



14 September 2023

#### ISSUED CAPITAL

Ordinary Shares: 1,106M

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Bob Vassie

##### MANAGING DIRECTOR:

Mark Zeptner

##### NON-EXECUTIVE DIRECTORS:

David Southam

Natalia Streltsova

Fiona Murdoch

Colin Moorhead

##### COMPANY SECRETARY:

Richard Jones

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RAMELIUS RESOURCES LIMITED

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14 September 2023

## RESOURCES AND RESERVES STATEMENT 2023

### Mineral Resources up 23%

Ramelius Resources Limited (ASX: RMS) ("Ramelius", "the Company") is pleased to announce new estimates of Mineral Resources and Ore Reserves as at 30 June 2023, with Mineral Resources up 23%.

Total **Mineral Resources** are estimated to be:

- **160 Mt at 1.5 g/t Au for 7.6 Moz of gold** (refer Table A)

Total **Ore Reserves** are estimated to be:

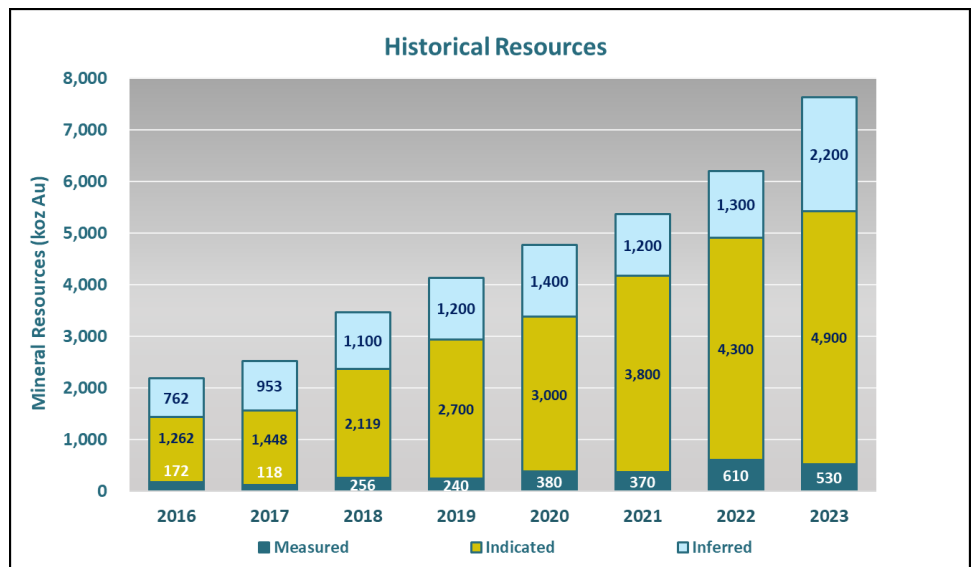
- **18 Mt at 1.6 g/t Au for 930 koz of gold** (refer Table B)

Acquisition of the Roe project delivered a significant increase to Mineral Resources and work is in progress to generate Ore Reserves for this project.

Overall, Ore Reserves were lower year-on-year once mining depletion was accounted for, with conversion of Resources to Reserves yet to occur and therefore the focus for FY24 being the following projects (in Resource size order):

- Roe (1.7Moz) and Rebecca (1.4Moz) - combined project with study update expected in early calendar 2024
- Bartus (202koz) - open pit and underground studies commenced
- Penny (tba) - Mineral Resource extensions to be announced separately based on recent 13,000m drilling program including those results received post 30 June 2023

The board approved exploration budget for FY24 is \$30M with focus areas including Mt Magnet, Penny and the Rebecca/Roe area. Historical Mineral Resource growth is shown in the table below.



## MINERAL RESOURCES

Table A: Mineral Resources

MINERAL RESOURCES AS AT 30 JUNE 2023 - INCLUSIVE OF RESERVES													
Project	Deposit	Measured			Indicated			Inferred			Total Resource		
		t	g/t	oz	t	g/t	oz	t	g/t	oz	t	g/t	oz
Mt Magnet	Morning Star				4,900,000	1.9	300,000	4,300,000	1.5	210,000	9,200,000	1.7	510,000
	Bartus Group				410,000	1.2	16,000	420,000	1.2	16,000	820,000	1.2	32,000
	Boomer				1,200,000	1.8	68,000	790,000	1.0	26,000	2,000,000	1.5	94,000
	Britannia Well				180,000	2.0	12,000				180,000	2.1	12,000
	Brown Hill				1,100,000	1.6	59,000	490,000	1.2	19,000	1,600,000	1.5	78,000
	Bullocks				200,000	3.3	21,000	40,000	2.5	3,000	240,000	3.1	24,000
	Eastern Jaspilite	150,000	2.2	10,000	120,000	2.8	11,000	130,000	2.5	11,000	400,000	2.5	32,000
	Eclipse				170,000	2.2	12,000	41,000	2.1	3,000	210,000	2.2	15,000
	Eridanus	850,000	1.3	36,000	13,000,000	1.3	550,000	3,900,000	1.1	140,000	18,000,000	1.3	730,000
	Franks Tower				2,200,000	1.0	70,000	700,000	1.2	26,000	2,900,000	1.0	97,000
	Golden Stream				150,000	2.9	14,000	67,000	1.2	2,700	220,000	2.4	17,000
	Golden Treasure				540,000	1.3	23,000	360,000	1.1	13,000	900,000	1.2	36,000
	Milky Way				820,000	1.1	29,000	1,600,000	1.1	57,000	2,400,000	1.1	86,000
	Spearmont-Galtee							580,000	2.6	48,000	580,000	2.6	48,000
	Welcome - Baxter	170,000	1.7	9,200	320,000	1.6	17,000	130,000	1.8	7,400	610,000	1.7	33,000
	<b>Open Pit deposits</b>	1,200,000	1.5	55,000	25,000,000	1.5	1,200,000	14,000,000	1.3	580,000	40,000,000	1.4	1,800,000
	Galaxy UG				6,500,000	2.1	430,000	970,000	2.2	67,000	7,400,000	2.1	500,000
	Hill 50 Deeps	560,000	7.6	140,000	580,000	5.0	92,000	720,000	5.5	130,000	1,900,000	6.0	360,000
	St George	380,000	3.7	45,000	180,000	3.0	17,000				560,000	3.5	62,000
	Water Tank Hill				200,000	3.8	24,000				200,000	3.8	24,000
Bartus East				2,300,000	2.2	160,000	160,000	2.2	11,000	2,500,000	2.2	170,000	
<b>UG deposits</b>	940,000	6.1	180,000	9,800,000	2.3	730,000	1,800,000	3.5	210,000	13,000,000	2.8	1,100,000	
ROM & LG stocks	7,300,000	0.6	140,000							7,300,000	0.6	140,000	
<b>Total Mt Magnet</b>	9,400,000	1.2	380,000	35,000,000	1.7	1,900,000	15,000,000	1.6	780,000	60,000,000	1.6	3,100,000	
Rebecca	Rebecca				17,000,000	1.5	820,000	3,100,000	1.4	140,000	20,000,000	1.5	960,000
	Duchess				7,300,000	0.9	220,000	2,400,000	0.9	72,000	9,700,000	0.9	290,000
	Duke				2,000,000	1.1	73,000	740,000	1.1	25,000	2,700,000	1.1	98,000
	Cleo				730,000	1.1	26,000	230,000	1.0	7,700	960,000	1.1	34,000
	<b>Total Rebecca</b>				27,000,000	1.3	1,100,000	6,500,000	1.2	240,000	33,000,000	1.3	1,400,000
Roe	Bombora OP				15,000,000	1.5	710,000	2,700,000	1.3	110,000	18,000,000	1.4	820,000
	Bombora UG				710,000	2.9	66,000	7,300,000	2.5	590,000	8,000,000	2.6	660,000
	Crescent-Kopai						4,100,000	1.0	130,000	4,100,000	1.0	130,000	
	Claypan						2,000,000	1.1	69,000	2,000,000	1.1	69,000	
	<b>Total Roe</b>				16,000,000	1.5	780,000	16,000,000	1.8	910,000	32,000,000	1.6	1,700,000
Edna May	Edna May	720,000	1.1	25,000	23,000,000	1.0	700,000	7,000,000	1.0	220,000	30,000,000	1.0	940,000
	Edna May UG	130,000	5.0	21,000	150,000	5.5	27,000	190,000	7.3	45,000	470,000	6.1	92,000
	ROM & LG stocks	30,000	1.0	970						30,000	1.0	970	
	<b>Total Edna May</b>	870,000	1.7	47,000	23,000,000	1.0	730,000	7,200,000	1.1	260,000	31,000,000	1.0	1,000,000
Symes	Symes Find	370,000	1.3	15,000	910,000	1.9	56,000	120,000	0.9	3,500	1,400,000	1.7	75,000
Marda	Die Hardy				600,000	1.7	33,000				600,000	1.7	33,000
	ROM & LG stocks	380,000	1.4	18,000						380,000	1.4	18,000	
	<b>Total Marda</b>	380,000	1.4	18,000	600,000	1.7	33,000			980,000	1.6	51,000	
Tampia	ROM & LG stocks	1,800,000	1.2	69,000						1,800,000	1.2	69,000	
	<b>Total Tampia</b>	1,800,000	1.2	69,000						1,800,000	1.2	69,000	
Penny	North & West				350,000	20.0	220,000	81,000	11.0	29,000	430,000	18.0	250,000
<b>Total Resource</b>		13,000,000	1.3	530,000	100,000,000	1.5	4,900,000	45,000,000	1.5	2,200,000	160,000,000	1.5	7,600,000

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

### ***Mineral Resource Commentary***

Mt Magnet is comprised of numerous gold deposits contained within a contiguous tenement holding and located within an 8km radius of the Checkers processing facility. Current mining operations include the major Eridanus open pit and the Galaxy, St George, and Water Tank Hill underground mines. A large low-grade stockpile has been generated from mining at Eridanus.

The Edna May mine was acquired in October 2017. It comprises of the large-scale Edna May granitoid hosted, stockwork deposit. Two high-grade, cross-cutting quartz lodes are being mined underground within the broader Edna May deposit. Marda, Symes, and Tampia form major ore sources for current mill feed.

Marda mining operations commenced in late 2019. It consists of BIF hosted deposits being mined as open pits. The Die Hardy open pit is being mined currently. It is located 130km north of Southern Cross and ore is hauled and milled at Edna May.

Tampia mining operations commenced in April 2021 and ceased in May 2023. The deposit is hosted within amphibolite facies mafic rocks, 12km SE of Narembeen in the WA wheatbelt. Gold is hosted within shallow dipping lode/shear zones and associated with arsenopyrite. Ore is hauled 140km to Edna May for milling. Large site stockpiles have been generated and will continue to feed the Edna May processing facility throughout the 2024 financial year.

Symes Find is located 120km SSE of Edna May, also in the WA wheatbelt and consists of lateritic oxide and primary mineralisation hosted in mafic gneiss units comparable to Tampia. Construction of the mining offices and workshops began in the fourth quarter of 2023 financial year and mining commenced in June 2023.

The Penny mine was acquired via the takeover of Spectrum Metals in early 2020. Both Penny West and Penny North are high-grade quartz-sulphide lodes. Penny West was discovered and mined by open pit in the early 1990's and project development progressed under Ramelius with a pit access cutback, camp, workshop and offices completed in 2022. An underground decline into Penny North and six levels of ore development with four stopes were completed in the 2023 financial year. Ore is hauled 160km to Mt Magnet.

All deposits have been depleted for mining during the 2023 financial year.

Mining and changes to modelling and/or categorisation generally resulted in decreases for most active projects, with the exception of Rebecca and Penny. The large increase in resource was primarily due to the addition of the Roe project.

See RMS ASX releases below for additional Mineral Resource reporting details:

- 'Ramelius Makes Recommended Takeover Offer for Breaker Resources', 20 March 2023
- 'June 2023 Quarterly Activities Report', 27 July 2023

The Rebecca project was acquired via acquisition of Apollo Consolidated in 2021. The project contains the substantial Rebecca deposit, plus the smaller Duchess, Duke, and Cleo deposits and is located 150km east of Kalgoorlie. Mineralisation occurs in large shear lodes with associated disseminated pyrrhotite, pyrite and silicification, hosted within a gneissic granodiorite.

The Roe project was acquired via acquisition of Breaker Resources in 2023. Resources at Roe include Crescent-Kopai, Claypan, and the extensive Bombora deposit which are located 50km southwest of the Rebecca project and 100km east of Kalgoorlie. Roe mineralisation occurs as disseminated gold within stockwork and quartz veins associated with cross cutting shear zones in Archean mafics and fractionated dolerite intrusives.

The Bartus group of deposits are located within the Boogardie Basin domain of the Mt Magnet goldfield, 6.3km south of the Checkers processing plant. Mineralisation is hosted by sericite-silica-albite altered granodiorite intrusions with quartz-pyrite+/-tourmaline vein stockworks and accessory molybdenite.

All resources are based on combinations of RC and diamond drillholes. Underground deposits may also utilise grade control and face sampling data. Drill sampling has been via riffle or cone splitters (RC) or by sawn half core and whole core. Assay is carried out by commercial laboratories and accompanied by appropriate QAQC samples.

Generally, a substantial proportion of drill data is historic in nature or gathered by previous owners, however Ramelius has added significant further drilling for all deposits, especially those forming Ore Reserves. Mineralisation has been modelled via cross-sectional interpretations, using deposit appropriate lower cut-off grade shapes and geological interpretations. Geological understanding has formed the basis of all ore interpretations. Ore domain interpretations have then been wireframed using geological software, including Micromine, Leapfrog, and Surpac. Mineralisation has been grouped by domain where required and statistical analysis, top-cutting and estimation carried out using anisotropic search ellipses. Estimation uses Ordinary Kriging and/or Inverse Distance methods. Modelling has been undertaken with recognition of the probable mining method and minimum mining widths and the resource classifications reflect drillhole age, spacing, data quality, geological and grade continuity.

Density information for fresh rock is generally well established and new measurements have frequently been obtained. All deposits listed, except Rebecca and Roe, have had some degree of recent production or historic mining.

Further details are available in prior RMS ASX Releases for individual projects. Additional detailed information relating to generation of the Resource estimates is attached below in JORC Table 1 Reporting Criteria.

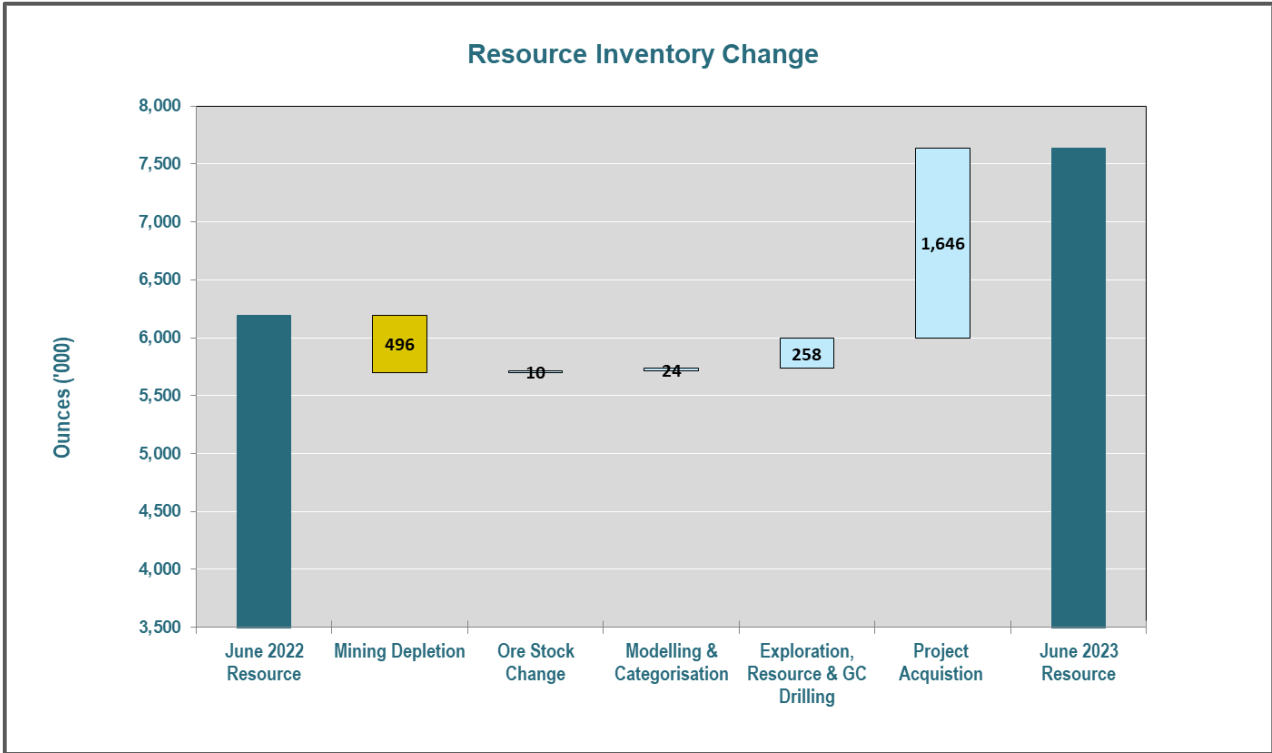


Figure 1: Resource Inventory Change

Referring to the above waterfall chart, mining depletion was significantly larger than production due to the removal of mineralised material below open pits no longer in production such as Tampia and Marda Central, and smaller underground remnants from Mt Magnet which are no longer part of Ramelius mine plans. The drilling related additions approximately equalled production and were due to significant increases to Bartus East, Symes, and Edna May Underground resources. The project acquisition increase primarily relates to the Roe project.

Mineral Resource Diagrams

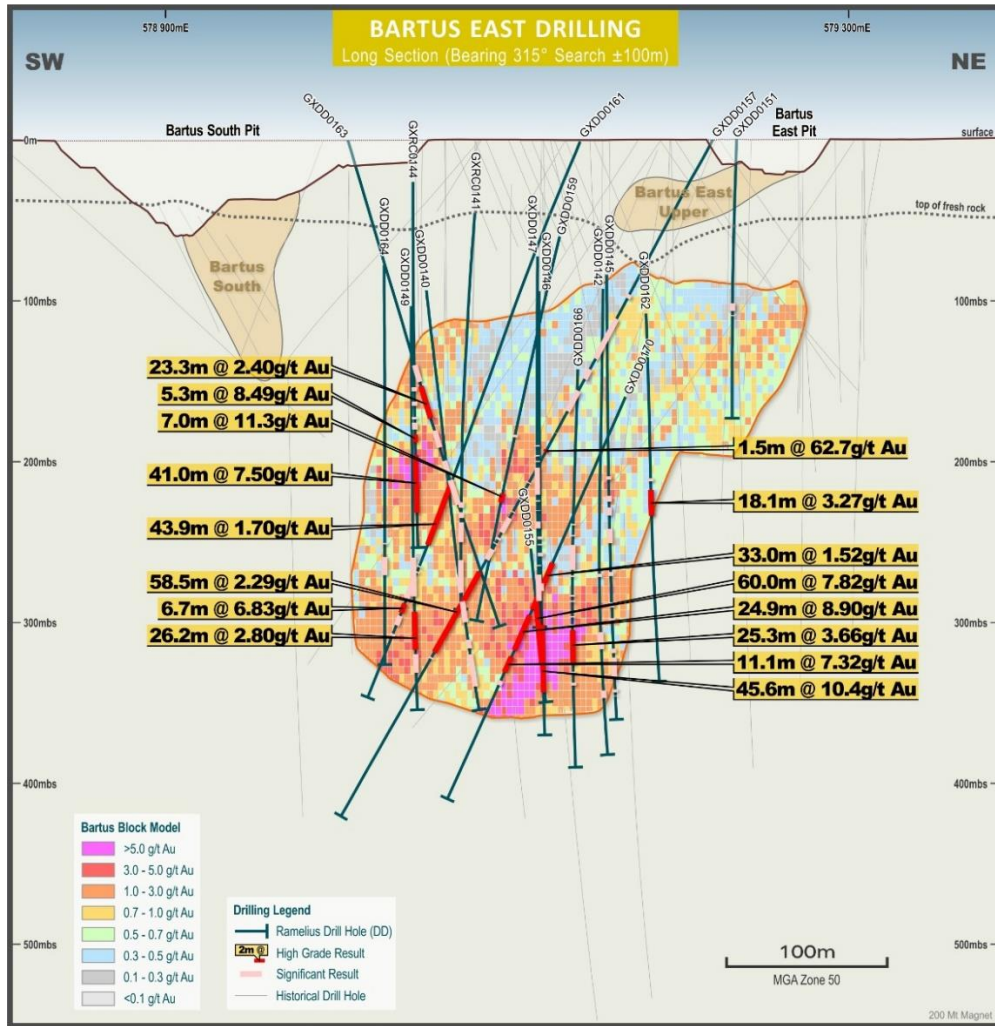


Figure 2: Bartus East long section - looking northwest - drilling & recent intercepts

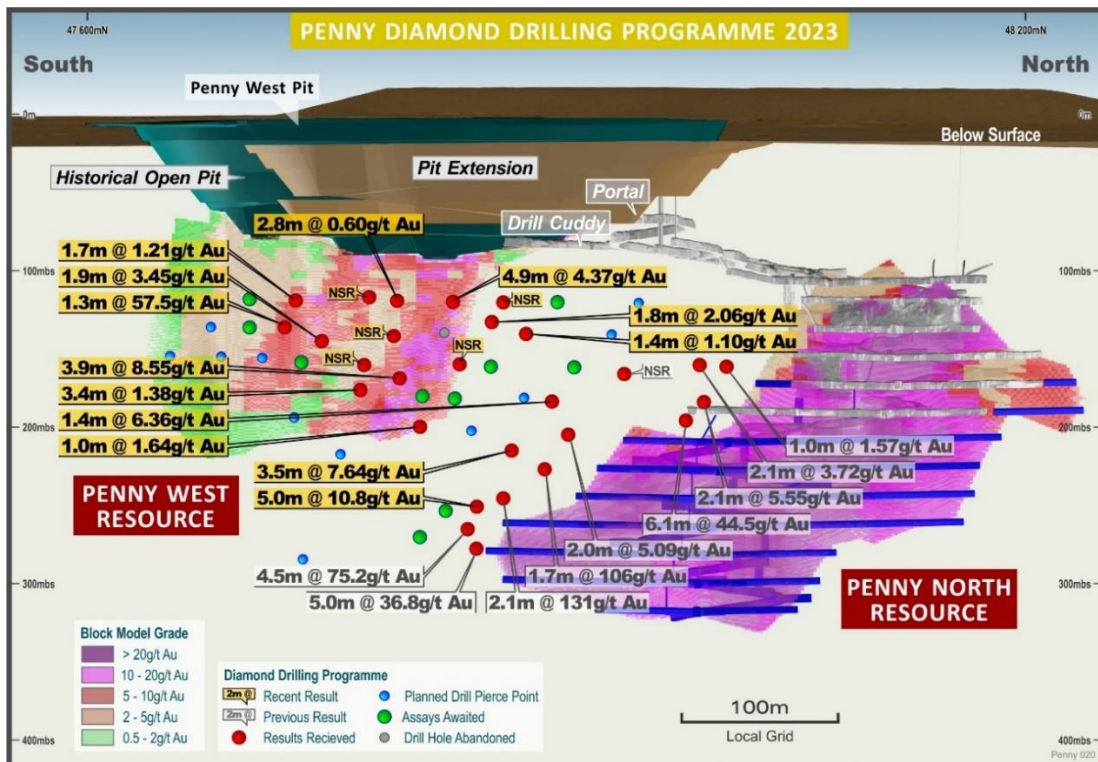


Figure 3: Penny long section – view to W – drilling & intercepts



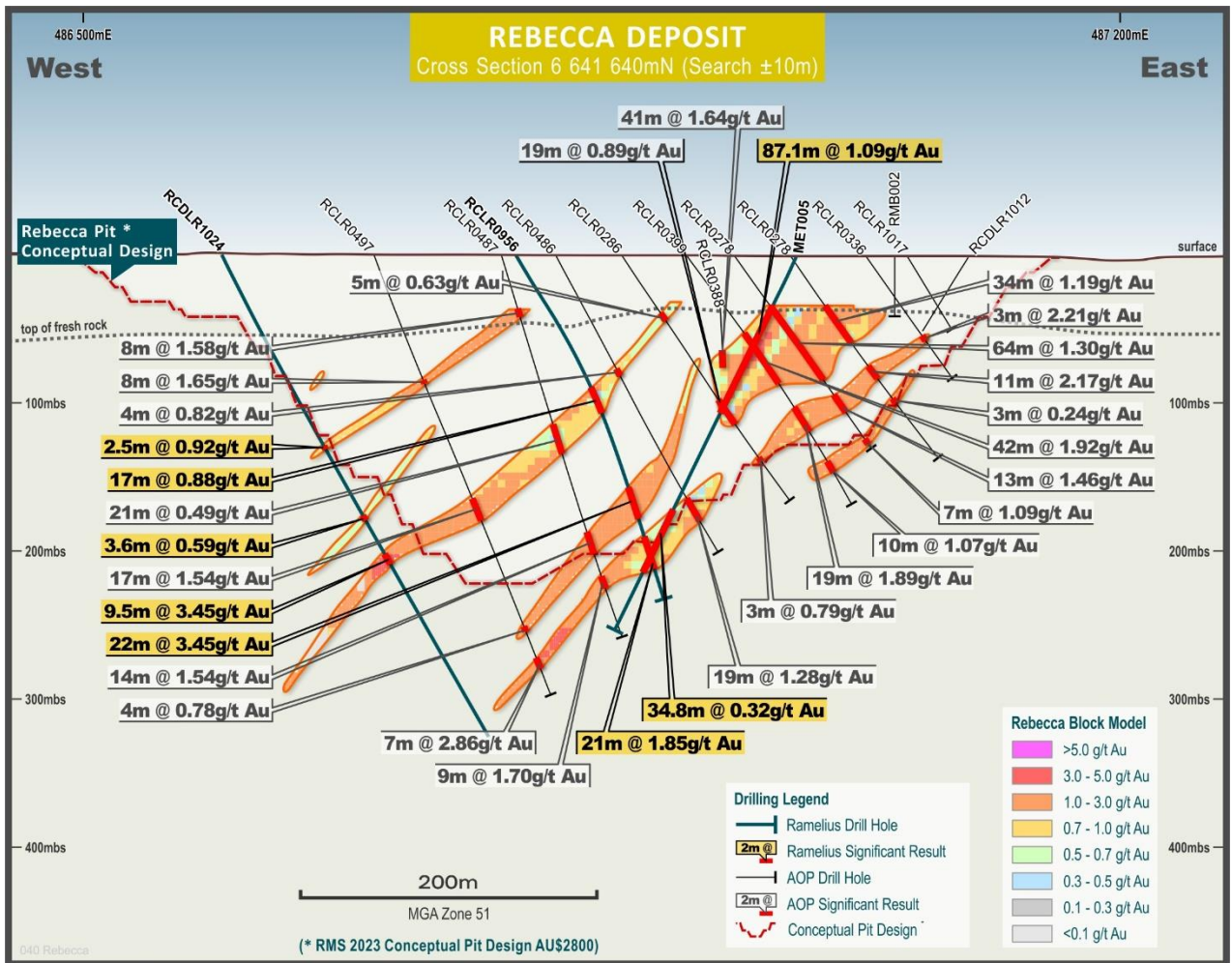


Figure 4: Rebecca deposit cross-section June 2023 - drilling & lode interpretation

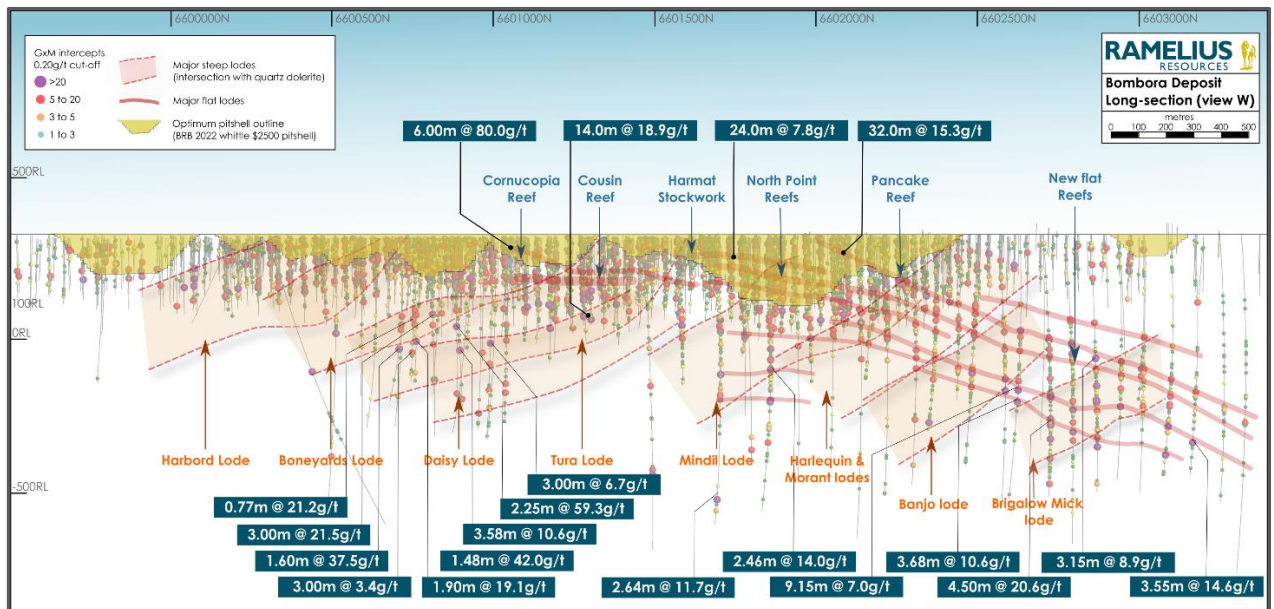


Figure 5: Roe – Bombara deposit cross-section June 2023 - drilling & lode interpretation

## ORE RESERVES

Table B: Ore Reserves

ORE RESERVE STATEMENT AS AT 30 JUNE 2023										
Project	Mine	Proven			Probable			Total Reserve		
		t	g/t	oz	t	g/t	oz	t	g/t	oz
Mt Magnet	Boomer				230,000	1.9	14,000	230,000	1.9	14,000
	Brown Hill				300,000	1.6	15,000	300,000	1.6	15,000
	Eridanus				2,100,000	1.4	95,000	2,100,000	1.4	95,000
	Golden Stream				85,000	2.6	7,200	85,000	2.6	7,200
	Morning Star				1,600,000	1.4	71,000	1,600,000	1.4	71,000
	<i>Total Open Pit</i>				4,300,000	1.5	200,000	4,300,000	1.5	200,000
	Hill 60				120,000	3.1	12,000	120,000	3.1	12,000
	Galaxy				2,600,000	2.4	210,000	2,600,000	2.4	210,000
	Water Tank Hill				95,000	2.9	8,900	95,000	2.9	8,900
	<i>Total Underground</i>				2,900,000	2.5	230,000	2,900,000	2.5	230,000
	ROM & LG stocks	7,300,000	0.6	140,000				7,300,000	0.6	140,000
<b>Mt Magnet Total</b>	<b>7,300,000</b>	<b>0.6</b>	<b>140,000</b>	<b>7,200,000</b>	<b>1.9</b>	<b>430,000</b>	<b>14,000,000</b>	<b>1.2</b>	<b>570,000</b>	
Edna May UG	Edna May UG				150,000	3.3	16,000	150,000	3.3	16,000
	ROM & LG stocks	30,000	1.0	970				30,000	1.0	970
	<b>Edna May Total</b>	<b>30,000</b>	<b>1.0</b>	<b>970</b>	<b>150,000</b>	<b>3.3</b>	<b>16,000</b>	<b>180,000</b>	<b>2.9</b>	<b>17,000</b>
Die Hardy	Die Hardy				300,000	1.7	17,000	300,000	1.7	17,000
	ROM & LG stocks	380,000	1.4	18,000				380,000	1.4	18,000
	<b>Total Marda</b>	<b>380,000</b>	<b>1.4</b>	<b>18,000</b>	<b>300,000</b>	<b>1.7</b>	<b>17,000</b>	<b>680,000</b>	<b>1.6</b>	<b>34,000</b>
ROM Stocks	ROM Stocks	1,200,000	1.5	56,000				1,200,000	1.5	56,000
	<b>Total Tampia</b>	<b>1,200,000</b>	<b>1.5</b>	<b>56,000</b>				<b>1,200,000</b>	<b>1.5</b>	<b>56,000</b>
Symes	Symes				530,000	2.2	37,000	530,000	2.2	37,000
	<b>Total Symes</b>				<b>530,000</b>	<b>2.2</b>	<b>37,000</b>	<b>530,000</b>	<b>2.2</b>	<b>37,000</b>
Penny	Penny Underground				480,000	14	210,000	480,000	14	210,000
	<b>Total Penny</b>				<b>480,000</b>	<b>14</b>	<b>210,000</b>	<b>480,000</b>	<b>14</b>	<b>210,000</b>
<b>Total Reserve</b>		<b>8,900,000</b>	<b>0.8</b>	<b>210,000</b>	<b>8,600,000</b>	<b>2.6</b>	<b>710,000</b>	<b>18,000,000</b>	<b>1.6</b>	<b>930,000</b>

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

### Ore Reserve Commentary

Pit Ore Reserves have been reported from Measured and Indicated Resources only. Current operations are the Eridanus, Brown Hill, Die Hardy and Symes open pits and the Penny, Edna May, Galaxy, Water Tank Hill / Hill 60 underground mines. All current pit and underground operations were depleted to 30 June 2023.

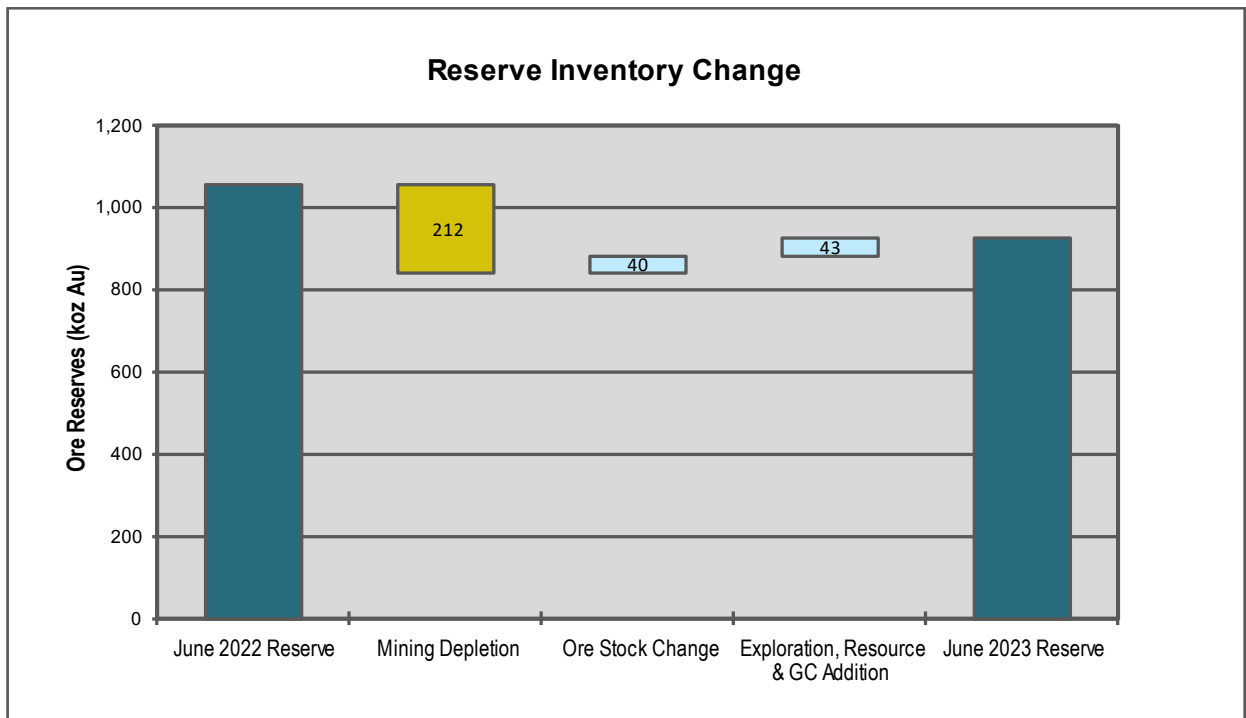
All Ore Reserves have been generated from design studies using appropriate cost, geotechnical, slope angle, stope span, dilution, cut-off grade and recovery parameters. Ore Reserves are utilised in the current Mine Plan. Mining approvals are in place for all Ore Reserve-related projects.

Penny underground mine design has incorporated approximately 20koz of Inferred Resource (at lower grade than the average ore reserve) mined coincidentally whilst extracting the Indicated Resource. The mine plan is not dependent upon Inferred Resource for profitability.

A maximum A\$2,700/oz gold price has been used to estimate Ore Reserves and determine appropriate cut-offs.

Mining, milling and additional overhead costs are based on currently contracted and budgeted operating costs. Mill recoveries for all ore types are based upon operating experience or metallurgical testwork. Stockpiles consist of ROM stocks & low-grade stocks mined under Ramelius' ownership.

Further detailed information relating to generation of the Ore Reserve estimates is attached below in JORC 2012 Table 1 Reporting Criteria.



**Figure 6:** Reserve Inventory Change

Mining depletion of the Ore Reserve for FY23 of 212koz is less than total mined ore in FY23 as a result of:

- mining ore outside of Ore Reserves estimated at 30 June 2022 at Hill 60 Underground and Orion Open Pit
- FY23 depletion at Edna May Underground being partially offset by increased depth or resources and consequent depth of Ore Reserve design at Edna May
- grade control updates during FY23 mining of Tampia and Eridanus open pits identifying additional ore to that identified in Ore Reserves estimated at 30 June 2022, within the same pit design.

The increase in ore stocks of 40koz reflects the build-up of stockpiles at Tampia and Eridanus because of mining ore faster than processing plant capacities allows treatment of this ore. The Ore Reserve addition of 43koz is primarily driven by the inclusion of reserves at Symes.

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

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## **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.

## **COMPETENT PERSONS**

The information in this report that relates to Mineral Resources and Ore Reserves is based on information compiled by Jake Ball (Mineral Resources) and Paul Hucker (Ore Reserves), who are Competent Persons and Members of The Australasian Institute of Mining and Metallurgy. Jake Ball and Paul Hucker are full-time employees of the company. Jake Ball and Paul Hucker 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". Jake Ball and Paul Hucker consent to the inclusion in this report of the matters based on their information in the form and context in which it appears.

## JORC 2012 TABLE 1 REPORTING CRITERIA

Project	Mt Magnet	Rebecca	Edna May	Tampia	Marda	Roe	Penny	Symes
<b>Section 1</b>	<b>Sampling Techniques and Data</b>							
Project History	Field discovered in 1891. Hill 50 UG mine operated 1934-1976 & 1981-2007. Recorded production of 6.0 Moz. Operated by numerous companies including WMC, Metana Minerals, Hill 50 Gold and Harmony Gold. Project acquired by Ramelius Resources Ltd (RMS) in 2010, with exploration, mining and milling recommencing early 2012. Ramelius gold production to 2019 is +600koz.	Duke & Duchess deposits discovered & drilled by Aberfoyle & Newcrest in 1990-2000 period. Discovery of Rebecca deposit by Apollo Consolidated in 2012, with major drilling 2018-20. Ramelius acquisition via friendly takeover in 2021.	Discovered in 1911. UG mining of quartz reefs from 1911-47 producing 360koz. Modern mining commencing 1984 with Australian Consolidated Minerals, followed by Catalpa & Evolution. Total production over 1Moz & continuing. Acquired by Ramelius in 2017.	Discovered by BHP in 1987. Drilled by BHP and Nexus Minerals. Limited exploration until acquisition by Auzex Ltd in 2012. Company evolved into Explaurum Ltd and significant resource drilling conducted 2015-2018. Ramelius acquisition & drilling 2019.	Marda area discovered in late 1800's. Minor historical workings at Dolly Pot deposit. Modern exploration by Chevron 1980's, Cyprus Gold 1990's, Savage Resources late 1990's and Southern Cross Goldfields/Black Oak Minerals from 2011-2014. Ramelius acquisition & drilling 2019. Mining commenced 2020.	Poseidon Exploration Ltd and Western Mining Corporation Ltd explored parts of Bombora in the 1990's. Breaker Resources Ltd pegged the tenements in 2014 and made the primary discovery in 2016. Resource definition and exploration continued under Breaker until Ramelius acquired via takeover in early 2023.	Penny West was discovered and mined in early 1990's. Spectrum discovered Penny North lode in early 2019 and drill defined high grade lode. Ramelius acquisition via takeover in early 2020. Project commenced 2021.	The Symes Find mining lease has previously been drilled and mined by small scale prospectors and syndicates. Broad shallow workings occur to around 10m depth. RMS acquired the project in 2018 and commenced a series of drill programs.
Sampling techniques	Sampling was completed using a combination of Reverse Circulation (RC) and Diamond Drilling (DD). RC drill samples were collected at 1m intervals in a cyclone at the side of the drill rig and a sub-sample collected via a riffle or cone splitter. Tampia drilling used a Metzke powered rotary splitter. A split portion weighing 2-3kg was in collected in numbered sample bags. The remaining portion was laid out on the ground for logging. Occasional wet samples were not split but collected in a plastic bag then spear sampled. Some historic samples were collected as 2m or 4m composites. Diamond Drilling (DD) core was sampled as 1m or geologically selected intervals. Core was sawn to provide half core samples for analysis. Core outside lode or mineralised zones is not always sampled.							
	All sampling by conventional gold industry drilling methods. Recent RC drilling has duplicate samples collected to test sample representivity. Tampia drilling had duplicate sample collected for all intervals.							
	Sampling Technique details for historic drilling are often partial or unknown. At Mt Magnet, numerous reports exist referencing similar methods of sampling, however detailed information is incomplete or lacking for the majority of older data or exists in hardcopy formats which have not been systematically investigated. Early RC drill sampling (pre 1990's) is likely to have used cross-over subs which could affect sample recovery and contamination to a greater degree than modern face sampling hammers. Early RC drilling may have been collected in bagged 1m samples and manually riffle split. At Roe, RC samples were composited at 4m to produce a bulk 3kg sample for initial analysis. If the 4 m composite sample was a nomalous (Au>0.1 g/t), the original 1 m samples were retrieved and submitted to the laboratory. Half core samples were taken with a diamond saw generally on 1m intervals or on geological boundaries where appropriate (minimum 0.3m to maximum of 1.3m). Whole core sampling was conducted at Penny in 2023. The average weight of core samples was 3kg. Samples were sorted, dried, crushed to 10mm, pulverised to -75µm and split to produce either a 30g or 50g charge for fire assay analysis for gold. Penny North and West diamond drill holes drilled since June 2023 were photon assayed using whole core samples that were crushed to 90% passing 3.15mm and split into 500g aliquot jars for analysis.							
Drilling techniques	<i>Recent (+2009)</i> : 2228 RC and 104 DD surface holes, plus UG DD holes. RC using face sampling bit. Diamond drilling (DD) consists of NQ or HQ drill core. Most core is orientated. <i>Old</i> : Exploration/resource database contains 74,000 holes, with around 23,000	Between 1990-2021, 843 holes for 119,000m were drilled by previous owners, primarily RC with 6 DD and approx. 30 DD core tails. Apollo drilled the 626 of these holes, largely post 2018. Ramelius has	Deeper resource drilling below current pit is largely diamond or RC pre-collared diamond tail holes. The non-GC drill dataset is over 200,000m. 227 holes are greater than 200m and maximum depth is 835m.	Majority of drilling is 267 RC holes drilled by Explaurum in 2017, plus 53 RC holes and 63 'grade control' RC holes drilled by Explaurum/RMS in 2018-2019. 21 DD holes and around 100 earlier RC holes are also used to varying	Numerous holes drilled by Gondwana (1990's) and Southern Cross Gold (2011) as mostly RC drilling, plus moderate DD holes. RMS drilled a further 45 RC infill holes in 2019 which confirmed earlier	RC drilling was undertaken using a face-sampling hammer with 5½" bits. Diamond core is HQ3, HQ or NQ2. Core is orientated using Reflex orientation tools, with core initially cleaned	All Penny North lode drilling is new RC and DD completed by Spectrum or RMS in 2019 & 2020. Historic drilling from 1989 on exists for Penny West and Magenta lodes and used in	RMS has drilled approximately 1,000 RC holes for around 43,000m. This drilling effectively replaces all historic drill data. Three diamond holes completed late 2020. Significant infill drilling took place between 2022 and 2023.

Project	Mt Magnet	Rebecca	Edna May	Tampia	Marda	Roe	Penny	Symes
	RC and 5,000 DD. Not all hole types recorded. Older RC holes may have used cross-over subs. Some RAB, AC or VAC holes may be included in shallow resource estimates (i.e. surficial laterites). Significant GC drilling (RC & UG DD) included for currently active deposits.	continued significant RC drilling in 2022 (99 holes for 15,050m) and recently commenced DD tails and DD geotech drilling.	Typically NQ core. Ramelius drilled 108 holes (100 DD) for 13,715m in 2017/18. Significant UG DD drilling completed 2019-2021.	degrees. The Mace paleochannel zone has a further 350 short RC holes drilled in 2018. Significant RC grade control drilling has now been completed and is utilised.	drillholes. Significant GC RC drilling included for currently active deposits.	and pieced together at the drill site, and fully orientated by field staff at Lake Roe core yard.	combination with additional recent Spectrum & RMS infill drilling. Underground diamond drilling of orientated NQ2 core using Reflex orientation tools was completed in 2023.	
Drill sample recovery	Core recovery has been logged at all projects for recent drilling (post 2009) and is generally excellent ( $\approx 100\%$ ). Minor wet intervals occur and can affect RC sample recovery. Chip sample recovery is generally not logged but noted if wet sample or other issues (rare). Voids relating to historic UG workings are logged as open or filled stope voids.							
	Sample recovery at all deposits is generally excellent in weathered and fresh rocks. Recent drilling has utilised RC rigs of sufficient size and air capacity to maximise recovery and provide dry chip samples or using significant diamond drilling, i.e. Edna May. At Tampia RC primary, duplicate and total sample was weighed and graphed at the rig to check sample recovery and interval accuracy.							
	No indication of sample bias is evident or has been established.							
Logging	All recent RMS exploration & res-def drilling has been logged for lithology, oxidation, alteration, veining, textures and sulphides and all core is photographed and unsampled core retained. Chip-trays are retained for most RC holes. Older drilling generally has a minimum of lithology is logged for +90% of holes, with varying degrees of other information. All projects have a number of holes drilled and logged specifically for geotechnical purposes and the level of detail supports resource estimation, mining studies and metallurgical understanding.							
	Drillhole logging of RC chips & DD core is qualitative on visual recordings of rock forming minerals & estimates of mineral abundance. Photography exists for recent (+2002) DD core from all projects.							
	The entire length of drillholes are geologically logged							
Sub-sampling techniques and sample preparation	Core holes are sawn and sampled as half core. Some 1/4 core sampling has occurred as checks. Older drilling details incomplete but where available were similar. Old Mt Magnet core may have been hand split in some instances. Some whole core sampling at underground projects in production, i.e. Penny and for metallurgical or geotechnical testwork.							
	Recent RC holes were sub-sampled by rig mounted cone or riffle splitter. Tampia used Metzke powered rotary splitter. Majority of old drilling details unknown. Occasional wet samples spear sampled from plastic bags or dried and riffle split post drilling.							
	Sub-sample methods appear appropriate for deposit and sample type using accepted industry practices.							
	Recent RC samples have field duplicate samples taken at regular intervals and compared. Duplicate sample collected for all Tampia intervals. For historic projects, sampling reports often exist referencing similar methods, however detailed information is also often incomplete and lacking for the majority of older data or exists in hardcopy formats which have not been systematically investigated. Diamond core sample intervals are based on geological intervals typically less than a nominal 1m.							
	Quality control procedures involved the use of Certified Reference Materials (CRM) along with sample duplicates (submitted as quarter core). Selected samples are also re-analysed to confirm anomalous results.							
	Assay laboratory QAQC included insertion of certified standards, blanks, check replicates and fineness checks to ensure grind size of 85% passing -75 $\mu$ m as part of their own internal procedures.							
	All recent samples sub-sampled using accepted splitting techniques and have been delivered to laboratory for total preparation by crushing and pulverisation, before being sub-sampled for analysis. At Tampia significant numbers of mineralised duplicate samples were selected based on Arsenic grade (by handheld pXRF analysis) and submitted. Analysis of duplicates shows good to moderate correlation.							
	Sample sizes are generally appropriate for grain size and material types being sampled, although nuggety gold exists at Edna May, Penny & Shannon and small samples, i.e. half NQ core, may be less representative than larger RC samples.							
Quality of assay data and laboratory tests	Recent assaying has all been by commercial laboratories including ALS, SGS, KalAssay, MinAnalytical and Genalysis, typically by 40-50g Fire Assay to give total contained gold. Subsequent Screen Fire Assays have been used for some high grade Fire Assays and replace earlier values. Historic assaying includes a number of techniques and laboratories and details are often incomplete or unknown. Some older Mt Magnet assays use PAL method conducted by onsite laboratories. Recent assaying at Penny has been conducted by Photon analysis of a crushed 500g sample or sub-sample. Photon assaying is a non-destructive technique that utilises high energy X-Rays for gold detection.							
	No field analyses of gold grades are completed. Quantitative analysis of the gold content and trace elements is undertaken in a controlled laboratory environment. At Tampia handheld pXRF analysis of Arsenic was conducted in the field as a 1st pass indication of mineralised zones. Final Arsenic grade is generated by laboratory analysis.							

Project	Mt Magnet	Rebecca	Edna May	Tampia	Marda	Roe	Penny	Symes
	Recent assaying has had QAQC measures including certified reference standards, field duplicates, blank samples and umpire laboratory check samples carried out for all deposits and shows acceptable levels of accuracy and precision. For older data reports and tables exist, referencing similar QAQC methods, however detailed information is incomplete or lacking for the majority of old data. Tampia resource drilling had significant QAQC measures conducted.							
Verification of sampling and assaying	The Competent person has verified significant intersections of recent drilling during the resource modelling process							
	In most projects holes were not twinned deliberately, but there are frequent holes that effectively twin others due to varied drill angles, collar location restrictions or hole density. All resources have holes drilled more recently as a check of older drilling data. The Eridanus resource has a number of scissor and orthogonal holes drilled as checks and to understand geology. Tampia has an area of 10m x 10m infill drilling which overlaps earlier Resource drilling. Many projects are in production and have recent grade control drilling available.							
	Directional "wedging" was used in several deep diamond drill holes at Bombora which results in twinning of parent drill hole intersections in several areas of mineralisation. The density and pattern of RC and diamond drilling also results in twinning of RC intersections by diamond drill holes in several other areas.							
	Recent data is captured using logging software (i.e. Field Marshall or Logchief) and transferred to a central databases (i.e. SQL). Assay results are loaded electronically. All drillhole data is visually validated prior to resource modelling. For old data detailed information for verification of sampling and assaying is generally not available. In limited cases hardcopy data is available and checks have been conducted to verify original and electronic datasets.							
Location of data points	No adjustment of assay data							
	Recent drill collars have been surveyed by DGPS instruments or by accredited surveyors to sub-metre accuracy. At Roe, GPS elevation values are corrected where necessary using a digital elevation model from a LIDAR survey. Expected accuracy is +/- 4m for easting, northing and RL (GPS) and +/- 0.1m or less for surveyed and LIDAR elevation point data. All recent holes were downhole surveyed using electronic camera or gyroscopic survey tools.							
	Old: Collar survey method is not always recorded for all old holes, however at Mt Magnet mine site surveyors were available and used. Downhole surveys not always available for older drilling. If present, downhole survey method frequently unknown. Tampia drilling post 2014 surveyed by commercial surveyor and downhole electronic camera tool.							
Data spacing and distribution	Most new drilling post 2009 uses GDA94 grid. Local grids have been used for resource modelling of most deposits, unless they are parallel to MGA grid. Older holes may have been surveyed in local grid or AMG grids and then translated. Original survey coordinates are retained. GDA2020 is now used for Rebecca project.							
	Quality topographic surfaces have been generated more recently from aerial photogrammetry or detailed surveys. Some older drillhole RL data has been adjusted to match accurate topography, i.e. Die Hardy (Marda)							
		The majority of Mt Magnet deposits are drilled on a 25m based sections and frequently closed to 12.5m. On section hole spacing is generally 20-50m, with spacings generally closer near surface and wider at depth. Some deposits are drilled on 20m section spacings.	Drilling is typically on 20m x 20m sections at Rebecca, Duke, Duchess, and Cleo. Density decreasing at depth.	Resource holes on 25m sections with variable 10-50m on section spacing. Density decreasing at depth.	Dominant resource pattern of 40m x 40m. Ramelius has added selected infill drilling on 20m infill sections on variable 20-50m spacings. 6 lines of 10m x 10m infill RC were included in the central south area.	Marda Central 12.5 sections x 12.5m, Golden Orb 20m sections x 8-20m, King Brown 12.5 sections x 6-10m, Die Hardy 40m sections x 10-20m,	<b>Bombora:</b> Drill holes are on a nominal spacing of 40m x 20m with areas at a 20m x 20m spacing completed every 200 metres along strike in the shallow part of the Bombora resource to ~200-250 meters below surface). <b>Claypan:</b> The drill spacing is on a nominal 200m x 80m reconnaissance pattern. <b>Kopai-Crescent:</b> The drill spacing is on a nominal 100m x 40m with local infill to 40m x 20m in the southern (Crescent) area. Drilling outside the Mineral Resource	Surface drilling largely of 40m sections with 30m hole spacing and some 20m infill sections. Underground diamond drilling has been on a general 20x20m spacing.

Project	Mt Magnet	Rebecca	Edna May	Tampia	Marda	Roe	Penny	Symes
						areas is on an irregular reconnaissance spacing.		
Drill spacing is sufficient to establish appropriate continuity and the classifications applied.								
RC: Vast majority of samples are 1m, with minor 2 or 4m composites, generally outside mineralised areas. Diamond: 1m samples or geologically defined 0.3 - 1.5m samples. All data composited to 1m lengths for resource calculations.								
Orientation of data in relation to geological structure	Orientation of geological structure and deposit geometry is varied at Mt Magnet. Intercept angles are usually orthogonal or high-angle to stratigraphy and vary to suit individual deposits. Mineralisation is frequently complex with structurally controlled stratigraphic and cross-cutting sub-vertical trends. Drillhole dip angles are generally at a moderate to high angle to steeply dipping stratigraphy and mineralisation.	Drillholes are orientated orthogonal to the geological and mineralised trend. Intercept angles are often near perpendicular. Typically as -60° east dipping holes drilling 40-50° west dipping lodes. Selected metallurgical holes drill down the lodes.	Drillholes are orientated orthogonal to the geological and mineralised trend. Intercept angles are moderate to high angle. Typically as -60° south dipping holes drilling a steeply -80° west dipping gneiss unit. High grade UG quartz reefs have been targeted with orthogonal UG DD holes	Drillholes are orientated orthogonal to the geological and mineralised trend. Intercept angles are mostly at a high angle and often >85°. Typically as -60° northwest dipping holes drilling shallow 30° east dipping lode zones.	The core drilling and RC drilling is completed orthogonal to the interpreted strike of the deposits. A number of scissor holes exist at most deposits. Marda ore zones are generally vertical. Die Hardy -40° SW dipping lode zone. New RMS drilling is -60° to the NE.	<b>Bombora:</b> Three main mineralised fault (lodes) orientations have been recognised: steep lodes, flat lodes and west lodes. A combination of east- and west-orientated drilling is used overcome potential biasing of west-dipping lodes. <b>Claypan and Kopai-Crescent:</b> The geometry of the flat, north-plunging mineralisation is constrained by diamond drilling and is factored into the modelling. Wider drill spacing introduces the possibility that other mineralised geometries may be present. These issues are well understood.	Drillholes are orientated orthogonal to the geological and mineralised trend. Intercept angles are at a moderate to high angle to the lode. Typically as -60° W dipping holes drilling a -55° E dipping lode zone. Underground diamond holes are -30° to -70° E dipping at a moderate to high angle to the lode.	Drillholes generally orthogonal with vertical to -70° holes intersecting flat to shallow dipping supergene and lode zones.
No bias considered present for all deposits. Minor potential for orientation bias for some individual holes exists, but no bias is believed evident at deposit scales.								
Sample security	<i>Recent:</i> All samples have been collected by Ramelius geological staff. Samples are transported to the laboratory by commercial transport companies. The laboratory receipts received samples against the sample dispatch documents and issues a reconciliation report for every sample batch.							
Audits or reviews	For Roe, a formal audit and review was conducted on field sampling techniques, data collection and storage procedures by Cube Consultants (February 2018) did not identify any material issues. Scanning of sample quality (recovery, wetness and contamination) as recorded by the geologist on the drill rig against assay results occurs regularly with no obvious issues identified to date. Ongoing reviews of QA/QC data (CRM and duplicate samples) and RC composite v RC split metal content are regularly carried out as a part of RMS standard procedures.							
<b>Section 2 Reporting of Exploration Results</b>								
Mineral tenement and land tenure status	Mt Magnet resources and reserves fall within the contiguous Mt Magnet tenement group. Total of	Rebecca deposits fall within E28/1610 owned 100% by RMS subsidiary AC	Edna May falls within M77/88 owned 100% by RMS subsidiary	The Tampia deposit is located on M70/815 & M70/816, owned 100% by Ramelius.	Marda ore deposits are located on Mining Leases owned 100% by	The Roe resources and deposits are located on tenements M28/388	Penny falls within M57/180 & M57/196 owned 100% by Ramelius	Symes falls within M77/1111 owned 100% by Ramelius Resources Ltd



Project	Mt Magnet	Rebecca	Edna May	Tampia	Marda	Roe	Penny	Symes
	62 Mining Leases and 6 Prospecting leases 100% owned by Mt Magnet Gold Pty Ltd, a wholly owned subsidiary of RMS.	Minerals Pty Ltd. A 1.5% NSR royalty is owned by a 3rd party.	Edna May Operations Pty Ltd.		RMS subsidiary Marda Operations Ltd.	and E28/2515, which are held 100% by Lake Roe Gold Mining Ltd, a wholly owned subsidiary of RMS.	subsidiary Penny Operations Ltd.	
	Operating mine site. No known impediments.	The tenements are in good standing and no known impediments exist. Mining Lease application in progress.	Operating mine site. No known impediments.	RMS owns underlying freehold farmland. Operating mine site.	Operating mine site. No known impediments.	The tenements are in good standing and no known impediments exist. Mining Lease application in progress.	Operating mine site. No known impediments.	Operating mine site. No known impediments.
Exploration done by other parties	In all deposits significant exploration and development work has been carried out by previous owners. i.e. Mt Magnet - WMC, Metana Minerals, Hill 50 Gold and Harmony Gold. Vivien - Asarco, Wiluna Mines, Australian Goldfields and Agnew Gold Mining Company. Edna May - Westonia Mines, ACM, Catalpa. Tampia - BHP, Nexus, Explaurum. Marda - Chevron, Cyprus, Southern Cross Goldfields. Penny - EastMet, Metana, GMA, Aquila and Spectrum. Roe - Poseidon Gold, Western Mining Corporation, Mt Kersey Mining, Great Gold Mines, and Breaker Resources. Work includes geological interpretation, soil sampling, exploration and resource drilling, geophysical surveys, data collation and modelling.							
Geology	Archaean gold mineralisation. Mineralisation is principally hosted within Banded Iron Formations (BIF) where gold is spatially associated with NE trending faults and associated with pyrrhotite or pyrite mineralisation. Additionally, gold is commonly found in late stage felsic intrusives or structurally controlled zones which cross-cut stratigraphy on NE trend. Interpretation for Mt Magnet resources is based on a long-history of exploration, open-pit and underground mining. Numerous geological interpretations, pit fact maps and reports exist & almost all resources (except Eridanus) have been previously mined.	Rebecca is hosted by felsic gneissic rocks of granodiorite & diorite composition. Gold mineralisation occurs in broad lode/shear zones of disseminated to veinlet style pyrrhotite-dominant sulphides accompanied by increased shear fabrics and moderate silicification.	Hosted by the Edna May Gneiss, a metamorphosed granitoid with strike length of 1km, width of 140m and depth extent of 700m and bounded by a mafic-ultramafic stratigraphy. Mineralisation relates to widespread quartz veining, which occurs as thin sheeted foliation parallel or larger cross-cutting reef veins with a polymetallic sulphide assemblage. Mineralisation forms a broad low-grade stockwork throughout the gneiss. Greenfinch deposit very similar.	Tampia is hosted within Archaean mafic-felsic granulite facies units. Gold mineralisation is hosted within a mafic gneiss unit dominated by pyroxene-plagioclase - amphibole minerals. Late granitic sills intrude the mafic gneiss. Gold mineralisation occurs as shallow dipping (20°-30°), 2-20m thick lode zones sub-parallel to the granitic sills. Gold mineralisation of associated with disseminated pyrrhotite, arsenopyrite, chalcopyrite and rare pyrite.	Mineralisation is likely controlled by shear zones/fault zones passing through competent BIF rock units, hosted with mafic/ultramafic stratigraphy. Gold is associated with pyrite alteration in brecciated BIF, +/- quartz. Deep weathering has generated supergene enhancement of gold within the weathered zone.	Archean orogenic gold mineralisation near major faults. Gold at Bombora is associated with subsidiary faults of the Claypan Shear Zone and occurs preferentially in the Fe-rich part of a fractionated dolerite in an area of shallow (5m to 20m) transported cover. The dolerite is folded into a domal geometry between two major shear zones that converge and bend in the vicinity of the project. Mineralisation also occurs in other predominantly mafic rocks in the hanging wall at Bombora, and at the Crescent-Kopai and Claypan deposits. Mineralisation occurs as high-grade, stockwork, disseminated and	Penny is an orogenic structurally controlled Archaean gold lode system. Gold mineralisation occurs within narrow, steeply, east dipping, quartz-sulphide lodes. The quartz veins are variably massive, laminated or brecciated with a variable sulphide assemblage of pyrite, pyrrhotite, galena, chalcopyrite and sphalerite & frequent VG. High Ag grades (1:1 Au) are noted.	Shallow dipping gold lodes are hosted within mafic gneiss units, often occurring between intruding pegmatite sill units. Significant mineralisation occurs in shallow flat supergene or in surface laterites.

Project	Mt Magnet	Rebecca	Edna May	Tampia	Marda	Roe	Penny	Symes
						quartz vein hosted within the dolerite.		
Drill hole information	This report relates to resources and reserves based on existing drillhole datasets. No new exploration results are reported. All previous RMS significant new drilling results have been previously reported.							
Data aggregation methods	No exploration results are reported. Intercepts used in resource modelling are typically defined by cutoff and/or geological interpretation. Lower reporting cutoffs vary from 0.4 to 2 g/t based on deposit style and whether open pit or underground mining scenario. Topcuts not generally applied to drill intercept reporting.							
	Weighted averages are applied to determine the grade of the anomalous interval when irregular sample intervals have been used.							
	No metal equivalents, gold only							
Relationship between mineralisation widths and intercept lengths	This report relates to resources and reserves based on existing drillhole datasets. No new exploration results are reported. True width or relationship is generally reported where known.							
Diagrams	Appropriate plans and section are reported with previous separate RMS drilling result releases. Example resource/reserve pictures are presented above.							
Balanced reporting	This report relates to resources and reserves based on existing drillhole datasets. No new exploration results are reported. All previous RMS significant new drilling results have been previously reported. Generally all holes are reported.							
Other substantive exploration data	All deposits have had some degree of additional sampling or testwork in regard to geotechnical investigation, geochemical characterisation, metallurgical testwork and density measurement, usually on specific selected diamond core holes. Other exploration data is useful in understanding geology and mineralisation types but is generally not material to resource estimation.							
Further work	Further work will consist of ongoing infill or extensional drilling on material projects likely to convert to reserves and extend mine life.							
	Further work mainly comprises of further drilling programmes. No details or diagrams are attached for this announcement.							
<b>Section 3</b>	<b>Estimation and Reporting of Mineral Resources</b>							
Database integrity	Ramelius employs an SQL central database using Dashed information management software. User access to the database is regulated by specific user permissions. Only specific users can overwrite data. Data collection uses Field Marshall or Log Chief software with fixed templates and lookup tables for collecting field data electronically. A number of validation checks occur upon data upload to the main database. Recent data from Edna May (Evolution), Roe (Breaker), Tampia (Explaurum) & Penny (Spectrum) has employed similar measures. <i>Old:</i> The majority of data has been inherited as SQL or access databases and integrity measures is largely unknown. Numerous old resource reports list previous validation exercises, however new checks have not been systematically undertaken.							
	All drill data is checked visually as part of modelling process. Other validation checks include electronic checks for missing assays and geology intervals, overlapping intervals, duplicate assays, EOH depth, hole collar elevations and assay value detection limits, negative and zero values. Some historic data, has been checked against hardcopy logs.							
Site visits	The Competent Person is a full time employee of Ramelius Resources Ltd and has made site visits to all deposits, with the exception of Symes. Visits have confirmed understanding of deposits and datasets							
Geological interpretation	Confidence in the geological interpretation of the deposits is high. Most deposits have had a significant history of exploration and recent mining, with the exception of Rebecca and Roe. Geological interpretations have been formulated over many years and multiple drilling campaigns.							
	Data used includes drilling assays & logging from several generations of drilling. Numerous geological interpretations, pit or underground maps and reports exist and most resources have been previously mined to some degree. Drillhole geological logging and mapping data is the primary information used to interpret geological and fault wireframes.							
	No alternate interpretations have been considered necessary							
	Geology forms the base component of all interpretations. At Mt Magnet mineralisation is principally hosted within Banded Iron Formations (BIF) where gold is spatially associated with NE trending faults and associated with pyrrhotite and pyrite mineralisation. Additionally, gold is commonly found in late stage felsic intrusives which cross-cut stratigraphy in NE trend. For resource modelling the geology has generally been interpreted first followed by a separate interpretation of mineralisation envelopes. At Penny mineralisation is hosted by a steeply dipping quartz vein within a mafic to intermediate stratigraphy and strongly associated with sulphide mineralisation within the vein. Edna May is a large-scale vein stockwork within an altered metamorphosed granitoid, with a number of							

Project	Mt Magnet	Rebecca	Edna May	Tampia	Marda	Roe	Penny	Symes
	<p>higher grade quartz 'reefs'. Tampia mineralisation is hosted in a mafic gneiss and occurs in shallow dipping lode/shear zones sub-parallel to the banding and granitic sills. Rebecca mineralisation occurs as shear lodes hosted within a wide felsic gneissic unit. The lodes are defined by gold grade and generally have good correlation with logged sulphide content. Roe mineralisation occurs as high-grade, stockwork, disseminated and quartz vein hosted within dolerite which is cross-cut by barren lamprophyre dykes. Symes mineralisation is mostly supergene and laterite formed by deeply weathered north-south trending mafic amphibolites cut by east-west trending pegmatites and west-northwest trending mineralised shears.</p> <p>Continuity is affected by geological extents and mineralisation as currently defined by drilling. Cross-cutting relationships such as barren dykes and faults have been incorporated into the geology models and removed from the estimations where they are known to exist.</p>							
Dimensions	<p>Numerous variations. Examples: Saturn pit cutback 700m long, 350m wide &amp; 190m deep. Main Saturn BIF hosted ore zone strikes length of pit, is 5-30m wide, subvertical and currently drilled to 350m vertical depth. Higher grade zones typically occurring as vertical shoots in BIFs. Minimum width in resource interpretations generally 3-4m, example Golden Stream narrow sub-vertical BIF hosted resource over 270m strike length, drilled to 90m down-dip.</p>	<p>Rebecca consists of multiple stacked lodes which collectively strike for approximately 1.7km and up to 400m down dip. Individual lodes are 10-30m thick. Duchess is similar but smaller with 850m strike &amp; 5-30m wide. Duke strikes for 350m, is between 12m to 20m wide and 350m in depth.</p>	<p>Edna May gneiss unit is a lenticular body, typically 50-150m thick, 1000m long and defined down-dip to 700m. It strikes east-west and dips N at 50-60°. Internal high-grade quartz reefs occur and strike N-NE and dip 45-50 W. These are generally 100m in length and 2-4m wide.</p>	<p>The deposit has a strike of 1000m, down-dip width of around 400m and depth extent of around 150m. The mafic gneiss, granite sills and mineralised lodes have a shallow SE dipping, gently folded orientation forming a 'bowl' shaped geometry.</p>	<p>Lode and shear hosted styles. Strikes range from 140m (Dugite) to 450m (Golden Orb) and dip at 70-90°. Average lode width approximately 10m, mostly ranging between 2- 20m. Down-dip extents typically 50-75m.</p>	<p><b>Bombora:</b> Extends 4,525m along strike, has horizontal width up to 680m, and vertical extent of 722m. Mineralisation starts at 5m below surface to ~825m below surface. Width of mineralised zones ranges from 2 to 15m for steep lodes, up to ~150m for flat lodes, and 1 to 10m for west dipping lodes. <b>Claypan:</b> Extends ~700m along strike, has horizontal width up to ~600m, and vertical extent of 100m. Mineralisation starts at 20m below surface to ~120m below surface. Width of mineralisation from 2 to 15m. <b>Kopai-Crescent:</b> Extends 2,100m along strike, has horizontal width up to 1,400m, and vertical extent of 160m. Mineralisation starts at 10m below surface to 160m below surface. Width of mineralised zones from 15m to 155m (east-west direction).</p>	<p>Penny lodes are a narrow vein/lode style. Penny North strikes N and dips 55° to E. Average width around 2-3m, ranging from 1m to 6m. Strike and dip extent of 250m by 200m. Penny West is similar to Penny North in orientation and extent with an average width ranging from 1-2m.</p>	<p>The main shallow lode zone has a strike of 120m to NE and dips around 25° to the SE with a thickness of 4-12m. Flat lying supergene zones are around 20-40m wide and 40-100m long. Laterite ore is extensive i.e. 500m x up to 200m, except where previously mined.</p>
	3D mineralisation wireframes are	3D mineralisation wireframes	The Edna May Gneiss unit forms the	3D mineralisation wireframes	3D mineralisation wireframes	3D mineralisation wireframes	3D mineralisation wireframe	3D mineralisation wireframes interpreted

Project	Mt Magnet	Rebecca	Edna May	Tampia	Marda	Roe	Penny	Symes	
Estimation and modelling techniques	interpreted in Micromine. Often multiple domains were generated to reflect geological host, mineralisation style or local spatial trends and hard bound assay information at a nominal 0.2 - 0.5g/t (open-pit) cutoff. Estimation by anisotropic Ordinary Kriging or ID methods using 1m composited assay data in parent cells only. Eridanus uses a estimated grade indicator values (+/-0.25g/t) generate ore & waste domains. Topcuts applied by domain determined by review of population stats. All resources have previous versions to compare. Models were validated visually.	interpreted in Micromine. Sectional lode shapes interpreted based on 0.3-0.5g/t cutoff. Hard bounded grade estimation by Ordinary Krige method using 1m composited topcut assay data to parent cells only. Anisotropic search ellipse based on interpretation of continuity. Models were validated against assay data.	main mineralised domain and grades were generated within it using anisotropic Ordinary Kriging. Population statistics were reviewed and appropriate topcuts and parameters applied. Quartz reefs were constrained within interpreted lode shapes and estimated separately.	interpreted in Micromine. Lode domains interpreted based on 0.2-0.5g/t cutoff and or/+400ppm As. A minimum thickness of 2-3m is used. Two internal high-grade sub domains where interpreted to control zones of notably higher grade. Grade within each domain is estimated using Inverse Distance <sup>1</sup> . Ordinary Kriging grades were generated and compared.	interpreted in Micromine. Lode domains interpreted based on 0.6-0.8g/t cutoff. Hard bounded grade estimation by Inverse Distance method using 1m composited topcut assay data to parent cells only. Anisotropic search ellipse based on interpretation of continuity.	interpreted in Leapfrog. Lode domains interpreted based on a 0.1g/t Au cutoff above 100mRL and 0.3g/t Au cutoff below 100mRL. Grade estimation by Ordinary Kriging using 1m composited topcut assay data. Dynamic anisotropy applied to search neighbourhoods and three search passes controlled by variography were applied. >92% of blocks were estimated in the first three passes with the remaining blocks estimated in a fourth pass using Nearest Neighbour interpolation.	interpreted in Micromine and Leapfrog. Lode domains are interpreted based on quartz vein position, with minimum 2m downhole width. Grade estimation by Inverse Distance method using 1m composited topcut assay data to parent cells only. Anisotropic search ellipse interpreted plunge continuity to the south.	in Micromine. Ore domains interpreted based on a nominal 0.5g/t cutoff. Hard bounded grade estimation by Inverse Distance method using 1m composited topcut assay data to parent cells only. Anisotropic search ellipse interpreted continuity.	
	All deposits have previous resource estimates which have been used as checks against current estimates. Significant mining by RMS at Mt Magnet, Penny, Edna May, Tampia and Marda has also occurred and allows comparison of resource estimates to production. Multiple comparisons of Inverse Distance and Ordinary Kriging were used to validate each estimation.								
	No by-products								
	Generally no non-gold elements of significance. Low sulphur or sulphur directly related to ore grade material. Ag grades at Rebecca & Penny are notably higher (1:1 Au).								
	Eridanus block size 5m(X) x 5m(Y) x 5m(Z) with limited subcelling (50%). Parent cell estimation only. Other deposits similar sizes - frequently 5m(X) x 10m(Y) x 2.5m(Z). Anisotropic searches - maximum range 120m	Block size 5mE x 10mN x 5mRL with limited subcelling to 50%. Parent cell estimation only. Anisotropic search - maximum range 75m	Block size 10m(X) x 5m(Y) x 5m(Z) with limited subcells (quartz reefs). Parent cell estimation only. Anisotropic search - maximum range 100m	Block size 5mE x 10mN x 5mRL with sub-cells to minimum of 1mE x 2mN x 1mRL. Parent cell estimation only. Anisotropic search - maximum range 100m	Block size typically 10mE x 5mN x 5mRL with subcelling to minimum of 2mE x 1mN x 2.5mRL. Parent cell estimation only. Anisotropic search - maximum range 75m	Block size typically 10mE x 10mN x 5mRL with subcelling to minimum of 1mE x 1mN x 0.5mRL. Anisotropic search - maximum range 100m	Block size 5mE x 10mN x 5mRL with frequent subcelling to minimum of 1mE x 2mN x 1mRL. Parent cell estimation only. Anisotropic search - maximum range 75m	Block size 5m(X) x 5m(Y) x 5m(Z) with subcells. Parent cell estimation only. Anisotropic search - maximum range 60m	
	Parent block size is generally assumed to match SMU size.								
	Grades assumed to correlate along mineralised trends/wireframes and/or estimated using anisotropic searches matching correlation directions								
	Mineralisation wireframes are constructed with reference to geological/mineralisation interpretations								
	All gold deposits with lognormal grade distributions. Top cutting used in all estimates as per normal industry practice, generally in 97.5 to 99.5 percentile range.								
	Validation has generally included visual comparison against drillhole grades, volume comparisons, global grade statistic comparison and swath grade plots								
Moisture	All tonnages are estimated on a dry basis								

Project	Mt Magnet	Rebecca	Edna May	Tampia	Marda	Roe	Penny	Symes
Cut-off parameters	Reporting cut-off grades are adopted to be around operating ore cutoff grades, typically 0.5 - 1.0 g/t, with variances for deposit mineralisation tenor, location and mining method. For most deposits interpretation cutoff is typically in the 0.3 to 0.7g/t range. These cutoffs encapsulate the mineralisation effectively and typically discriminate economic material from waste. Considerations of geology, nugget effect, width and shape continuity mean significant sub-grade material is often incorporated to create realistically mineable resources.							
Mining factors	Eridanus, Morning Star and most Mt Magnet deposits, Rebecca, Roe, Tampia, Symes & Marda are modelled as open pit deposits. Factors include potential pit depths, minimum mineralisation widths and economic cutoffs based on current contract mining equipment and milling facilities. UG deposits, including Galaxy, Water Tank Hill, St George, Edna May, Roe lodes below 100mRL, and Penny are modelled with consideration of extraction by conventional sub-level open stoping methods. Edna May, Galaxy and Eridanus models are generated as bulked low-grade models for open pit evaluation and bulked underground mining scenarios.							
Metallurgical factors	Metallurgical treatment is based on current ore production or metallurgical testwork. Milling is occurring at Ramelius' Checker mill (Mt Magnet), a 2.0 Mtpa CIL gold plant and the Edna May mill (Westonia), a 2.8Mtpa CIL gold plant. Mt Magnet deposits are currently or have recently been processed with recoveries around 91-94%. Edna May has significant gravity recoveries (≈50%) and high total recoveries (≈94%). Penny is processed at Mt Magnet with recoveries of around 97%. Rebecca and Roe testwork shows good recoveries are achievable at around 97% and 96% respectively.							
Environmental factors	All sites are now operating or recently operating mine sites, with the exception of Roe and Rebecca, and compliant with all legal and regulatory requirements. No significant environmental issues are envisaged. Approvals processes are underway for a number of projects. Rebecca and Roe are at early stage and various approvals are required.							
Bulk density	All deposits have a number of density measurements based on core samples using water immersion method. Calculated density is dry. The number of measurements is variable but there are enough to give representative average density values to use in ore and waste tonnage calculations. At Tampia a gamma density probe was used for much of the resource drilling a provides an extra density measurement, however these values are not directly used in modelling.							
	Density measurements are available for fresh core, but limited measurements exist for oxidised or transitional materials. Oxidised densities used often include assumed values based on previous mining data and the Competent Person's experience.							
	All resources have dry densities assigned by geologically interpreted weathering horizon, plus rocktype where appropriate. Downhole geophysical studies were applied to oxides and transported cover where measurements were available. It is assumed the deposit densities can be represented by the average values determined or estimated by rocktype and oxidation type.							
Classification	Mineral Resources have been classified into Measured, Indicated and Inferred categories based on drillhole spacing, geological confidence, information quality and grade continuity. Only a small proportion of resources have been classed as Measured and generally occur in areas of high drilling density where grade control data is available or underground development has been completed.							
	Appropriate account has been taken of all factors							
	The classification reflects the Competent Person's view							
Audits or reviews	The Edna May and Rebecca mineral resource estimates have been reviewed by an external geological consultant. While a number of minor changes and enhancements were recommended, no significant flaws to the resource models were found. Historic drilling data information quality was not reviewed. Other Mt Magnet resources have not been externally reviewed. For Tampia a resource geological consultant was used to generate alternative slightly earlier versions of the resource and several methodologies were adopted from this work. This also gave a model for comparison.							
Discussion of relative accuracy /confidence	All deposits have a number of previous resource estimates for comparison. Much of the drilling data used however is historic (exceptions Eridanus, Penny, Tampia & Rebecca) and methodology detail and quality assurance information is not always complete or is in hardcopy records which have not been systematically investigated. Hence the bulk of resources have been assigned an Indicated or Inferred status. At the Mt Magnet deposits: Galaxy, Morning Star, and Hill 50, historic underground mining voids exist and proximal remnant resources are unclassified or classed as Inferred. Confidence levels are reflected by the classifications applied and reported.							
	The estimates are global estimates, expected to be reasonable for mine planning and reserve generation.							
	Many of the resources have current production data to compare, including, Eridanus, St George, Galaxy, Penny, Marda and Edna May and reconcile within -15% to +20% of estimates.							

Section 4 Estimation and Reporting of Ore Reserves								
Mineral Resource estimate for conversion to Ore Reserves	Mt Magnet ore reserves are based on resource estimates generated by Ramelius.	No ore reserve yet at Rebecca.	Edna May ore reserves are based on current Ramelius resource models.	Tampia ore reserves are based on estimate of ore stockpiled from mining by Ramelius.	Marda ore reserves are based on current Ramelius resource models.	No ore reserve yet at Roe.	Penny ore reserve based on recent resource model.	Symes ore reserve based on recent resource model.
Site visits	Mineral Resources are reported inclusive of Ore Reserves							
Study status	The Competent Person is a full time employee of Ramelius Resources Ltd and has visited each site during the last year. Visits have confirmed understanding of reserve work.							
	All Reserves were verified by inclusion in recent budgets mine plans.							
	Ore Reserves have been generated after studies appropriate to the deposit type, mining method and scale and are considered to be at least Pre-Feasibility level. Mining studies have been carried out both internally and using external consultants with appropriate geotechnical, hydrological, equipment, metallurgical and mining method information. Environmental, social and other factors have been considered internally.							



Project	Mt Magnet	Rebecca	Edna May	Tampia	Marda	Roe	Penny	Symes
Cut-off Parameters	Cut Off grades applied vary between 0.4g/t and 0.6g/t at Mt Magnet to 0.9g/t and 1.2g/t for Die Hardy and Symes respectively.							
Mining factors or assumptions	Models have been created with a parent block size to reflect likely SMU block size and mining resolution prior to optimisation and design work to generate ore reserves.							
	Open pit mining methods for open pit resources use 90t rigid dump trucks and excavators of 120 to 200t operating weight.							
	Edna May Underground mine mining method involves uphole open stoping without fill.							
	Galaxy Underground uses bulk mining methods.							
	The Penny underground uses a conventional, narrow, top-down, long hole stoping method, with partial backfilling.							
	Geotechnical parameters are derived from current mining practises and regular inspection & reporting by geotechnical consultants for all operating mines. All new projects have a number of geotechnical drillholes and assessments generated. Grade control processes are well established and generally consist of RC drilling within pits or face sample grade control and drilling in undergrounds.							
Metallurgical factors or assumptions	Dilution factors are used for all pits and range based on deposit style, orientation and mining method.							
	Open pits mining recoveries 95%.							
	Generally a minimum width of around 3m is assumed for open pit and 1.5 - 2m for underground with increased applied unplanned dilution assumptions for narrower widths.							
	Inferred mineral resources for pits have been tested in optimisations but are not included in Ore Reserves or final pit economic evaluations. The project viability is not dependent on the inferred resource.							
	Milling will use Checkers mill at Mt Magnet and Edna May mill, conventional gravity recovery and CIL processing circuits. Significant milling information historical and/or current testwork is available for all deposits.							
	Process is proven technology.							
Environmental	Metallurgical recoveries are based on operating experience or testwork.							
	No deleterious elements present							
	No bulk samples or bulk sample requirement							
	No specifications, gold							
Infrastructure	Environmental studies including waste rock characterisation studies from drill samples, flora and fauna and hydrological surveys have been carried out for all projects. Mining Approvals are currently granted for all reserve projects.							
Costs	Site infrastructure is in place for current mining and milling operations. At Mt Magnet it includes accommodation camp, Checkers mill and tailings dams, offices, magazines, roads and gas power station. At Edna May it includes mill, tailings dams, offices, magazines, roads. Power is on state grid. At Marda offices, workshops and bores are established. Accommodation will utilise existing camps at Mt Magnet, Westonia, Naremben, and Penny. Marda accommodation is provided at the Windarling camp (MRL).							
	Capital costs based on current costs and budget model or recent Feasibility studies.							
	Operating costs based on current costs and budget models. Additional costs i.e., void backfilling added where required							
	No deleterious elements present							
	Using recent average gold price							
	Cost models use Australian dollar							
	Transport cost based on contracted or quoted rates							
Revenue factors	Treatment costs based on known current milling costs. No penalties or specifications							
	Royalty costs are included in budget models, financial evaluations and feasibility models							
Market assessment	All reserves are generated at A\$2700/oz or less.							
Economic	Doré is sold direct to the Perth Mint at spot price or used to fill hedging obligations							
	Not industrial mineral							
Social	Discounted cash flows were carried out to determine relative NPV's, using a 5% annual discount rate.							
Other	Sensitivity to gold price, grade and costs was also evaluated.							
	Agreements are in place with stakeholders including traditional landowner claimants, pastoralists and the local Shires for current operations to support reserve projects.							
	No material risks or impacts are identified.							

Project	Mt Magnet	Rebecca	Edna May	Tampia	Marda	Roe	Penny	Symes
Classification	Reserves have been classified according to Resource classification. The majority are Probable with a limited amount of Proven							
	They reflect the Competent Person's view							
	No probable reserves are derived from measured resources.							
Audits or reviews	No recent external reviews							
Discussion of relative accuracy /confidence	Confidence is in line with gold industry standards and the companies aim to provide effective prediction for current and future mining operations. No statistical quantification of confidence limits has been generated. Estimates are global by deposit. The Ore Reserve is most sensitive to a) resource grade prediction, and b) gold price.							