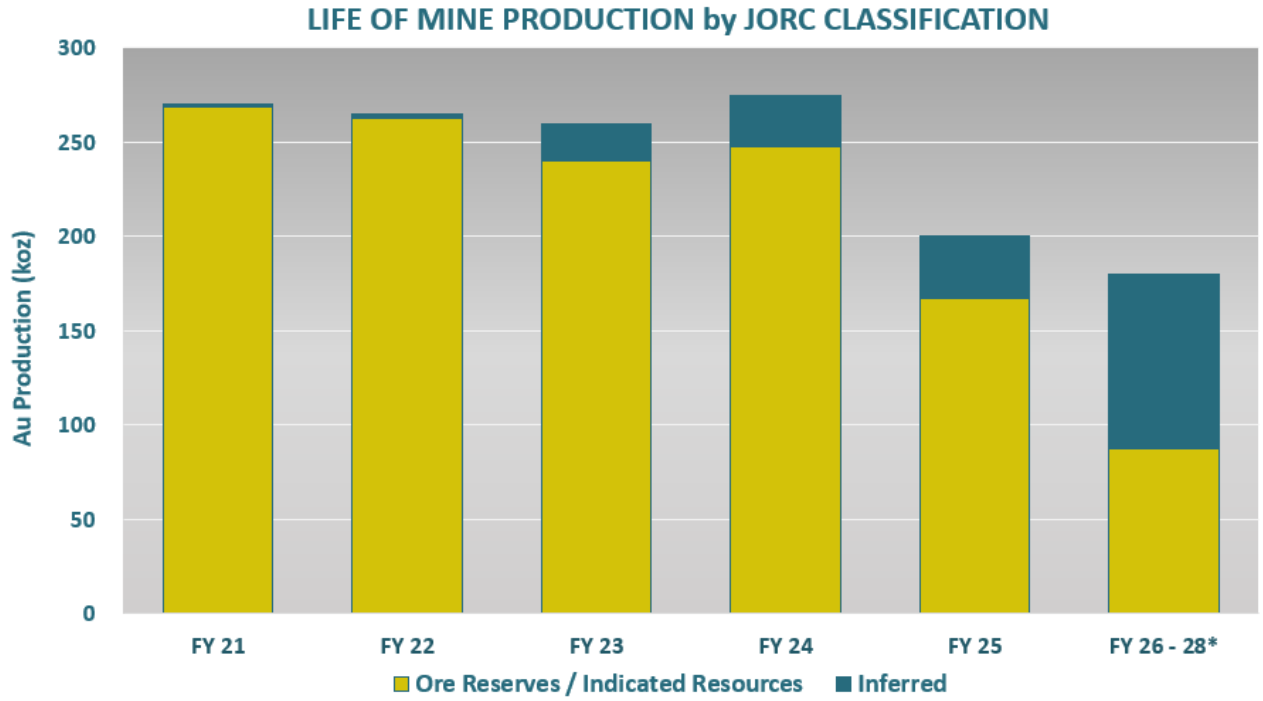

Figure 2 – Life of Mine Production by JORC Category

#The LOMP is a Production Target that contains a proportion of Inferred Mineral Resources (12%). There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised

*Refer previous comment on years FY2026-2028.

COMPARISON TO JUNE 2019 LOMP

Comparing the new LOMP with the previous one published in June 2019~ (refer Figure 3) shows both a longer mine life and production at a higher annual rate, leading to a 34% increase in total ounces.

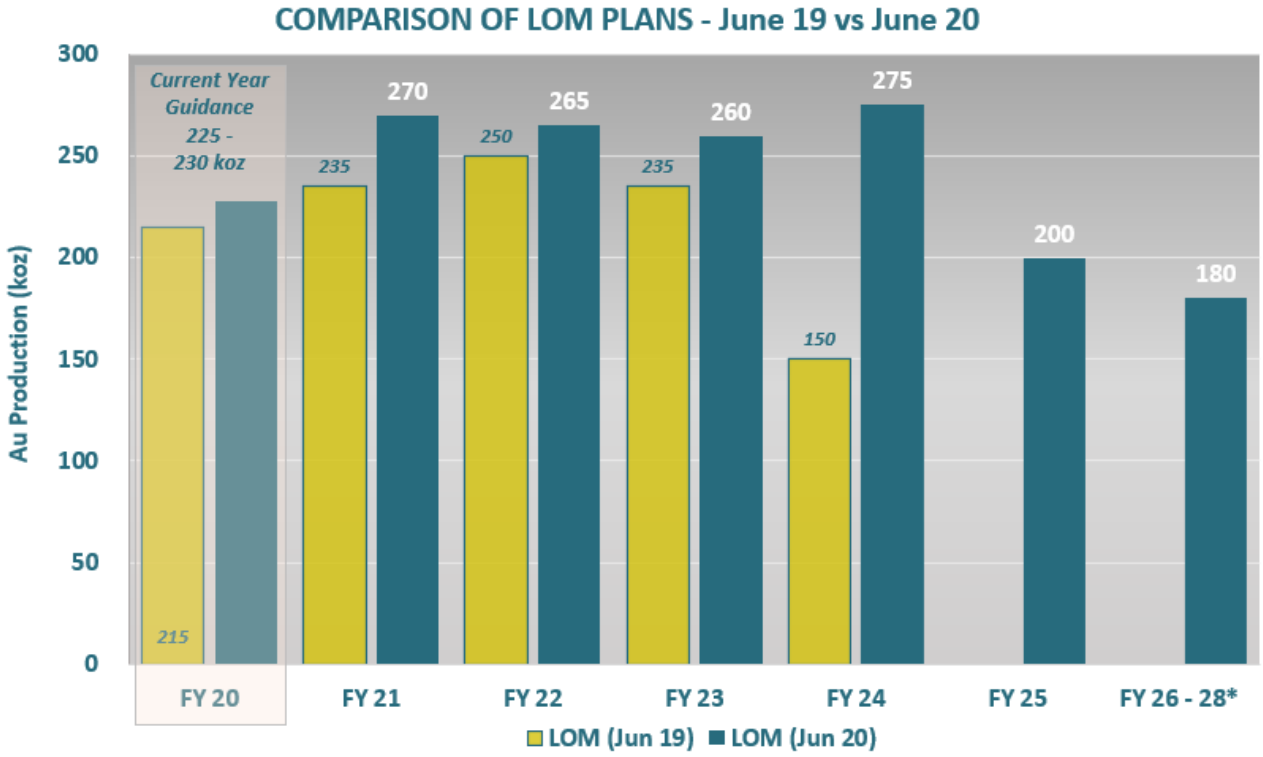

Figure 3 – LOMP Comparison

The key drivers of this positive change revolve around the expanded mining operations at the Eridanus open pit as well as the early results of a preliminary scoping study into a bulk mining operation beneath the base of the planned Eridanus pit. The contribution from the recently acquired Penny Gold Project has added significant, low cost ounces to the LOMP.

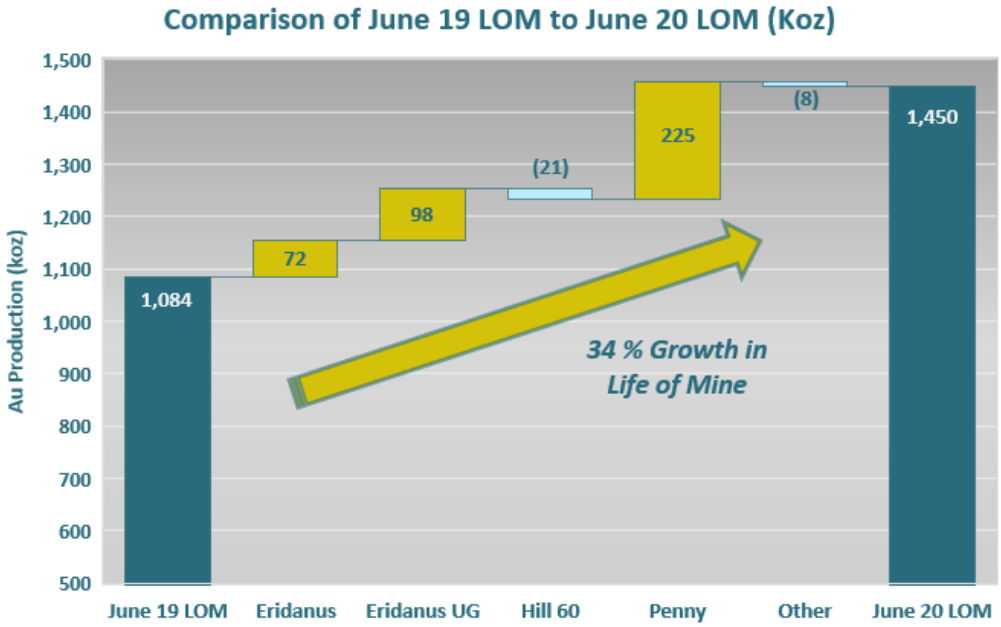

Figure 4 – LOMP Growth

~See RMS ASX Release, "Life of Mine and Tampia Updates with conference call info", 17 June 2019.

*Refer previous comment on years FY26-28.

PENNY GOLD PROJECT (WA) – PRE-FEASIBILITY STUDY & MAIDEN ORE RESERVES

Summary

Ramelius is pleased to provide the results of its Penny Gold Project Pre-Feasibility Study (**PFS**) for the development of the project. The PFS focused on the option to haul ore to Ramelius' Mt Magnet processing facility, as the preferred option under Ramelius ownership. Some of the key physical and financial outcomes are included in Table 2 below.

Table 2 – Penny Gold Project PFS Results

Parameter	Unit	Pre-Feasibility Study (June 2020)
General		
Start Date (open pit cut-back)	Qtr	September 2021 Quarter
Initial life	Yrs	3.8
Mining (open pit)		
Ore tonnes (high grade)	kt	13
Grade	g/t	5.1
Contained Gold	koz	**2**
Mining (underground)		
Ore tonnes (high grade)	kt	571
Grade	g/t	13.3
Contained Gold	koz	**248**
Processing		
Ore processed	Mt	584
Grade	g/t	13.3
Gold fed	koz	**250**
Recovery	%	92
Gold Production	koz	**230**
Financial		
Upfront Capital Cost	A$M	**23.5**
AISC	A$/oz	**703**

Location & History

The Penny Gold Project is located approximately 150km south-east of Ramelius' Mt Magnet mining and processing operations and approximately 550km north-east of Perth in Western Australia. The Penny West (PW) deposit was discovered in 1990 and mined as a high-grade open pit in 1990/91 producing approximately 154,000t @ 18.0g/t Au for 89,000oz. Minor exploration was conducted over following years by a number of companies until Spectrum Metals discovered the Penny North (PN) lode zone in March 2019. Ramelius acquired the project in 2020 via an off-market takeover offer of Spectrum Metals.

Geology & Mineralisation

Gold mineralisation is hosted within large, quartz-sulphide lode veins occuring within a steeply dipping greenstone stratigraphy dominated by mafic and ultramafic units and with minor felsic and granitoid intrusive units. The Penny West & North lodes occur at or proximal to a felsic schist–mafic amphibolite contact and slightly cross-cut stratigraphy. The lodes are typically 2-6m thick, dip east at 50°- 65° and both have strike and dip extents of 350m and 250m respectively. Gold mineralisation is nuggety and closely correlates with sulphide rich zones of pyrrhotite, pyrite, galena, sphalerite and minor chalcopyrite. The Magenta deposit is a smaller lode of a similar mineralisation style occuring 1.4km north of the Penny area.

Mineral Resource

Ramelius has generated a new resource estimate which includes a number of recent diamond holes. The lode interpretation generally utilises a slightly thinner lode interpretation and stronger emphasis on the core quartz-sulphide lode zone. Discontinuous hangingwall mineralisation was not modelled, but some further scope for definition of these zones will occur during underground mining.

Table 3 – Penny Mineral Resource Summary > 2.0g/t

Lode	Indicated			Inferred			Total		
	tonnes	g/t	ounces	tonnes	g/t	ounces	tonnes	g/t	ounces
Penny North	360,000	21.2	240,000	61,000	13.0	26,000	420,000	20.0	270,000
Penny West	43,000	7.2	9,800	47,000	6.1	9,400	90,000	6.6	19,000
Magenta	19,000	4.0	2,500	92,000	2.5	7,300	110,000	2.7	9,800
Total	**420,000**	**19.0**	**260,000**	**200,000**	**6.6**	**42,000**	**620,000**	**15.0**	**300,000**

Figures rounded to 2 significant figures. Rounding errors may occur.

Mineral Resource Commentary

The Penny North lode is based on recent drilling by Spectrum and Ramelius conducted since discovery in early 2019. The lode is directly intersected by 49 RC holes for 11,997m and 6 diamond holes for 1,768m. Penny West and Magenta utilise historic drilling data plus a number of confirmatory new RC & Diamond holes. Sampling was conducted via an RC cone splitter as 1m samples or as sawn half HQ core on 1m or geologically selected intervals. All samples were dispatched to a Perth commercial laboratory and accompanied by appropriate QAQC samples. All sample were analysed by 50g Fire Assay, with many recent lode zone samples assayed using Screen Fire Assay. Geological and mineralisation interpretation was carried out on section spacings of 20-40m (PN) and 10-20m (PW & Magenta). Density values are derived from core SG measurements. Modelling and estimation was carried out using Micromine software. Samples were grouped by domain, composited to 1m intervals and top-cut (circa 98th percentile). Geostatistical modelling was conducted to generate search directions, ranges and kriging parameters. Estimation was by ordinary kriging and inverse distance, with ID¹ being selected as the final grade value. Resource classification was applied based on geological and grade continuity, drillhole spacing and estimation variance.

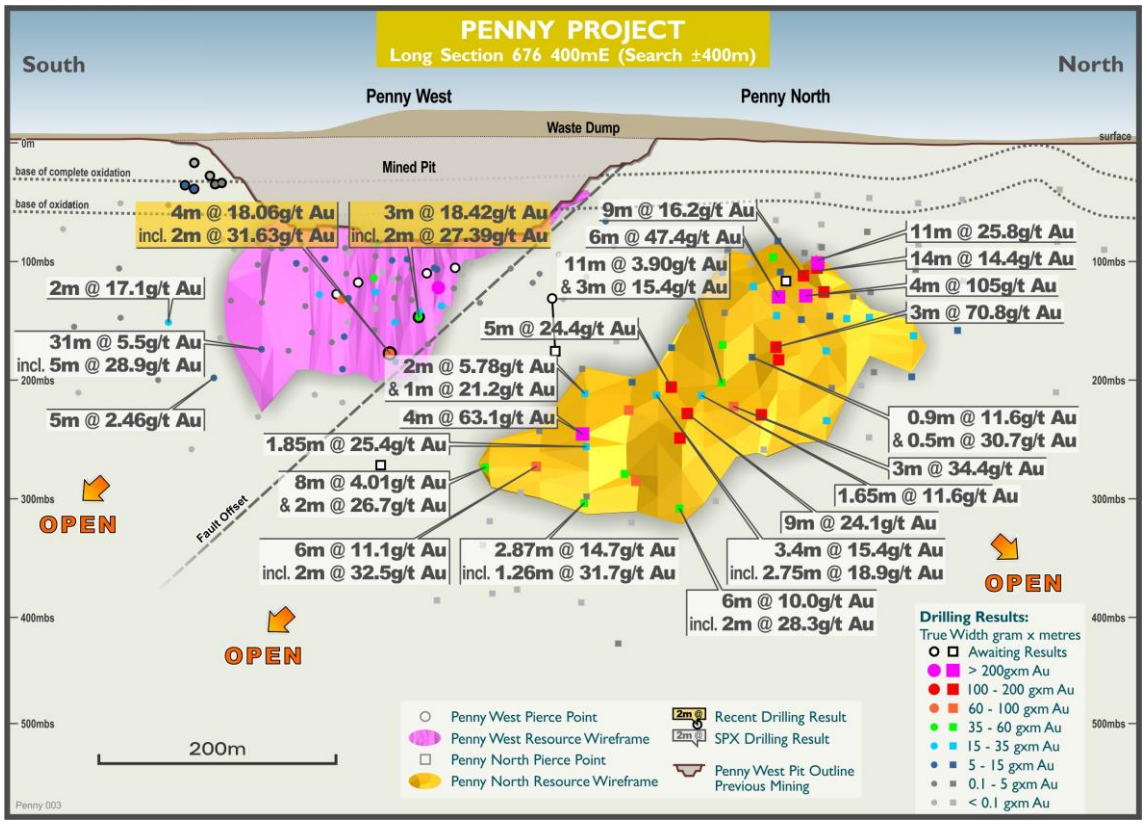

Figure 5 – Penny West and North, looking west with RC & DD drilling and Mineral Resource wireframes

Ore Reserve

Table 4 – Penny Ore Reserve Summary

Mine	Proven			Probable			Total		
	tonnes	g/t	ounces	tonnes	g/t	ounces	tonnes	g/t	ounces
Penny North UG	-	-	-	490,000	15.0	230,000	490,000	15.0	230,000
Magenta OP	-	-	-	12,000	4.0	1,500	12,000	3.9	1,500
Total	**-**	**-**	**-**	**500,000**	**14.0**	**230,000**	**500,000**	**14.0**	**230,000**

Figures rounded to 2 significant figures. Rounding errors may occur.

The project financial model mining inventory is inclusive of 100% of the Ore Reserves and a portion of Inferred Resource, making up 14% tonnes and 7% ounces of the total project financial model mining inventory.

Ore Reserve Commentary
Ore Reserves are based on the resource models referenced above.

The Magenta Resource Model including parent block size of 2.5mE x 5mN x 2.5mRL and variable sub-blocks to 1mE x2mN x 1mRL (unregularized) was used as the evaluation model. Pit optimisations and designs was carried out using appropriate mining and ore costs, mining recovery and dilution factors, wall angles, mill recoveries and a A$2,300/oz gold price.

The Penny West Resource Model was evaluated on Indicated Resource only though did not generate an economic and mineable pit shell. A cut back pit design was completed for the existing Penny West open pit to provide a suitable location for the development of the Penny North underground main decline portal and ventilation and egress adits. A 65m deep cut-back has been designed to allow for portal and adits to be approximately 10m below the predicted transitional/fresh rock interface.

The Penny North underground design and mining method consists of a conventional small-scale mechanised design with a decline portal and ventilation and egress adits developed from the base of the Penny West pit cutback. The stoping method is conventional longhole drilling and blasting of up-hole bench stopes with a combination of in-situ pillars and cement rock fill stope support (refer Figure 6). Open pit and underground ore will be hauled along existing access and government roads to the Mt Magnet plant for processing.

Open pit and underground mining and ore haulage costs were based on current contractor unit rates at current Ramelius operations. Milling costs were based on current costs at the Mt Magnet Gold Project Checker Processing plant. Open pit design work included use of external geotechnical recommendations and groundwater studies.

Metallurgical test work has been conducted on a single composite sample to derive a recovery of 96% for Magenta open pit Ore Reserve and seven composite samples to derive a recovery of 92% for the Penny North underground Ore Reserve.

Ore Reserves utilise Indicated Resources and are reported above 0.8g/t Au grade for open pit and 3.0g/t Au for underground. Detailed information is provided in the JORC Table 1 in Attachment A.

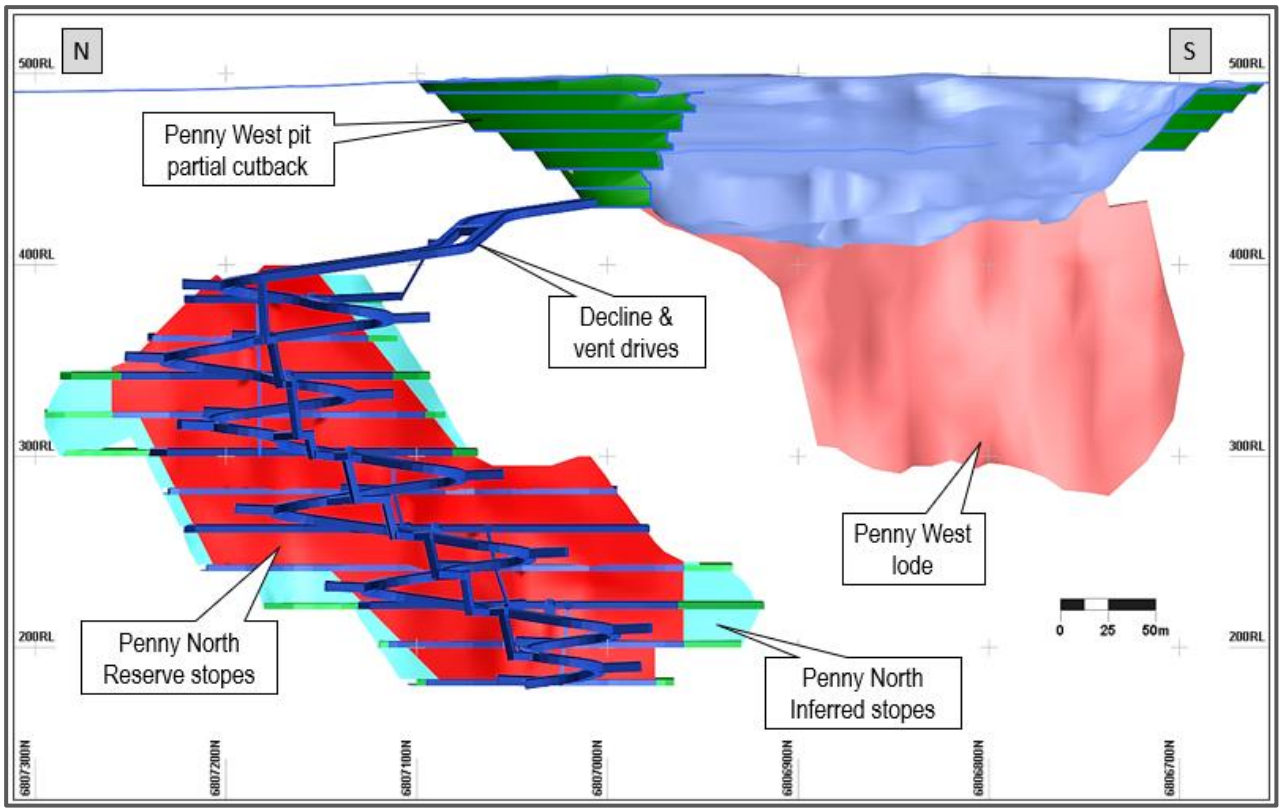

Figure 6 – Penny North underground mine design and Penny West partial pit cutback, looking East

Indicative Development Timeline

The Company generally will develop its projects on an "as soon as possible" basis, and this is expected to be the case with the high-grade Penny Gold Project. As shown in Figure 7, the development of new projects involves a number of requirements, often with limited flexibility within the schedule. Notwithstanding this, the operations team will endeavour to pull the project forward if at all possible, which will have a positive impact on gold production in FY2022 if so.

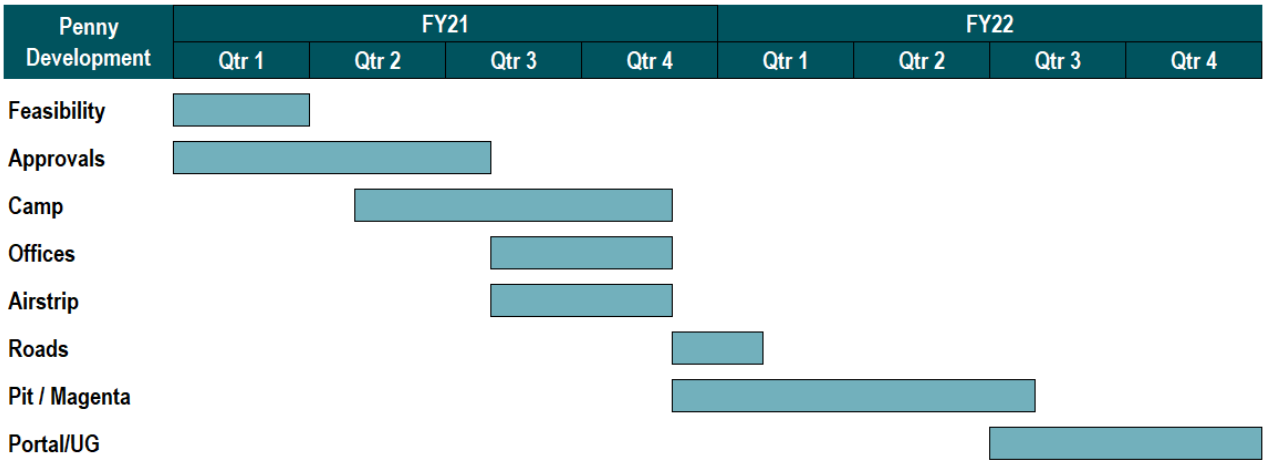

Figure 7 – Indicative timeline for development of the Penny Project

ERIDNAUS UNDERGROUND (MT MAGNET, WA) – SCOPING STUDY STATUS

Location & History

The Eridanus open pit is located 7.8 kilometres southwest, by haul road from the Mt Magnet Mill (refer to Figure 8). The Mineral Resource is situated between the historical Lone Pine open pit and the backfilled Theakston open pit. The deposit was discovered by Ramelius in late 2017 and mining of the Stage 1 pit commenced in mid-2019.

Geology & Mineralisation

Eridanus is predominately hosted within a granodiorite intruded into felsic aphyric to porphyritic intrusive rocks. Mineralisation occurs as stockwork veins concentrated around inferred low angle structures within the east-west orientated Eridanus Granodiorite intrusion. The granodiorite has undergone pervasive sericite–carbonate alteration and silica healing manifesting in quartz plus quartz-tourmaline veins. A supergene zone is recognised in the transitional weathered zone between 25-50m depth, below up to 25m of depletion. Given the overall stockwork nature of the gold mineralisation true widths are variable, but the average true width of the mineralised granodiorite is 60m.

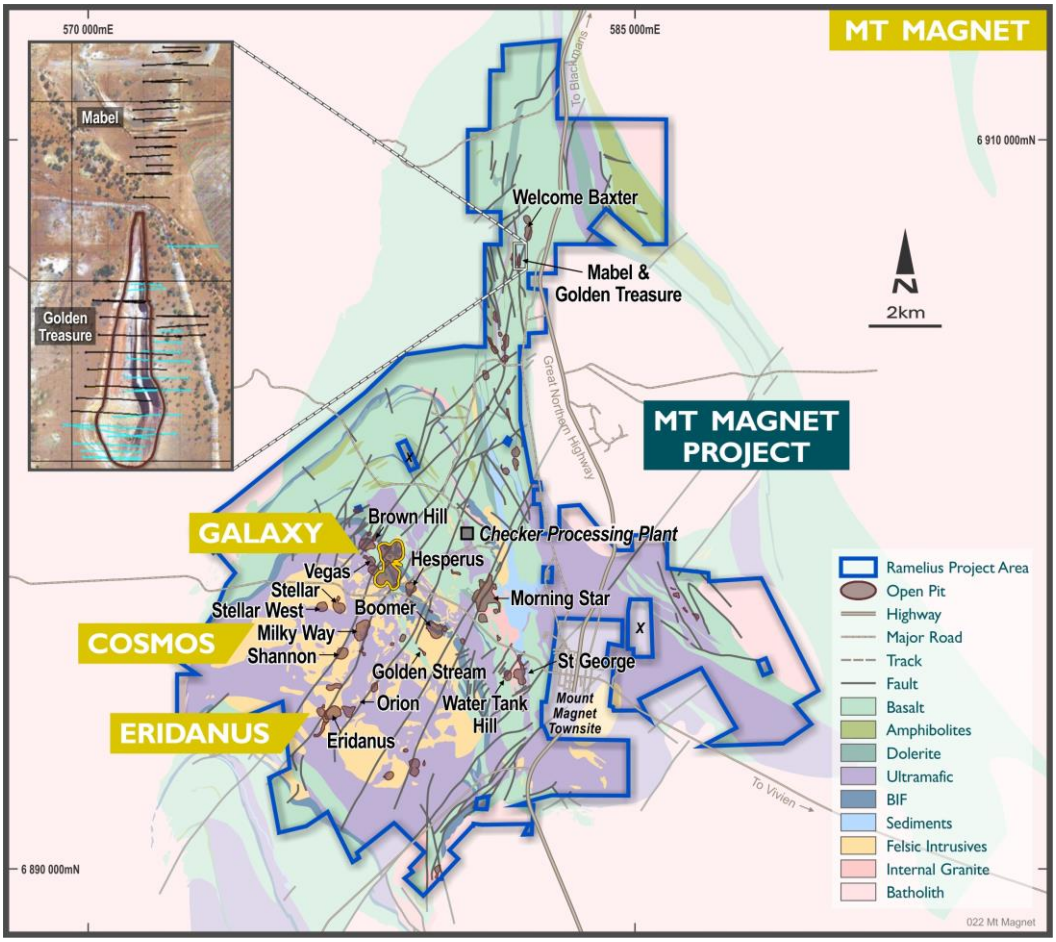

Figure 8: Location of Eridanus as part of the Mt Magnet Project

Mineral Resource

Table 5: Eridanus December 2019 Mineral Resource (+0.6g/t)

Measured			Indicated			Inferred			Total		
tonnes	g/t	ounces	tonnes	g/t	ounces	tonnes	g/t	ounces	tonnes	g/t	ounces
1,500,000	1.2	56,000	5,900,000	1.3	240,000	4,500,000	1.3	190,000	**12,000,000**	**1.3**	**490,000**

Figures rounded to 2 significant figures. Rounding errors may occur.

Eridanus Deeps

Diamond drilling recently completed at Eridanus, including geotechnical drilling skirting the A$2,000/oz pit shell as well as targeted exploration holes below the pit shell down to 400m below surface. Significant intersections were returned (previously reported) with wide composite zones of stockwork style gold mineralisation occurring at depth within the host Eridanus Granodiorite. Assay results were also reported for the final deeper geotechnical diamond drill hole (GXDD0103) completed at Eridanus (refer Figure 9). The drill hole was designed to pierce the full thickness of the Eridanus Granodiorite below the proposed pit. Highly encouraging results were returned and the drill hole, along with adjacent supporting intersections, uses uncut grades and is bulked over the entire geological thickness of the host granodiorite. They returned:

- **203m at 2.18 g/t Au** from 297m in GXDD0103, including **22m at 13.07 g/t Au**
- **114m at 1.11 g/t Au** from 288m in GXDD0096A and
- **103m at 1.19 g/t Au** from 319m in GXDD0097

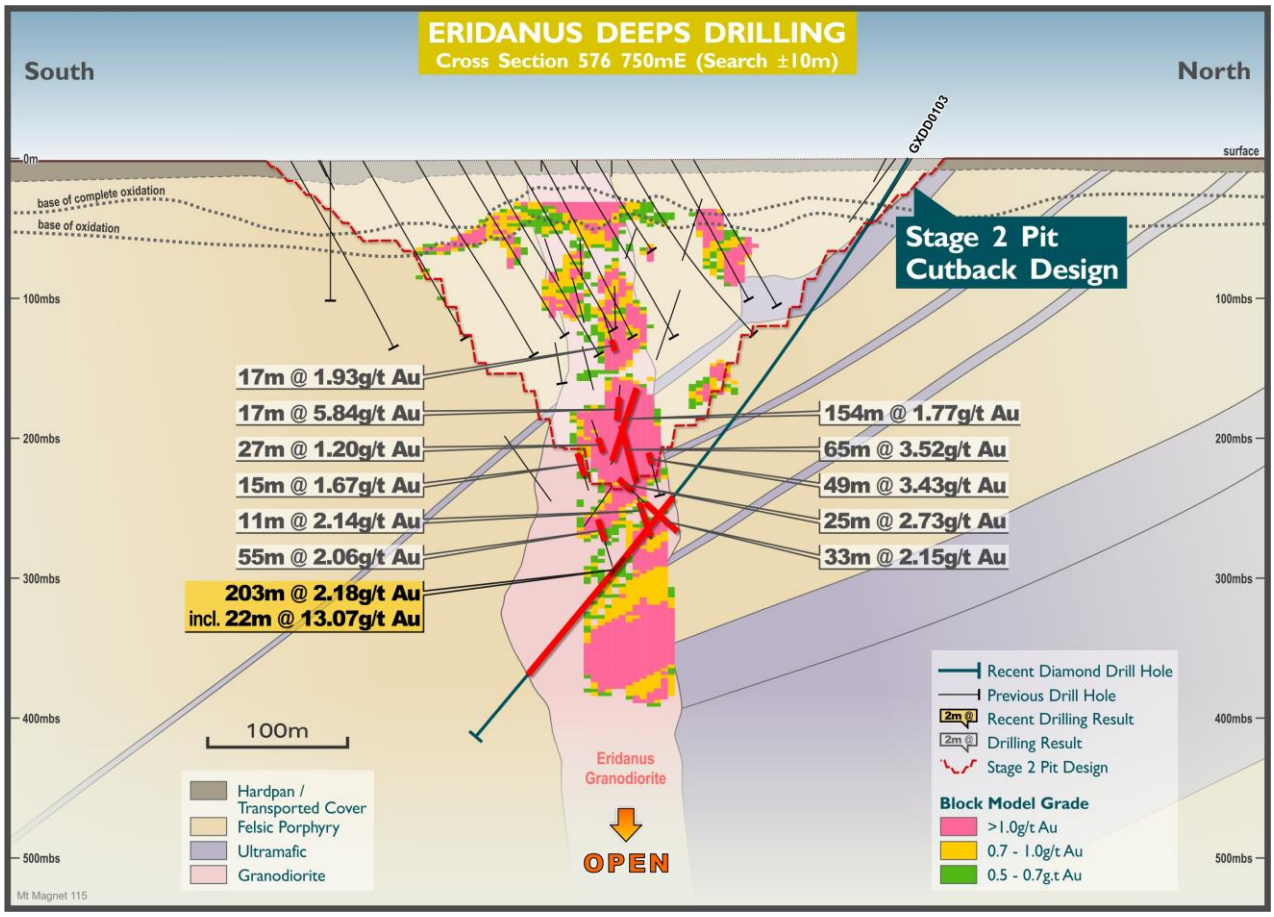

Figure 9 - North-south cross section 576750mE with a 10m search (looking west) through Eridanus, highlighting GXDD0103

Scoping Study Status

Remodelling of the Eridanus Deeps area, from the base of the current open pit down to 430mbs, remains ongoing in order to incorporate all drilling (including diamond hole GXDD0103), as well as in-pit grade control drilling and further geological understanding gained from open pit mining and geological mapping. Mining of the Stage 1 open pit has revealed a number of large high-grade veins cross-cutting the host granodiorite (refer Figure 10). The higher grades associated with these vein sets is being incorporated into new modelling of the Eridanus orebody and this work is expected to be completed in the September 2020 Quarter.

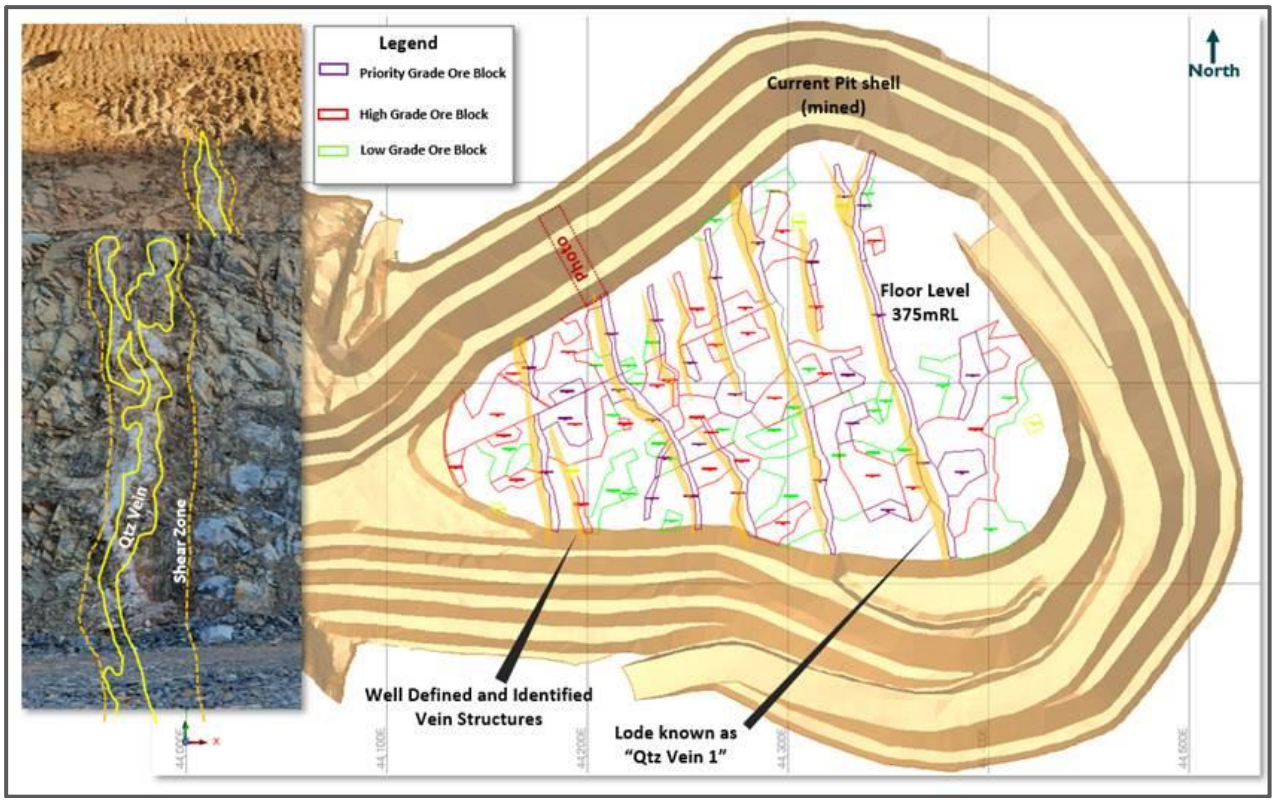

Figure 10 – Plan view of the Eridanus open pit showing multiple veins (RHS) and a photo of a vein set in the pit wall (LHS)

In terms of the LOMP, an early stage bulk underground mining option is included based on the December 2019 Mineral Resource, with the following key parameters as shown in Table 6.

Table 6 – Eridanus Bulk Underground

Parameter	Unit	Preliminary Scoping Study (June 2020)
General		
Start Date (decline development)	Qtr	December 2023 Quarter
Initial life	Yrs	3.0
Mining (underground)		
Ore tonnes	Mt	2.0
Grade	g/t	1.6
Contained Gold	koz	**103**
Processing		
Ore processed	Mt	2.0
Grade	g/t	1.6
Recovery	%	95.0
Gold Production	koz	**98**
Financial		
Upfront Capital Cost	A$M	**30**
AISC	A$/oz	**1,559**

It is expected that Scoping Study results based on the new resource model will focus more on a lower tonnage, higher grade portion of the Eridanus orebody, that will potentially deliver lower cost ounces into subsequent mine plan updates.

MINING/PROCESSING STUDIES & RESOURCE CONVERSION

The Company plans to leverage its large resource base^, particularly at Mt Magnet and Edna May, over the next 12 months to ultimately produce a longer LOMP with higher conversion of resources. Ramelius notes that any increase in production that is largely due to the higher gold price environment we are currently operating in will generally lead to higher underlying operating costs due to a lower cut-off grade being applied to design parameters. Notwithstanding, mining/processing studies that are currently planned for FY2021 include:

Mt Magnet

- Galaxy (Saturn, Mars, Titan & Hill 50) – underground studies to look at options to convert approximately 470koz^ of mineral resources into the LOMP
- Morning Star – underground study to consider the 79koz^ mineral resource currently at depth as well as other nearby opportunities
- Eridanus/Shannon/Stellar – continue work on the bulk underground option at Eridanus as well as accelerate extensional drilling at Shannon and considering underground opportunities below the high-grade pod at the base of the Stellar pit
- Processing facility – the processing plant, currently operating between 1.9-2.0Mtpa, has previously operated up to 2.4Mtpa with additional secondary crushing, ball mill and leach tanks being decommissioned in the early 2000's. The team is currently carrying out a cost/benefit analysis on this upgrade option which, based on previous studies, could be carried out for less than A$20M.

Edna May

- Edna May underground – carry out study on bulk underground option and compare to current high-grade lode only mine plan which focuses primarily on the Fuji and Jonathan lodes
- Edna May Stage 3 – re-visit the large cutback on the original Stage 2 pit to potentially unlock over 500koz^ of lower grade resources which would potentially secure a mine life at Edna May out towards 10 years

This ASX announcement was authorised for release by the Board of Directors. For further information contact:

Investor enquiries:

Mark Zeptner

Managing Director
Ramelius Resources Ltd
Ph: +61 8 9202 1127

Tim Manners

Chief Financial Officer
Ramelius Resources Ltd
Ph: + 61 8 9202 1127

Media enquiries:

Luke Forrestal

Associate Director
Media & Capital Partners
Ph: +61 411 479 144

CONFERENCE CALL

Details for the conference call to be held at 9am (WST) / 11am (AEST), Tuesday 30 June 2019 are as follows:
Within Australia (Toll Free): 1800 809 971
Alternate Australia (Toll Free): 1800 558 698
International: +61 2 9007 3187
Conference ID: 10000767

Alternatively, participants can register for the call by navigating to:

https://services.choruscall.com.au/diamondpass/rameliusresources-10000767.html

Please note that registered participants will receive their dial-in number upon registration.

^See RMS ASX Release, "Resources and Reserves Statement 2019", 10 September 2019.

ABOUT RAMELIUS

Ramelius Resources Limited (ASX:RMS) is a Western Australian gold producer that has been listed on the ASX since 2003 and in production since 2006. Ramelius owns and operates the Mt Magnet, Edna May, Vivien, Penny and Marda gold mines and owns a 90% interest in the Tampia Hill gold project, all in Western Australia (refer Figure 11).

Ore from the 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 currently processes ore from its underground operations, the nearby Greenfinch open pit and hauled ore from the Marda gold mine.

Ramelius reported a 329% increase in its Net Profit after Tax for the 6 months to December 2019 of A$20.5M. The financial performance was achieved on the back of production for the 6 months of 92,084 ounces of gold at an AISC of A$1,240/oz for the half-year. Further to this, Ramelius has recently upgraded its guidance for the 2020 Financial Year of 225,000-230,000 ounces of gold produced at an AISC of A$1,150-$1,250/oz.

Figure 11 – Ramelius' Production Centre and Development Project locations

FORWARD LOOKING STATEMENTS

This report contains forward looking statements. The forward looking statements are based on current expectations, estimates, assumptions, forecasts and projections and the industry in which it operates as well as other factors that management believes to be relevant and reasonable in the circumstances at the date such statements are made, but which may prove to be incorrect. The forward looking statements relate to future matters and are subject to various inherent risks and uncertainties. Many known and unknown factors could cause actual events or results to differ materially from the estimated or anticipated events or results expressed or implied by any forward looking statements. Such factors include, among others, changes in market conditions, future prices of gold and exchange rate movements, the actual results of production, development and/or exploration activities, variations in grade or recovery rates, plant and/or equipment failure and the possibility of cost overruns. Neither Ramelius, its related bodies corporate nor any of their directors, officers, employees, agents or contractors makes any representation or warranty (either express or implied) as to the accuracy, correctness, completeness, adequacy, reliability or likelihood of fulfilment of any forward looking statement, or any events or results expressed or implied in any forward looking statement, except to the extent required by law.

PREVIOUSLY REPORTED INFORMATION

Information in this report references previously reported exploration results and resource information extracted from the Company's ASX announcements. For the purposes of ASX Listing Rule 5.23 the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

COMPETENT PERSONS

The information in this report that relates to Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves is based on information compiled by Kevin Seymour (Exploration Results & Exploration Targets), Rob Hutchison (Mineral Resources) and Duncan Coutts (Ore Reserves), who are Competent Persons and Members of The Australasian Institute of Mining and Metallurgy. Kevin Seymour, Rob Hutchison and Duncan Coutts are full-time employees of the company. Kevin Seymour, Rob Hutchison and Duncan Coutts have 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". Kevin Seymour, Rob Hutchison and Duncan Coutts consent to the inclusion in this report of the matters based on their information in the form and context in which it appears.

Attachment A: JORC Table 1 Report Penny Project

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Over 95% of sampling was conducted using 1m intervals collected from reverse circulation (RC) drill holes. Surface diamond holes are sampled on 1m or geologically selected sub metre intervals. • RAB drilling occurs and is excluded from resource modelling with a few minor exceptions. • Drill hole locations were designed to allow for spatial spread across the interpreted mineralised zone. All RC samples were collected and split to 3-4kg samples on 1m metre intervals. Diamond core is half cut along downhole orientation lines. Half core is sent to the laboratory for analysis and the other half is retained for future reference. • Standard fire assaying was employed using a 50gm charge with an AAS finish for all samples. Screen fire assay methods were used for some selected mineralised zones.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Drilling was completed using 5 ¾" face sampling RC drilling hammers for all RC drill holes. Diamond drilling used HQ and NQ diamond core. Most core holes were drilled as tails from 100m to 200m RC precollars. RAB holes were completed using 4" blade bits or hammers.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• RC drill hole samples were visually inspected by the supervising geologist to ensure adequate clean sample recoveries were achieved. Cone splitter systems were levelled before use. All diamond core is jigsawed to ensure any core loss,if present is fully accounted for. Any wet, contaminated or poor sample returns are flagged and recorded in the database to ensure no sampling bias is introduced. • Sample recovery in both RC and Diamond is generally excellent.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Samples are geologically logged on site by geologists. Details on the rock type, mineralogy, fabrics and textures are recorded. • Drill hole logging is qualitative on visual inspection of rock forming minerals and on estimates of mineral abundance. A number of HQ geotechnical diamond holes were drilled as core from surface and have been logged by a geotechnical consultant to support the mining study. • The entire length of each drill hole is geologically logged.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	• Core samples were sawn and half core sampled. • Most RC 1m samples were split to a 3kg target sub-sample via a cone splitter. Some samples were collected as 4m spear composites in zones of geologically determined waste rock.

	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Samples are appropriate for type of mineralisation and analysis. • All core and RC samples are crushed & pulverized prior to splitting in the laboratory to ensure homogenous samples. 200gm is extracted by spatula that is used for the 50gm or 30 gm charge on standard fire assays. • Significant numbers of mineralised duplicate samples were geologically selected and submitted. Analysis of duplicates shows satisfactory performance. • The sample size is considered appropriate for the type, style, thickness and consistency of mineralization.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The fire assay method and AAS finish is used for most samples. Screen fire assay method has been applied to some recent lode zones and is also appropriate. • No field analyses of gold grades are completed. Quantitative analysis of the gold content is undertaken in a controlled laboratory environment. • Handheld pXRF analysis of mineralised zones but is superceded by multi-element lab analysis for significant elements including, Pb, Zn and Ag. • Industry best practice was employed with the inclusion of duplicates and standards. Standards and blanks are interrogated to ensure they lie within acceptable tolerances.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Ramelius personnel have inspected the diamond core and RC chips in the field to verify the correlation of mineralised zones between assay results and lithology, alteration and mineralization. • Twinned or close spaced holes exist and are used significantly at Penny West and Magenta where historic drilling occurs. • Holes are digitally logged in the field and data is collected in auto validating spreadsheets. These sheets were loaded into an Access database using scripting and further validation steps. Data was then exported to Micromine for visual validation by the Project & Resource Geologists. • 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. • No adjustments or calibrations are made to any of the assay data recorded in the database.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All drill hole collars are picked up using accurate DGPS survey control by a commercial survey contractor. All down hole surveys are collected using downhole gyro surveying technique provided by the drilling contractors. • All holes were picked up in MGA94 – Zone 50 grid coordinates. • An accurate topographic surface has been established from a recent aerial survey and is used to check DGPS surveys.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation*	• Penny North - the dominant spacing is a 40m section x 30m grid with selected 20m section infill holes. Penny West and Magenta hole spacings are variable with many drilled on a 20m x 10m pattern. • Drill spacing is sufficient to establish appropriate continuity and classifications.

	procedure(s) and classifications applied. • *Whether sample compositing has been applied.*	• No physical compositing has been applied within mineralised intervals.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• The drilling is completed orthogonal to the interpreted strike and dip of the mineralisation. • No orientation bias is evident
Sample security	• *The measures taken to ensure sample security.*	• All bagged samples are collected by the small Penny team and driven directly to the laboratory in Perth, whereupon the laboratory checks the physically received samples against sample submissions.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No external audits have been completed to date.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *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.*	• The results reported in this report are located on granted Mining Leases (ML) owned by Zebra Minerals Pty Ltd, which is under Compulsory Acquistion by Ramelius Resources Ltd. • Currently all the tenements are in good standing. There are no known impediments to obtaining a licences to operate in either area.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Penny West deposit was discovered and mined in 1990/91. Numerous other companies have held and/or explored the area including Eastmet, Metana, GMA, Goldcrest, Apex and Plateaux.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Penny lodes are hosted within an Archaean mafic-felsic greenstone belt. Gold mineralisation is hosted within a structurally controlled quartz-sulphide vein associated with pyrite, pyrrhotite, galena, sphalerite and chalcopyrite. • Lodes occur at or proximal to a felsic/mafic schist contact and transgress from one unit to the other.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• No new drill hole information is reported • Previous reporting of Penny intercepts has been made in prior releases with all appropriate information included.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Weighted average techniques are applied to determine the grade of the lode intervals when geological intervals are less than 1m (core samples) • Exploration drilling results are generally reported using a nominal 0.5 g/t Au lower cut-off. Sub grade values may be incorporated if within geological lode interval or making up a minimum width (2-3m downhole). • No metal equivalent reporting is used or applied.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• No new results reported
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Example maps and sections are included in previous releases
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.*	• Most drill holes completed to date are reported in previous releases and all material intersections are reported.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• No other exploration data that has been collected is considered meaningful and material to this report.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Exploration of the wider project area is in progress. Additional resource infill drilling may take place prior to commencement of mining.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection*	• Data was imported from digital logging sheets and validated via a number of steps when entered into the Access database. Validation includes scripting checks and

	and its use for Mineral Resource estimation purposes. • *Data validation procedures used.*	final visual validation by the Resource geologist. • Data was imported from the Access database as Micromine data files for use in the estimate
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person is a full-time employee of Ramelius Resources and has made two site visits • Visits verified understanding of deposit and available information
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Confidence in the geological interpretation is high. • Data used includes drilling assays & logging, density and multi-element data from drilling. • No alternate interpretation required • Geology forms a base component in the mineralisation interpretation. Mineralisation is sub-parallel to stratigraphy.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Penny North & Penny West deposits both have a strike of 350m, down-dip extent of around 250m and widths of 2-6m.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• The interpretation of the mineralised lodes forms the grade domains. A minimum lode thickness of 2-3m is used. • The resource model was constructed using Micromine software. • Grade within the domain is estimated by geological software using Inverse Distance[1] within hard bounded domains. Ordinary Kriging grades were generated and compared. • Global production numbers for the Penny West pit appear in several reports with grade of 20g/t quoted. • Gold, Ag and Pb grade is estimated • Parent cell of 5mE x 10mN x 5mRL with sub-cells to minimum of 1mE x 2mN x 1mRL. Parent cell estimation only. The sub-cell size is small to allow for narrow sections of the lode to be defined. Parent cells are SMU size or larger. • Domains are statistically analysed and assigned appropriate search directions, top-cuts and estimation parameters. The search is aligned with the observed geological strike and dip of the lodes. Lodes domains estimated separately. • Samples were composited within ore domains to 1m lengths. • Top cuts were applied to domains after review of grade population characteristics. Topcuts used are PN 120 g/t, PW 50 g/t and Magenta 30 g/t. • Validation includes visual comparison against drillhole grades and comparison against previous models.

Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Reporting cutoff is >2.0 g/t reflecting likely UG economic limits and >0.6 g/t for Magenta
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Resources are reported on the assumption of mining by underground mining methods and by open pit methods for Magenta. • The sub-celled resource model was used for evaluation and require reasonable mining dilution and recovery factors for lode style mining.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Historic reports refer to Penny West as free milling. • Spectrum completed initial metallurgical testwork on 2 samples showing high (99%) recovery • Ramelius completed initial metallurgical testwork on 5 fresh and 1 oxide Magenta ore composite samples. Average fresh recovery is • Further advanced testwork is in progress.
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. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Mining Approvals are yet to commence • Processing will take place at the Mt Magnet gold mine.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *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.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Around 95 core SG measurements were available (weight in air/weight in water method) with 34 being lode zone. • Lode SG used is 2.90. While quartz vein hosted significant sulphide is present. • SG is mostly estimated for weathered rock units.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The resource has been classified as Indicated or Inferred categories based on geological and grade continuity and drillhole spacing and age. • The resource classification accounts for all relevant factors • The classification reflects the Competent Person's view
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No audits or reviews conducted
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The accuracy and confidence in the Resource is reasonably high given the deposit style, quality and density of drilling and sampling. • Resources are global estimates • Historic global pit production data is available

Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• Mineral Resource models described above were used for mining evaluation, design and reporting. • Mineral Resources are reported inclusive of Ore Reserves.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person has made one site visit. • Visit verified understanding of deposit and available information.
Study Status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and*	• A pre-feasibility study has been carried out appropriate to the deposit type, mining method and scale. The study was carried out internally and externally using consultants where appropriate.

	will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered. The effect, if any, of alternative interpretations on Mineral Resource estimation.	
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• Cutoff grade for the open pit is calculated at 0.8g/t based on Penny administration cost estimates, ore haulage and milling cost estimates for haulage to and milling at the Mt Magnet Gold Project Checkers Processing Plant. • Cutoff grade for underground is calculated at 3.0g/t based on the proposed underground mining method and cost estimates, site administration cost estimates and cost estimates for ore haulage to and milling at the Mt Magnet Gold Project Checkers Processing Plant.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	• Open pit mining method (Magenta Open Pit) is conventional open pit with drill and blast, excavate, load and haul. SMU block reflects expected grade control density and mining equipment size. • Underground mining method consists of a conventional small scall mechanised design with jumbo decline and ventilation access from the Penny West pit cutback and longhole drilling and blasting of up-hole bench stopes. A combination of in-situ pillars and cement rock fill stope support are incorporated. • An external preliminary geotechnical investigation was commissioned based on geotechnical logging of geological and geotechnical diamond drill cores and other geological information and gives base case pit wall design parameters and indicative underground stoping parameters. • Open Pit - mining dilution of 12% and mining recovery of 95% were applied to the Magenta open pit in-situ physicals. Minimum width reflected by block parent block (2.5m) and dilution. • Inferred Resources were tested but are not used or included in optimisation or final pit designs for Magenta or Penny West cutback. • 50% of the Inferred Resource within the Penny West cutback pit design was included in the financial model. There is no Ore Reserve within the Penny West pit cutback. • Underground - mining dilution of 25% and mining recovery of 95% was applied to the minimum width stope designs. No dilution or recovery factors were applied to the ore development. • The underground mining study includes Inferred Resource which accounts for 6% of underground mining study ounces. • The project is not sensitive to the inclusion of Inferred Resource. • Ore Reserves no not include Inferred Resources. Infrastructure required includes administration offices, ablutions and underground change rooms, accommodation

		camp including water supply and treatment plant, airstrip, mining and haulage workshops, fuel tanks, generators for surface infrastructure and mining requirements, surface explosives magazine, dewatering and water transfer equipment and pipelines, surface water storage dam, access road and ore haulage road upgrade.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• Processing will be through conventional milling, gravity gold recovery and CIL/CIP gold leaching through the existing Mt Magnet Gold Project Checkers Processing Plant (CPP). • The CPP is long established and well proven, having successfully processed a wide range of gold ores, particularly fresh underground ores similar to those from the Penny West Project. • Metallurgy testwork programs have included comprehensive head assays, diagnostic leach testing, mineralogy, grind establishment, gravity concentration, cyanide leach, reagent consumption and comminution testing. Testwork has reflected the CPP flowsheet. • The 13 samples tested are all within the Ore Reserve and the probable mining inventory. They have been selected from different drill holes to ensure they are spatially representative both along strike and at varying depths, and to account for different lithologies within the fresh ore as well as at a range of gold feed grades. • Head grade analysis and mineralogy shows elevated sulphides associated with lead, zinc and iron however diagnostic testing and subsequent leach testing has shown the samples tested not to be refractory. Other deleterious elements or preg-robbing minerals are not at elevated levels. • Metallurgical testwork simulating the Mt Magnet Gold Project flowsheet with 175 µm, 125 µm and 75 µm grind has been carried out. Gravity recoveries are high, averaging 60%. Overall recoveries ranged from 46% to 99%. A recovery of 92% has been used based on average recoveries at the target grind size after 24 hours leaching. Additional testing is ongoing and testing conditions are being optimised. • Bulk sample pilot scale testing was not undertaken. The ores will be processed through a conventional, existing plant which is well proven in processing similar ores. The Penny West ore only makes up a small percentage of the overall feed blend and therefore pilot scale testing is not considered necessary, particularly at a prefeasibility level of study. • A final gold doré will be produced at the CPP. The relevance of the mineralogy to the product specification is not applicable to this project.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of*	• Flora and fauna studies have been completed. • No processing of ore will occur at the Penny Project. • Waste rock and soils characterisation studies have commenced and remain in progress.

	potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	• Mining Approvals processes yet to commence. • Heritage surveys have not been completed.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.*	• The Local Government Authority (Shire) road located 3km east of the project is suitable for ore haulage following minor upgrades and agreements. • Infrastructure required includes administration offices, ablutions and underground change rooms, accommodation camp including water supply and treatment plant, airstrip, mining and haulage workshops, fuel tanks, generators for surface infrastructure and mining requirements, surface explosives magazine, dewatering and water transfer equipment and pipelines, surface water storage dam, access road and ore haulage road upgrade.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Capital costs are based on a combination of project specific quotes and recent capital expenditure for similar plant and equipment and infrastructure at other Ramelius Operations. • Operating costs are based on open pit contractor mining rates and underground contractor rates at current Ramelius operations of similar size, actual Mt Magnet Gold Project milling costs, current contractor ore haulage rates at similar Ramelius sites, and administration costs incurred at current Ramelius sites. • No deleterious elements present. • Pit optimisation was run using A$2,300/oz. • Cost models use Australian dollars. • No penalties or specifications are applicable. • All underground Ore Reserves are above the calculated cut-off grade. • State royalty of 2.5% used.
Revenue Factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• Gold price of A$2,300/oz for pit optimisations and underground design was used. • Gold price of A$2,300/oz was used for financial model. • Revenue from recovery of other metals was not considered in the Pre-Feasibility Study.
Market Assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• Doré is sold direct to the Perth Mint at spot price. • Market window unlikely to change. • Price is likely to go up, down or remain same. • Not an industrial mineral.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The resource has been classified as Measured, Indicated or Inferred categories based on geological and grade continuity and drillhole spacing and generation. • The resource classification accounts for all relevant factors • The classification reflects the Competent Person's view.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• NPV of 5% used. • Sensitivities were run on gold price, mining costs, haulage and milling cost, administration cost and mill recovery.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• Pastoral Lease stakeholders have been engaged.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• No significant issues around the mining approvals process is identified. • No significant issues around the ore haulage road upgrade and permits are identified. • Heritage surveys have not been completed.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any)*	• Reserves are classified according to Resource classification. • They reflect the Competent Person's view. • All Ore Reserves are Probable.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• No external audits carried out.
Discussion of relative accuracy / confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the*	• Confidence is in line with gold industry standards and the companies aim and track record on providing effective prediction of mining projects. No statistical quantification of confidence limits has been applied. • Estimates are global.

	Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The Reserve is most sensitive to gold price, mill grade and metallurgical recovery. • Reserve confidence is reflected by the fact a Probable category is applied to the majority, which in turn reflects the confidence of the Mineral Resource. • No production data is available for comparison.