RAMELIUS RESOURCES

ASX RELEASE

ACN 001 717 540
ASX code: RMS

**24 July 2019**

# Exploration Update

## HIGHLIGHTS

- Excellent high grade Vivien mine extension diamond drilling results including:
  - **4m at 33.2 g/t Au** from 56m in VVDD1088
  - **2.7m at 22.4 g/t** Au from 64.6m in VVDD1094
  - **6.8m at 17.1 g/t Au** from 213.7m in VVDD1105
  - **4.1m at 8.68 g/t Au** from 254.2m in VVDD1108
- Significant high grade Edna May Deeps diamond drilling results including:
  - **7m at 4.93 g/t Au** from 521m in EMRCD022 within a broader EMG* intersect:
  - **183.8m at 1.52 g/t Au** from 386.2m in EMRCD022
  - **7m at 8.95 g/t Au** from 508m in EMRCD025 within a broader EMG* intersect:
  - **169m at 1.36 g/t Au** from 433m in EMRCD025
  - **5.4m at 5.67 g/t Au** from 480m in EMRCD027 within a broader EMG* intersect:
  - **188m at 2.09 g/t Au** from 394m in EMRCD027
- Exceptional RC drill results returned below the Eridanus pit (Mt Magnet) including:
  - **12m at 6.90 g/t Au** from 211m in GXRC2027
  - **12m at 4.14 g/t Au** from 248m in GXRC2028
  - **7m at 13.70 g/t Au** from 264m in GXRC2028
  - **8m at 7.66 g/t Au** from 218m in GXRC2030

Ramelius Resources Limited (**ASX:RMS**) (**"Ramelius", "the Company"**) is pleased to announce highly encouraging deeper exploration results as it continues its expanded drilling campaign focussing on resource and reserve extensions at the Underground Vivien and Edna May mines and the newly commissioned Eridanus open pit at Mount Magnet in Western Australia.

Mineral Resource and Ore Reserve estimation updates will commence once all available drilling data has been collated.

Ramelius Managing Director, Mark Zeptner today said:

"*It is pleasing to note our aggressive program of exploration drilling below our cornerstone underground mining operations is continuing to deliver significant intersections that give us a great deal of confidence in our ability to continue to increase our Mineral Resources and Ore Reserves. This success, which is a credit to our mine-site geologists and regional exploration teams, has huge potential to extend our mine life at Mount Magnet and Edna May beyond our current base case one-million-ounce mine plan announced in June.*"

*"We are also buoyed by the thickness and grade of the intercepts below our new Eridanus pit. We carry real expectations that this will be a cornerstone project at Mount Magnet ensuring it continues to be a key production centre well into the future""*

** Denotes Edna May Gneiss*

**24 July 2019**

**ISSUED CAPITAL**
Ordinary Shares: 658M

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**Vivien Mine Extension Diamond Drilling**

Significant high grade gold mineralisation has been returned from deeper exploratory underground diamond drilling below the current mine plan at Vivien (Vivien Deeps). To date an aggregate 5,220.5m has been drilled from 33 holes. The drilling has successfully delineated a significant high grade shoot straddling either side of the barren healed quartz breccia vein which has been mapped as a marker horizon throughout the decline as the mine has deepened. Better down hole and true width (bracketed) drill intersections include:

- **4.00m (2.50m) at 33.2 g/t Au** from 56.00m in VVDD1088
- **2.70m (1.30m) at 22.4 g/t Au** from 64.60m in VVDD1094
- **2.70m (1.90m) at 9.63 g/t Au** from 200.90m in VVDD1103
- **6.80m (4.50m) at 17.1 g/t Au** from 213.70m in VVDD1105
- **4.10m (2.90m) at 8.68 g/t Au** from 254.20m in VVDD1108

These results are considered very significant as they now extend the known mineralisation a further 200m below the current mine plan, deepening the known mineralisation to 600m below surface. These intersections support previously reported intersections up to 5.6 m (true width) at 8.00 g/t Au (VVDD1067). Strike extent of the higher grade lode zone is less than previously mined levels and is being delineated with additional drilling. Resource and reserve modelling will commence once all drill intersections are received.

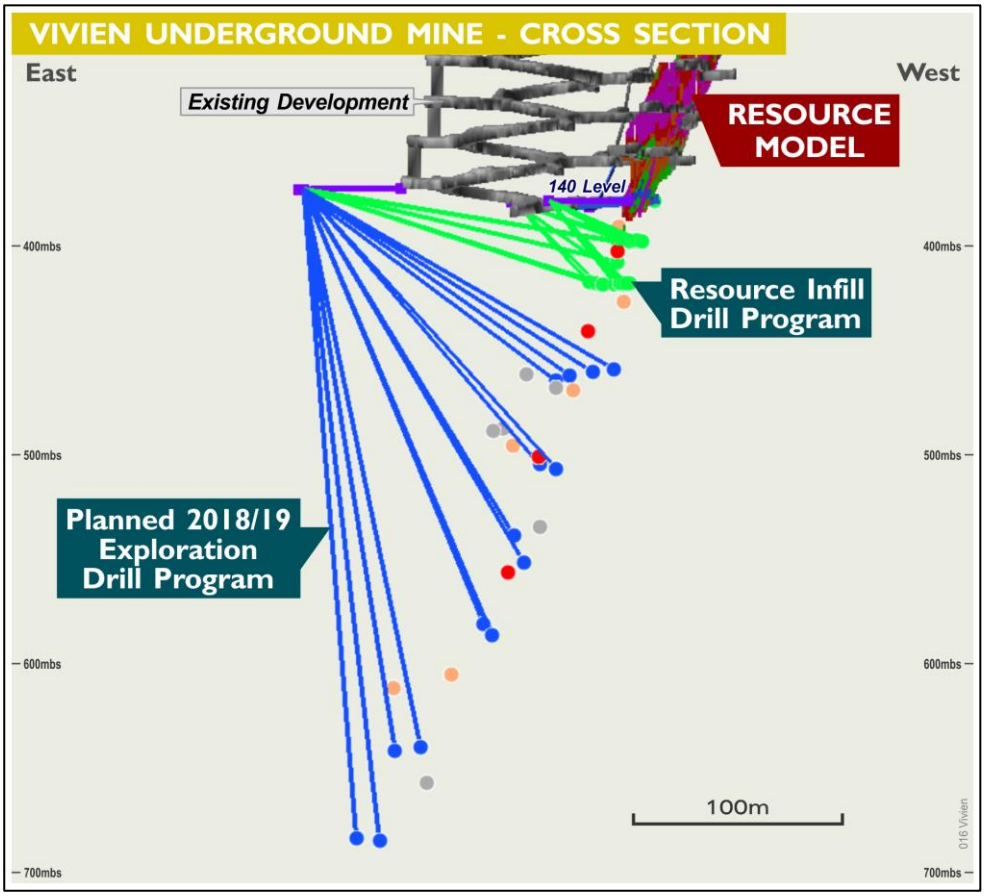


**Figure 1:** Vivien Deeps planned diamond drilling programme below the current mine plan

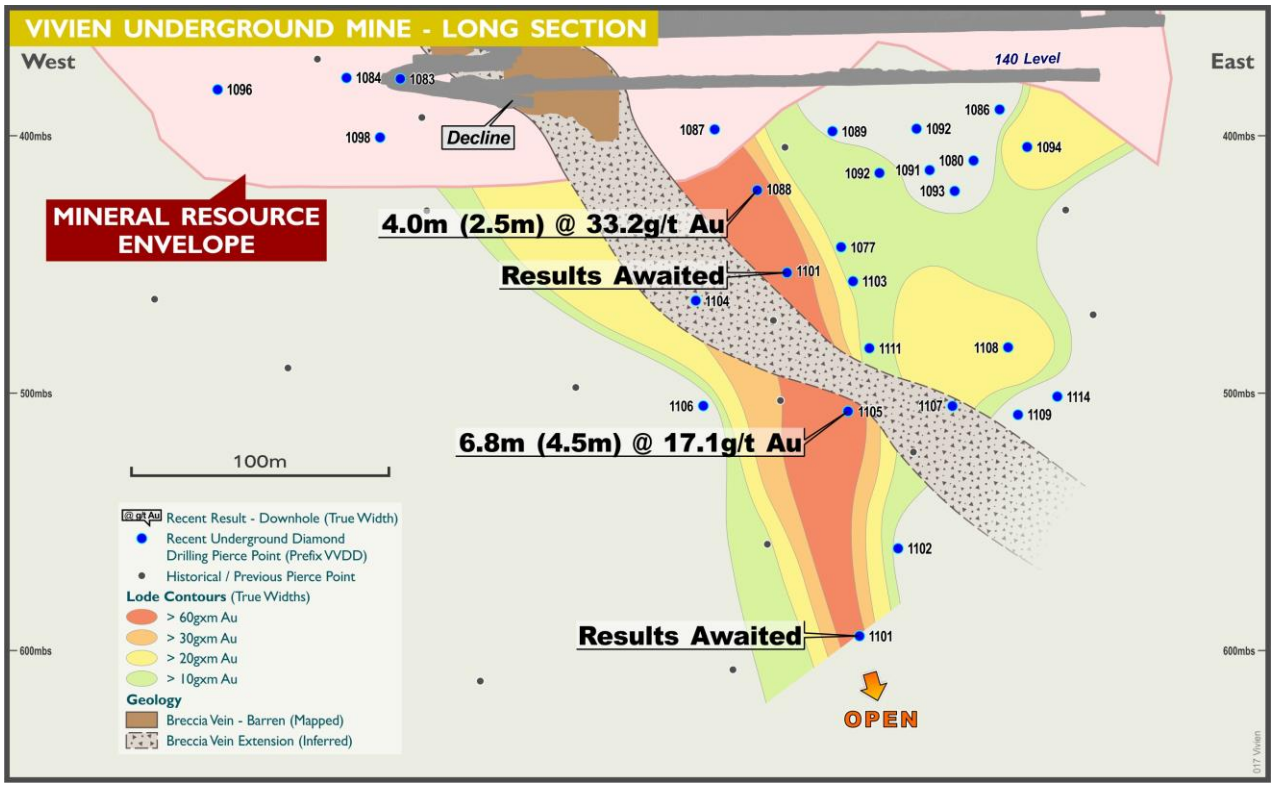


**Figure 2:** Vivien Deeps long section, from 400mbs highlighting good depth continuity over 200 vertical metres

**Edna May Deeps Diamond Drilling**

At Edna May, the high grade Jonathan and Fuji Lodes are currently being diamond drill tested below the existing 61,000oz underground Ore Reserve. Underground ore development is currently in progress on these lodes within the upper levels of the mine design and is looking very encouraging.

The aim of the drilling is to improve the drill density to allow for resource and reserve estimations down to 600m below surface. The first holes have targeted below the current limit of the reserve (at 400mbs) down to 500mbs to give more confidence on lode geometry and continuity around previously reported high grade intersections up to 8m at 20.2 g/t Au (see Figure 3).

To date an aggregate of 5,420.5m has been drilled from 11 holes (EMRCD018 – 027 + 20W1). Significant high grade drill intersections returned to date include:

- **7.0m at 4.93 g/t Au** from 521m in EMRCD022 (Jonathan Lode)
- **7.0m at 8.95 g/t Au** from 508m in EMRCD025 (Jonathan Lode) and
- **5.4m at 5.67 g/t Au** from 480m in EMRCD027 (Jonathan Lode) plus
- **4.0m at 3.99 g/t Au** from 526m in EMRCD027 (Fuji Lode)

Both lodes are showing continuity at depth, with good grades returned from the Jonathan and slightly lower grade results from the Fuji Lode. A number of hole results are pending and diamond drilling is continuing.

Selected surface RC drilling (completed in conjunction with the deeper diamond drilling precollars) targeted a number of litho-structural targets within the footwall of the Edna May deposit. Best result was **5m at 5.02 g/t Au** (EMRC015) within the Edna May Gneiss drilled off the switch-back on the western wall of the Edna May pit. Limited follow-up surface drilling will be planned once suitable access can be established.

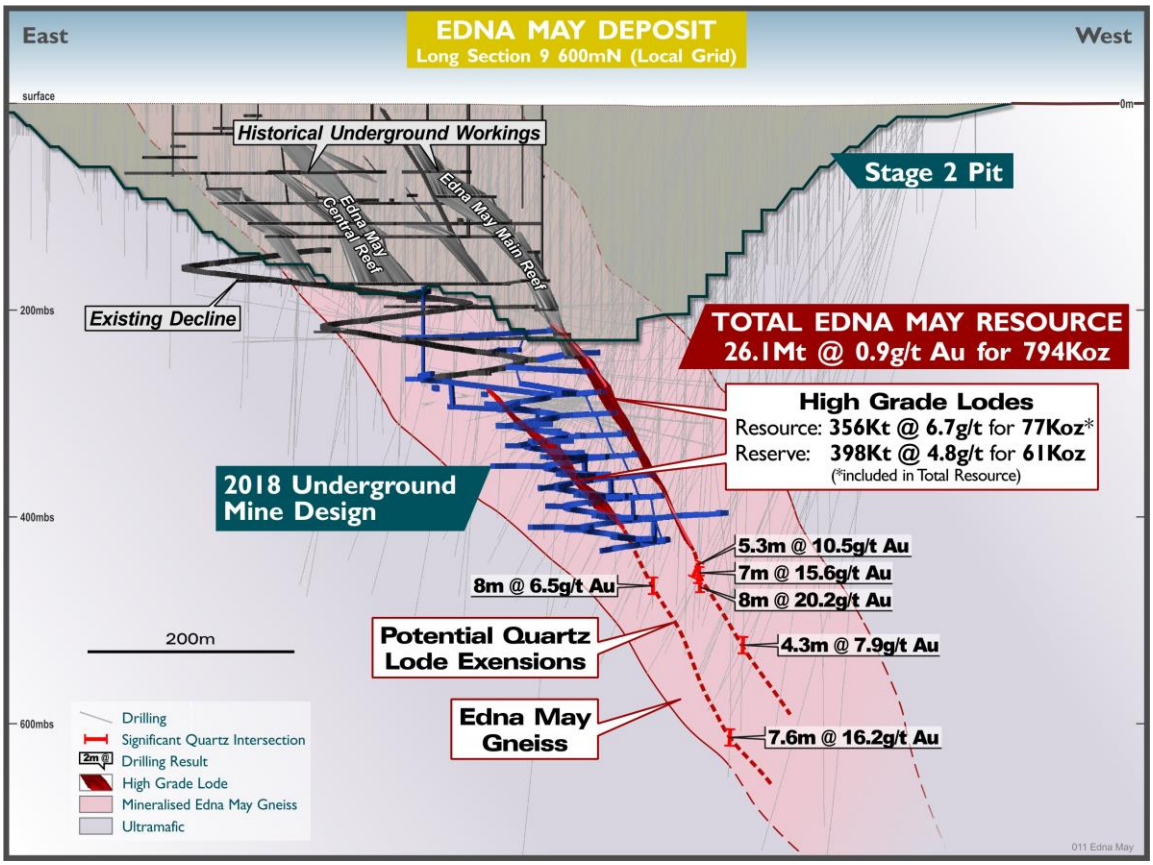


**Figure 3:** Edna May underground Mineral Resource and Ore Reserve summary, looking south, showing historical high grade intersections below the modelled High Grade Lodes, that are now subject to the infill surface drilling

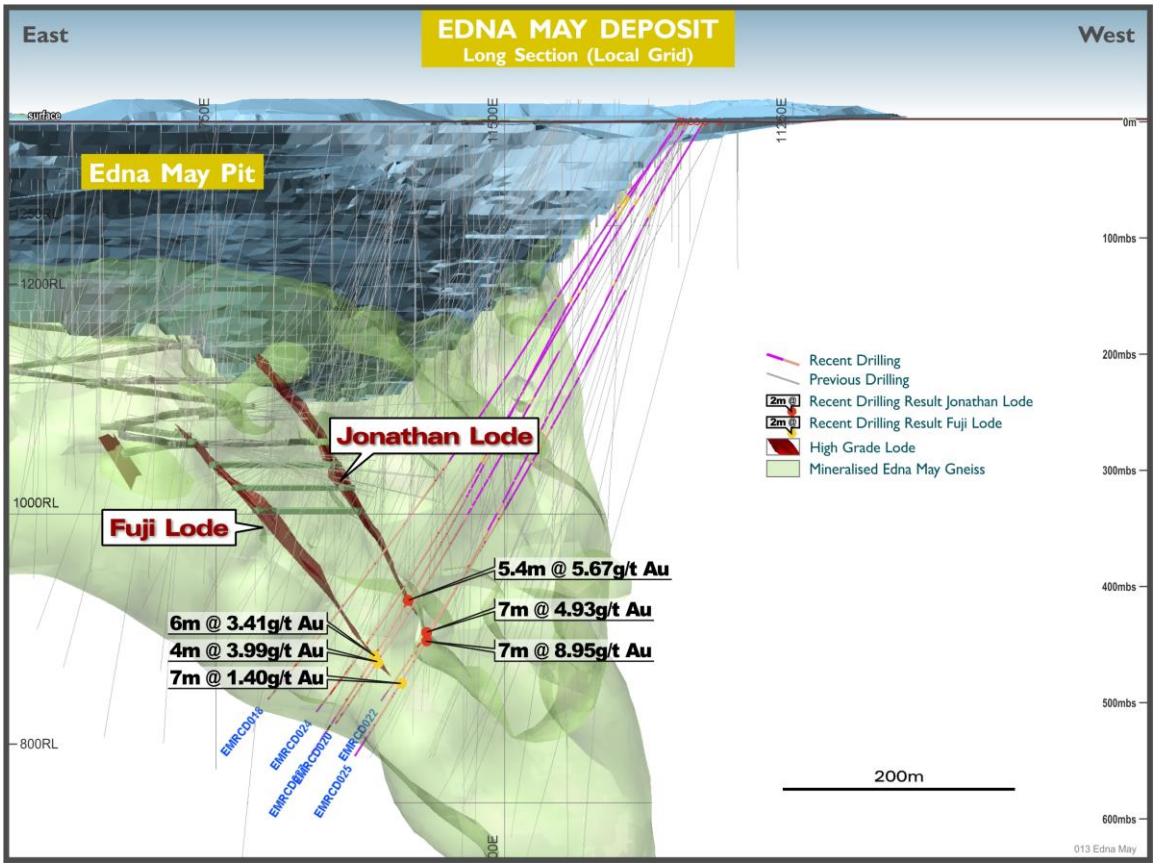


**Figure 4:** Recent drill intersections within the Jonathan (upper) & Fuji (lower) lodes within the EMG (green), looking south

**Eridanus Drilling**

Deeper exploration RC drilling below the new Eridanus open pit at Mount Magnet continues to define moderate to high grade sub-horizontal to shallow south dipping stacked lodes of gold mineralisation. Drill testing has now been partially completed to 400m below surface with an advance of 2,143m from 10 holes. The gold mineralisation is best developed within the competent east-west trending Eridanus Granodiorite but numerous lodes are seen to extend well beyond the granodiorite and are hosted by the surrounding Boogardie Basin felsic porphyry rocks. Better intersections not previously reported include:

- **12m at 6.90 g/t Au** from 211m in GXRC2027
- **30m at 1.85 g/t Au** from 206m in GXRC2028
- **12m at 4.14 g/t Au** from 248m in GXRC2028
- **7m at 13.7 g/t Au** from 264m in GXRC2028
- **37m at 2.60 g/t Au** from 30m in GXRC2029
- **17m at 2.17 g/t Au** from 90m in GXRC2029
- **16m at 2.66 g/t Au** from 84m in GXRC2030
- **8m at 7.66 g/t Au** from 218m in GXRC2030

True widths are interpreted to be around 80% of the reported downhole intersections for the shallow plunging mineralisation.

Broader zones of gold mineralisation are also defined where they are constrained by the geological contacts of the Eridanus Granodiorite, including:

- **49m at 3.43 g/t Au** from 174m in GXRC2027
- **37m at 2.51 g/t Au** from 226m in GXRC2027
- **65m at 3.52 g/t Au** from 206m in GXRC2028

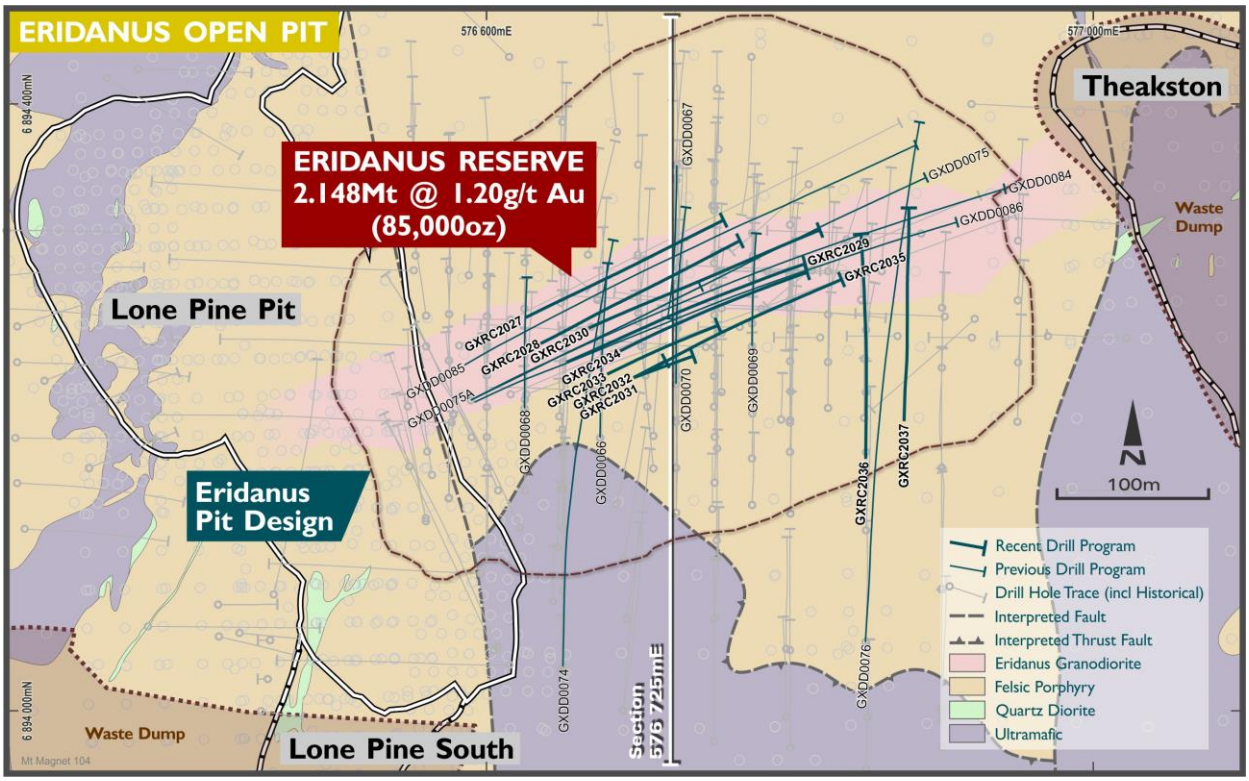


**Figure 5:** Eridanus highlighted recent RC drilling in plan view

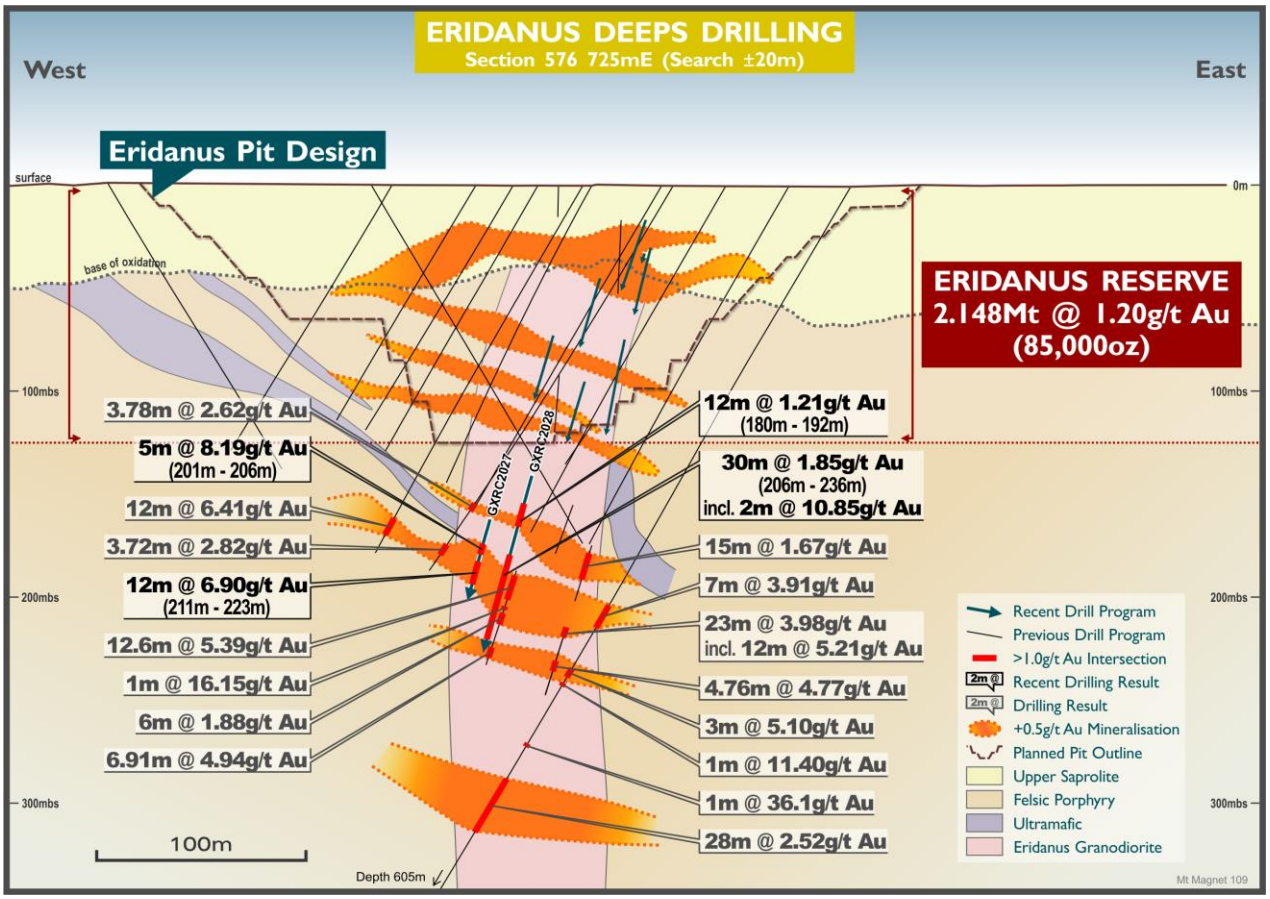


**Figure 6:** Eridanus exploration drilling cross section (north-south) below the current pit design

**Tampia Hill (Anomaly 8) Aircore Drilling**

Regional reconnaissance (800m to 200m x 40m spaced holes) Aircore drilling commenced over the western half of Anomaly 8 at Tampia Hill, as part of the Company's push to drill test the north-northeast trending Tampia Shear.

A five metre thick veneer of transported clays sits over a sequence of felsic, mafic and ultramafic gneissic rocks where drilled to date. The transported overburden can be mapped by surficial radiometric (Potassium) data and aligns to an inverted palaeodrainage feature draining northwards that may give rise to additional Mace type discoveries. Best result returned to date is **4m at 0.92 g/t Au** from 24m, associated with a weak north-south trending linear, as identified in previous drilling. Significant assay results will be reported as they become available.

**Symes' Find Resource Step-out RC Drilling**

Step out RC drilling, targeting the southern strike and plunge projection of the higher grade shoots at Symes' Find has commenced within the surrounding Exploration Licence (EL) 77/2474 (where drilling access can be achieved while paddocks are in fallow). Reconnaissance Aircore drilling will also scope the regional structural corridor as/when access is permitted around winter cropping.

This drilling follows the successful delineation of a maiden Indicated and Inferred Mineral Resource of 540,000 tonnes at 1.90 g/t Au for 34,000 ounces (see ASX Release, 'Life of Mine and Tampia Update', 17/06/2019). The defined resource is currently constrained by the granted Mining Lease (ML) 77/1111.

Drill results will be reported once they become available.

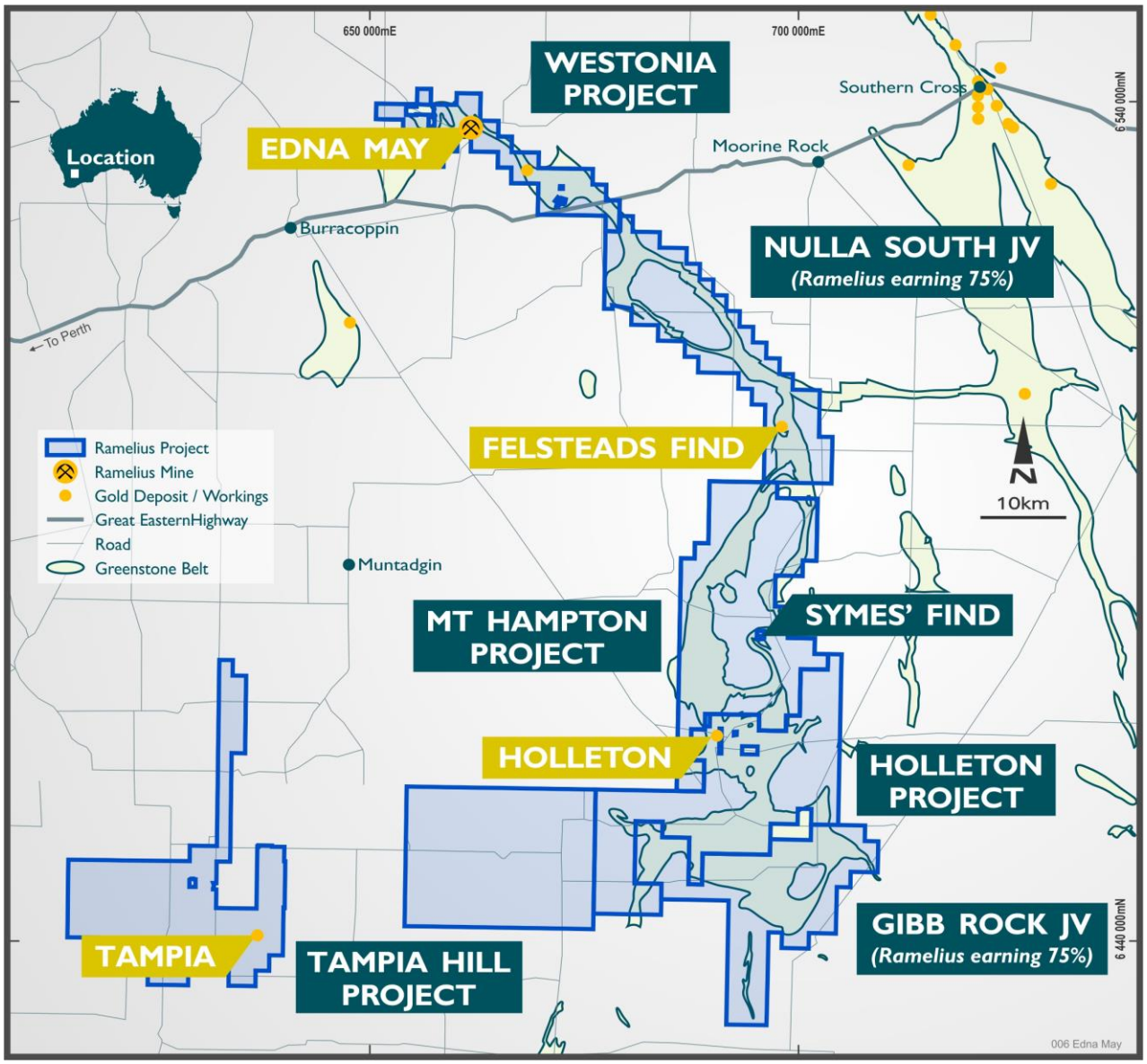


**Figure 7:** Location of Symes' Find relative to the Edna May gold mine, the Tampia deposit & other regional exploration properties

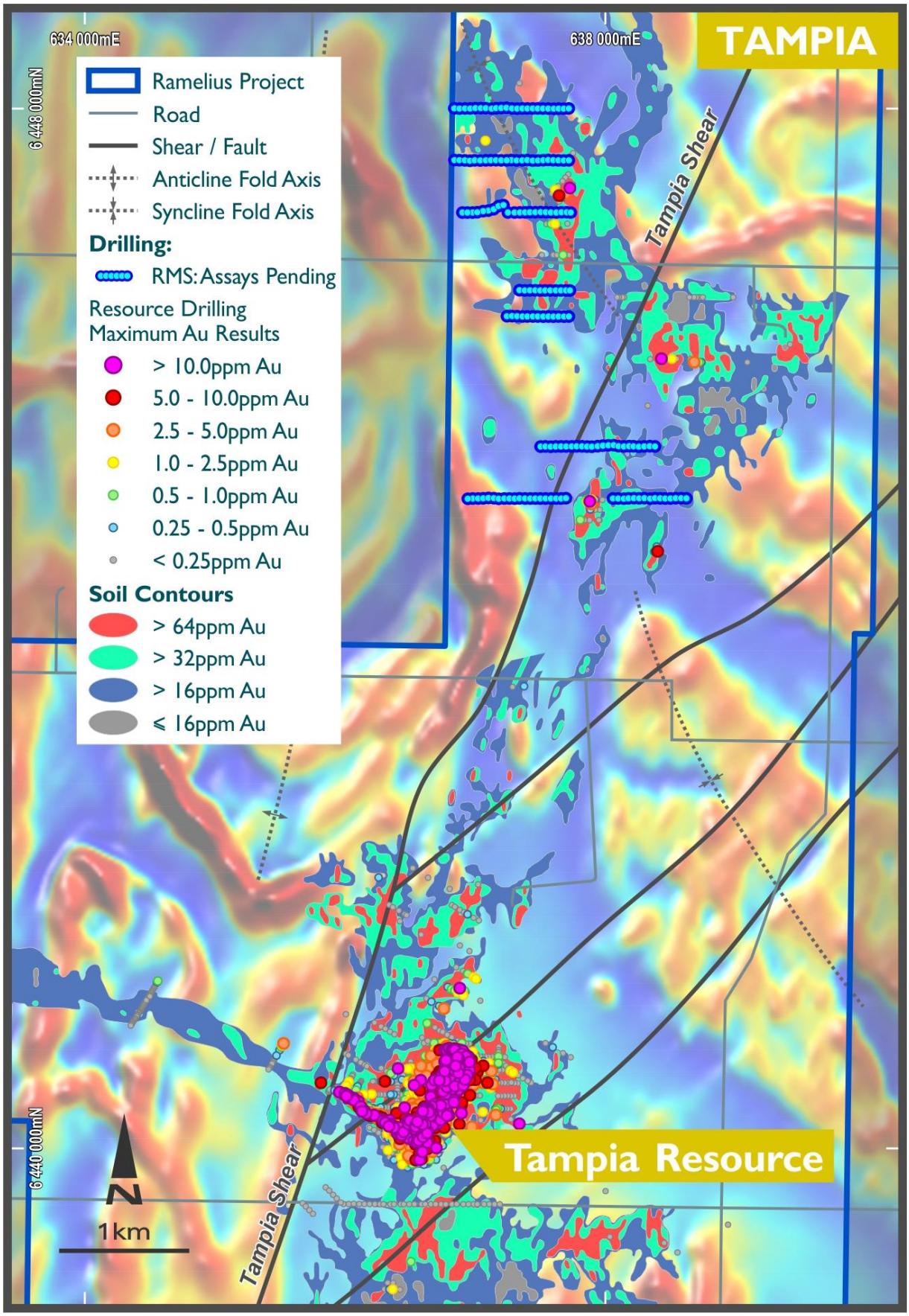


**Figure 8:** Historical and current drilling plus soil geochemistry along the Tampia Shear, draped over an aeromagnetic image

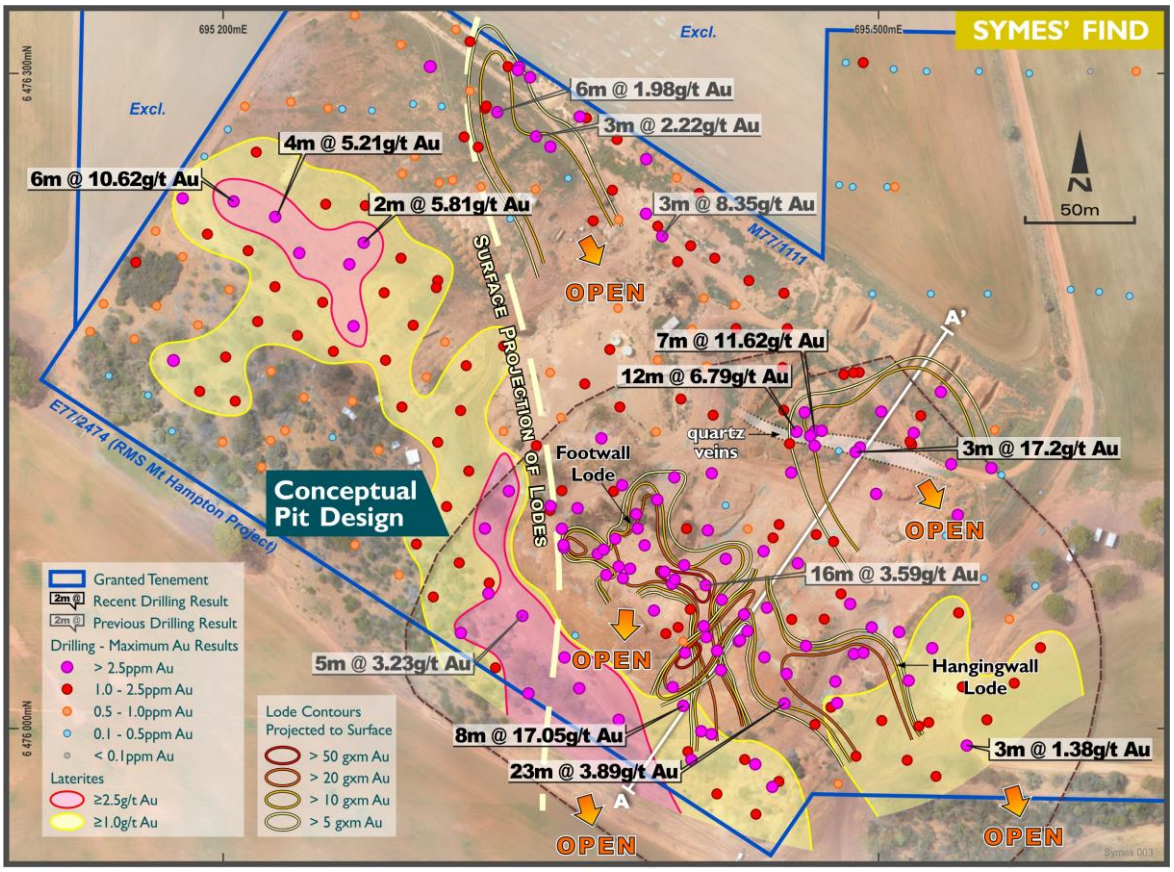


**Figure 9:** Drill hole location plan over Symes' Find

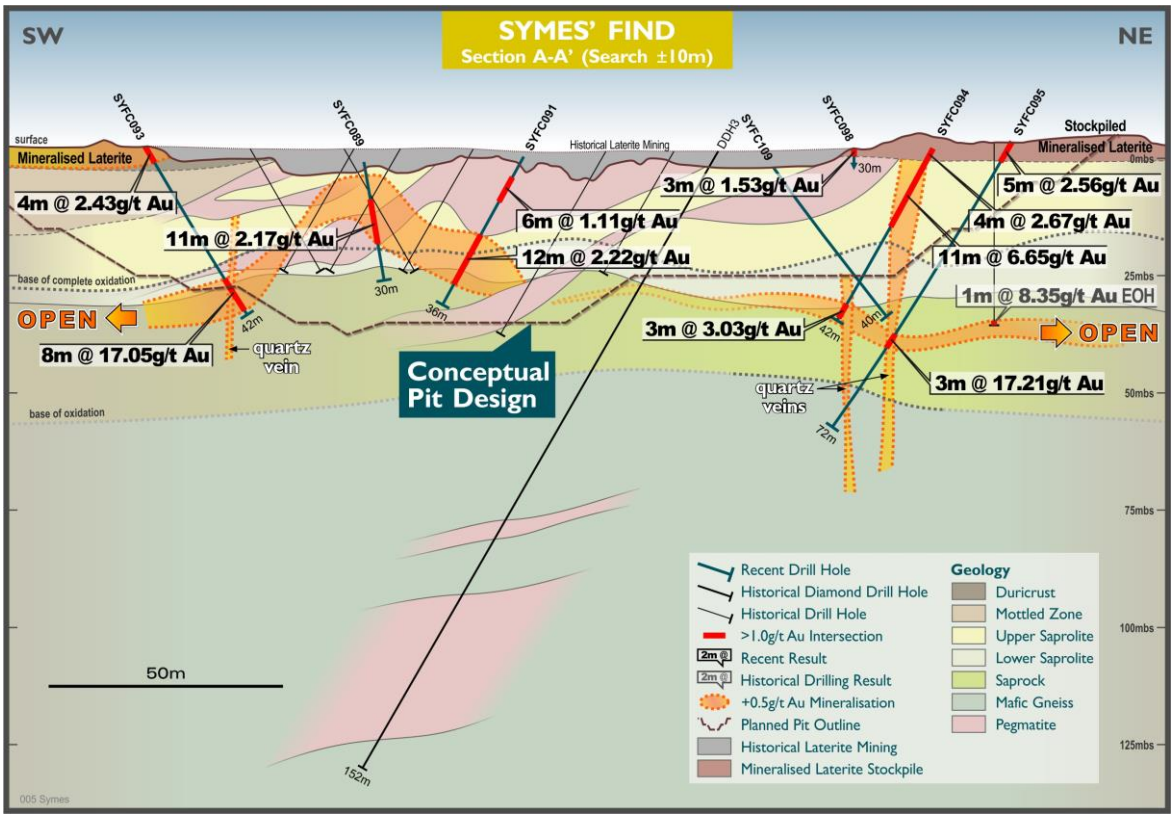


**Figure 10:** RC drilling cross section through Symes' Find. Previous explorers targeted vertical dip extensions (eg: deep diamond hole) rather than shallow plunging shoots, projecting out of the page on this section. Drilling is deliberately parallel to strike to maximise the potential for intersecting high grade shoots as well as the east-west striking subvertical quartz veins.

## ABOUT RAMELIUS


**Figure 11:** Ramelius' Operations & Development Project Locations

Ramelius owns and operates the Mt Magnet, Edna May and Vivien gold mines, all of which are located in Western Australia (refer Figure 11). Ore from the high-grade Vivien underground mine, located near Leinster, is hauled to the Mt Magnet processing plant where it is blended with ore from both underground and open pit sources at Mt Magnet.

The Edna May operation is currently feeding the adjacent processing plant with ore from surface stockpiles and the newly commenced Edna May underground, whilst the Greenfinch open pit awaits final approvals. The Marda Gold Project ore will be hauled to the Edna May processing plant whilst the strategic option of hauling ore from Tampia Hill to Edna May has been selected and further detailed assessment is underway.

## 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 PERSON

The information in this report that relates to Exploration Results is based on information compiled by Kevin Seymour whom is a Competent Person and Member of The Australasian Institute of Mining and Metallurgy. Kevin Seymour is a full-time employee of the Company. Kevin Seymour has 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 consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

**Attachment 1:** Res-Definition Diamond Drilling Vivien, WA

| Hole Id | Easting | Northing | Az/Dip | RL | F/Depth (m) | From (m) | To (m) | Interval (m) | g/t Au |
|---|---|---|---|---|---|---|---|---|---|
| VVDD1086 | 261135 | 6903356 | 005/-60 | 141 | 45.4 | 11.6 | 13.8 | 2.2 | 1.74 |
| VVDD1087 | 261132 | 6903292 | 263/-19 | 142 | 81.3 | 57.2 | 59.9 | 2.7 | 0.52 |
| VVDD1088 | 261132 | 6903291 | 271/-47 | 141 | 66.2 | **56.0** | **60.0** | **4** | **33.2** |
| VVDD1089 | 261131 | 6903295 | 314/-36 | 141 | 47.6 | | | | NSR |
| VVDD1090 | 261138 | 6903307 | 352/-32 | 141 | 48.2 | | | | NSR |
| VVDD1091 | 261138 | 6903307 | 006/-51 | 141 | 93.4 | 43.7 | 45.4 | 1.7 | 1.01 |
| VVDD1092 | 261138 | 6903306 | 325/-63 | 142 | 66 | **38.6** | **41.6** | **3** | **5.74** |
| VVDD1093 | 261139 | 6903307 | 028/-53 | 141 | 111.3 | 50.9 | 55.4 | 4.5 | 0.66 |
| VVDD1094 | 261140 | 6903307 | 031/-23 | 141 | 123.2 | **64.6** | **67.3** | **2.7** | **22.4** |
| VVDD1099 | 261180 | 6903123 | 038/-69 | 146 | 462.2 | | | | NSR |
| VVDD1101 | 261183 | 6903122 | 020/-54 | 146 | 305.8 | | | Assays | Awaited |
| VVDD1102 | 261182 | 6903123 | 017/-45 | 146 | 285 | | | | NSR |
| VVDD1103 | 261182 | 6903123 | 009/-24 | 147 | 231 | 200.9 | 203.6 | 2.7 | 9.63 |
| VVDD1104 | 261180 | 6903123 | 353/-31 | 147 | 230.8 | | | | NSR |
| VVDD1105 | 261182 | 6903123 | 013/-36 | 147 | 245.8 | **213.7** | **220.5** | **6.8** | **17.1** |
| VVDD1106 | 261180 | 6903123 | 358/-45 | 147 | 210 | 185.2 | 189.0 | 3.8 | 2.12 |
| VVDD1107 | 261182 | 6903122 | 019/-33 | 147 | 284.9 | 243.3 | 246.2 | 2.9 | 1.53 |
| VVDD1108 | 261182 | 6903122 | 020/-25 | 147 | 288.1 | **254.2** | **258.3** | **4.1** | **8.68** |
| VVDD1109 | 261183 | 6903122 | 023/-30 | 147 | 312.1 | 263.5 | 267.2 | 3.7 | 1.98 |
| VVDD1110 | 261179 | 6903124 | 002/-25 | 147 | 198 | | | Assays | Awaited |
| VVDD1111 | 261182 | 6903123 | 012/-30 | 147 | 240.4 | 211.2 | 217.8 | 6.6 | 3.33 |

Reported significant gold assay intersections represent interpreted lode ore zone based on geology and anomalism. Intercepts may include sub-grade assays within the lode position. Gold determination was by Fire Assay using a 50gm charge with AAS finishes and a lower limit of detection of 0.01 ppm Au. NSR denotes no significant results or lode results < 0.5g/t. True widths are typically 60-90% of reported intervals. Coordinates are MGA94-Z51.

**Attachment 2:** Significant (>0.50 g/t Au) Res-Definition Surface Diamond Drilling Edna May, Westonia, WA

| Hole Id | Easting | Northing | Az/Dip | RL | F/Depth (m) | From (m) | To (m) | Interval (m) | g/t Au |
|---|---|---|---|---|---|---|---|---|---|
| EMRCD018 | 661403 | 6537346 | 103/-53 | 1340 | 618.6 | 392 | 595 | 203 | 0.73 |
| Jonathan Lode | | | | | Incl. | 467 | 470 | 3.00 | 2.21 |
| Fuji Lode | | | | | + | 513.8 | 516 | 2.20 | 0.76 |
| EMRCD019 | 661390 | 6537349 | 102/-57 | 1340 | 36 | | | Hole | Abn |
| | | | | | | | | | |
| EMRCD020 | 661391 | 6537349 | 100/-58 | 1340 | 612 | 417 | 585 | 168 | 0.83 |
| Fuji Lode | | | | | Incl. | 539 | 545 | 6.00 | 1.90 |
| EMRCD020W1 | 661391 | 6537349 | 100/-58 | 1340 | 645 | | | Results | Awaited |
| EMRCD021 | 661378 | 6537331 | 100/-55 | 1340 | 631 | | | Results | Awaited |
| EMRCD022 | 661363 | 6537333 | 100/-60 | 1342 | 583 | 386.2 | 570 | 183.8 | 1.52 |
| Jonathan Lode | | | | | Incl. | **521** | **528** | **7.00** | **4.93** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EMRCD023 | 661370 | 6537332 | 107/-55 | 1340 | 234 | | | Precollar | only |
| EMRCD024 | 661396 | 6537348 | 105/-55 | 1340 | 607.10 | 369 | 588 | 219 | 2.65 |
| Fuji Lode | | | | | Incl. | **527** | **533** | **6.00** | **3.41** |
| EMRCD025 | 661384.30 | 6537350 | 100/-58 | 1340 | 630.90 | 433 | 602 | 169 | 1.36 |
| Jonathan Lode | | | | | Incl. | **508** | **515** | **7.00** | **8.95** |
| Fuji Lode | | | | | + | 564 | 571 | 7.00 | 1.40 |
| EMRCD026 | 661382 | 6537328 | 107/-52 | 1340 | 186 | | | Precollar | only |
| EMRCD027 | 661415 | 6537365 | 106/-55 | 1340 | 636.90 | 394 | 582 | 188 | 2.09 |
| Jonathan Lode | | | | | Incl. | **480** | **485.4** | **5.40** | **5.67** |
| Fuji Lode | | | | | + | 526 | 530 | 4.00 | 3.99 |

Reported significant gold assay intersections (using a 0.50 g/t Au lower cut) are reported using +2m downhole intervals at plus 0.50 g/t gold, with up to 2m of internal dilution. Gold determination was by Fire Assay using a 50gm charge with AAS finishes and a lower limit of detection of 0.01 ppm Au. NSR denotes no significant results. True widths 70-80% of reported downhole interval. Coordinates are MGA94-Z50. Hole Abn denotes hole was abandoned due to excessive deviation away from its intended target.

Bulked Edna May Gneiss (EMG) intersections are geologically constrained and may contain large zones of anomalous subgrade material (0.1 – 0.5 g/t Au)

**Attachment 3:** Significant (>0.50 g/t Au) Eridanus RC Exploration Drilling Mt Magnet WA

| Hole Id | Easting | Northing | Az/Dip | RL | F/Depth (m) | From (m) | To (m) | Interval (m) | g/t Au |
|---|---|---|---|---|---|---|---|---|---|
| GXRC2027 | 576626 | 6894259 | 065/-58 | 425 | 276 | 103 | 105 | 2 | 2.14 |
| Eridanus | | | | | | **174** | **223** | **49*** | **3.43** |
| | | | | | Incl. | 174 | 176 | 2 | 1.57 |
| | | | | | + | **179** | **185** | **6** | **4.58** |
| | | | | | Incl. | **183** | **185** | **2** | **11.7** |
| | | | | | + | 189 | 194 | 5 | 1.00 |
| | | | | | + | **201** | **206** | **5** | **8.19** |
| | | | | | Incl. | **201** | **202** | **1** | **30.5** |
| | | | | | + | **211** | **223** | **12** | **6.90** |
| | | | | | Incl. | **216** | **223** | **7** | **9.75** |
| | | | | | | **226** | **263** | **37*** | **2.51** |
| | | | | | Incl. | 226 | 228 | 2 | 3.17 |
| | | | | | + | **233** | **256** | **23** | **3.37** |
| | | | | | Incl. | **241** | **244** | **3** | **8.11** |
| | | | | | + | **248** | **249** | **1** | **17.25** |
| | | | | | + | **252** | **253** | **1** | **7.76** |
| | | | | | + | 261 | 263 | 2 | 2.63 |
| GXRC2028 | 576636 | 6894242 | 064/-56 | 425 | 280 | 44 | 51 | 7 | 1.9 |
| (Eridanus) | | | | | | 78 | 80 | 2 | 1.96 |
| | | | | | | 91 | 93 | 2 | 2 |
| | | | | | | 109 | 111 | 2 | 2.46 |
| | | | | | | 115 | 121 | 6 | 2.96 |
| | | | | | Incl. | 115 | 116 | 1 | 14.55 |
| | | | | | | 180 | 192 | 12 | 1.21 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | **206** | **271** | **65*** | **3.52** |
| | | | | | Incl. | **206** | **236** | **30** | **1.85** |
| | | | | | + | 239 | 241 | 2 | 10.85 |
| | | | | | + | 244 | 245 | 1 | 3.27 |
| | | | | | + | **248** | **260** | **12** | **4.14** |
| | | | | | + | **264** | **271** | **7** | **13.7** |
| | | | | | Incl. | **264** | **267** | **3** | **30.24** |
| GXRC2029 | 576653 | 6894230 | 067/-52 | 425 | 300 | 9 | 23 | 14 | 1.40 |
| (Eridanus) | | | | | | **30** | **67** | **37** | **2.60** |
| | | | | | | 72 | 73 | 1 | 2.37 |
| | | | | | | 76 | 81 | 5 | 1.44 |
| | | | | | | **90** | **107** | **17** | **2.17** |
| | | | | | | 139 | 146 | 7 | 2.12 |
| | | | | | | 181 | 186 | 5 | 1.22 |
| | | | | | | **210** | **220** | **10** | **2.13** |
| | | | | | | 225 | 227 | 2 | 1.67 |
| | | | | | | 238 | 239 | 1 | 2.56 |
| | | | | | | **243** | **248** | **5** | **3.84** |
| | | | | | | 278 | 285 | 7 | 1.12 |
| | | | | | | 292 | 294 | 2 | 2.52 |
| | | | | | | 297 | 299 | 2 | 2.77 |
| GXRC2030 | 576667 | 6894252 | 067/-53 | 425 | 270 | 8 | 12 | 4 | 1.37 |
| (Eridanus) | | | | | | 15 | 16 | 1 | 2.51 |
| | | | | | | 30 | 39 | 9 | 1.77 |
| | | | | | | 42 | 46 | 4 | 1.09 |
| | | | | | | 49 | 55 | 6 | 1.12 |
| | | | | | | 72 | 76 | 4 | 1.25 |
| | | | | | | **84** | **100** | **16** | **2.66** |
| | | | | | | **154** | **171** | **17** | **1.93** |
| | | | | | | **218** | **226** | **8** | **7.66** |
| | | | | | Incl. | 220 | 222 | 2 | 23.56 |
| | | | | | | 239 | 249 | 10 | 1.00 |
| GXRC2031 | 576697 | 6894219 | 070/-55 | 426 | 72 | **22** | **46** | **24** | **1.83** |
| (Eridanus) | | | | | | 49 | 52 | 3 | 1.72 |
| | | | | | | 64 | 72 | 8 | 1.02 |
| GXRC2032 (Eridanus) | 576697 | 6894220 | 063/-55 | 426 | 42 | 33 | 36 | 3 | 2.28 |
| GXRC2033 | 576679 | 6894222 | 065/-61 | 425 | 174 | 23 | 25 | 2 | 2.21 |
| (Eridanus) | | | | | | 81 | 82 | 1 | 5.15 |
| | | | | | | 92 | 108 | 16 | 1.28 |
| GXRC2034 | 576688 | 6894237 | 064/-53 | 425 | 236 | 17 | 31 | 14 | 1.01 |
| (Eridanus) | | | | | | 93 | 101 | 8 | 3.38 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 161 | 169 | 8 | 1.3 |
| | | | | | | **186** | **196** | **10** | **2.32** |
| | | | | | Incl. | 186 | 187 | 1 | 13.5 |
| | | | | | | 206 | 235 | 29 | 2.66 |
| GXRC2035 | 576708 | 6894224 | 061/-55 | 425 | 240 | 21 | 26 | 5 | 3.36 |
| (Eridanus) | | | | | | 41 | 45 | 4 | 1.02 |
| | | | | | | 57 | 62 | 5 | 2.06 |
| | | | | | | **65** | **79** | **14** | **2.55** |
| | | | | | | **94** | **124** | **30** | **1.04** |
| | | | | | | 127 | 131 | 4 | 3.93 |
| | | | | | | 142 | 144 | 2 | 1.12 |
| | | | | | | 164 | 170 | 6 | 1.71 |
| | | | | | | 177 | 181 | 4 | 1.02 |
| | | | | | | 193 | 194 | 1 | 13 |
| | | | | | | 233 | 239 | 6 | 1.26 |
| GXRC2036 (Eridanus) | 576850 | 6894166 | 360/-53 | 420 | 253 | | | Assays | Awaited |

Reported significant gold assay intersections (using a 0.50 g/t Au lower cut) are reported using +2m downhole intervals at plus 0.50 g/t gold, with up to 2m of internal dilution. Gold determination was by Fire Assay using a 50gm charge with AAS finishes and a lower limit of detection of 0.01 ppm Au. NSR denotes no significant results. See text for discussion on true widths. Coordinates are MGA94-Z50. Hole Abn denotes hole was abandoned due to excessive deviation away from its intended target.

* Composite Eridanus Granodiorite intersections are geologically constrained and may contain large zones of anomalous subgrade material (0.1 – 0.5 g/t Au)

**Attachment 4:** Significant (>0.50 g/t Au) RC Exploration Drilling Edna May, Westonia, WA

| Hole Id | Easting | Northing | Az/Dip | RL | F/Depth (m) | From (m) | To (m) | Interval (m) | g/t Au |
|---|---|---|---|---|---|---|---|---|---|
| EMRC015 | 661443 | 6537065 | 166/-54 | 1190 | 286 | 3 | 6 | 3 | 1.43 |
| (Edna May Pit) | | | | | | **16** | **21** | **5** | **5.02** |
| | | | | | | 48 | 52 | 4 | 1.02 |

Reported significant gold assay intersections (using a 0.50 g/t Au lower cut) are reported using +2m downhole intervals at plus 0.50 g/t gold, with up to 2m of internal dilution. Gold determination was by Fire Assay using a 50gm charge with AAS finishes and a lower limit of detection of 0.01 ppm Au. NSR denotes no significant results. See text for discussion on true widths. Coordinates are MGA94-Z50. Hole Abn denotes hole was abandoned due to excessive deviation away from its intended target.

**Attachment 5:** Incomplete - Significant (>0.40 g/t Au) 4m Composites Aircore Drilling (Anomaly 8) Tampia Hill, Narembeen, WA

| Hole Id | Easting | Northing | Az/Dip | RL | F/Depth (m) | From (m) | To (m) | Interval (m) | g/t Au |
|---|---|---|---|---|---|---|---|---|---|
| TRAC030 | 637603 | 6447999 | 270/-60 | 328 | 37 | 20 | 24 | 4 | 0.92 |
| TRAC043 | 637663 | 6447202 | 270/-60 | 328 | 60 | 32 | 40 | 8 | 0.45 |

Reported significant gold assay intersections (using a 0.50 g/t Au lower cut) are reported using +2m downhole intervals at plus 0.50 g/t gold, with up to 2m of internal dilution. Gold determination was by Fire Assay using a 50gm charge with AAS finishes and a lower limit of detection of 0.01 ppm Au. NSR denotes no significant results. See text for discussion on true widths. Coordinates are MGA94-Z50. Hole Abn denotes hole was abandoned due to excessive deviation away from its intended target.

# JORC Table 1 Report for the Surface Aircore, RC and Diamond Drilling plus Underground Diamond Drilling

**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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *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.* | • At all projects potential gold mineralised RC and Diamond intervals are systematically sampled using industry standard 1m intervals, collected from reverse circulation (RC) drill holes and/or 4m composites from reconnaissance Aircore traverses. Surface and underground Diamond holes may be sampled along sub 1m geological contacts, otherwise 1m intervals are the default.<br>• Drill hole locations were designed to allow for spatial spread across the interpreted mineralised zone. All RC samples were collected and riffle split to 3-4kg samples on 1m metre intervals. Aircore samples are speared from piles on the ground and are composited into 4m intervals before despatching to the laboratory. Single metre bottom of hole Aircore samples are also collected for trace element determinations. Diamond core is half cut along downhole orientation lines, with the exception of underground diamond drilling. Here whole core is despatched to the laboratory to maximise the sample size. Otherwise half core is sent to the laboratory for analysis and the other half is retained for future reference.<br>• Standard fire assaying was employed using a 50gm charge with an AAS finish for all diamond, RC and Aircore chip samples. Trace element determination was undertaken using a multi (4) acid digest and ICP-AES finish. |
| *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 best practice NQ diamond core, 5 ¾" face sampling RC drilling hammers for all RC drill holes at Mount Magnet or 3" Aircore bits/RC hammers at Edna May and Tampia. |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | • All diamond core is jigsawed to ensure any core loss, if present is fully accounted for. Bulk RC and Aircore drill holes samples were visually inspected by the supervising geologist to ensure adequate clean sample recoveries were achieved. Note Aircore drilling while clean is not used in any resource estimation work. Any wet, contaminated or poor sample returns are flagged and recorded in the database to ensure no sampling bias is introduced.<br>• Zones of poor sample return both in RC and Aircore are recorded in the database and cross checked once assay results are received from the laboratory |

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| | | to ensure no misrepresentation of sampling intervals has occurred. Of note, excellent RC drill recovery is reported from all RC holes. Reasonable recovery is noted for all Aircore samples. Zero sample recovery is achieved while navi drilling. The navi lengths are kept to a minimum and avoided when close to potentially mineralised units. |
| *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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • All drill samples are geologically logged on site by professional geologists. Details on the host lithologies, deformation, dominant minerals including sulphide species and alteration minerals plus veining are recorded relationally (separately) so the logging is interactive and not biased to lithology.<br>• Drill hole logging is qualitative on visual recordings of rock forming minerals and quantitative on estimates of mineral abundance.<br>• 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.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • Duplicate samples are collected every 25th sample from the RC and Aircore chips as well as quarter core from the diamond holes.<br>• Dry RC 1m samples are riffle split to 3-4kg as drilled and dispatched to the laboratory. Any wet samples are recorded in the database as such and allowed to dry before splitting and dispatching to the laboratory.<br>• All core, RC and Aircore chips are pulverized prior to splitting in the laboratory to ensure homogenous samples with 85% passing 75um. 200gm is extracted by spatula that is used for the 50gm or 30 gm charge on standard fire assays.<br>• All samples submitted to the laboratory are sorted and reconciled against the submission documents. In addition to duplicates a high grade or low grade standard is included every 25th sample, a controlled blank is inserted every 100th sample. The laboratory uses barren flushes to clean their pulveriser and their own internal standards and duplicates to ensure industry best practice quality control is maintained.<br>• 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.*<br>• *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.*<br>• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of* | • The fire assay method is designed to measure the total gold in the diamond core, RC and Aircore samples. The technique involves standard fire assays using a 50gm or 30 gm sample charge with a lead flux (decomposed in the furnace). The prill is totally digested by HCl and HNO3 acids before measurement of the gold determination by AAS, while the Edna May samples employed ICP finishes to give a lower limit of detection. Aqua regia digest is considered adequate for surface soil sampling.<br>• No field analyses of gold grades are completed. Quantitative analysis of the gold content and trace elements is undertaken in a controlled laboratory environment. |

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| | *bias) and precision have been established.* | • Industry best practice is employed with the inclusion of duplicates and standards as discussed above and used by Ramelius as well as the laboratory. All Ramelius standards and blanks are interrogated to ensure they lie within acceptable tolerances. Additionally, sample size, grind size and field duplicates are examined to ensure no bias to gold grades exists. |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • Alternative Ramelius personnel have inspected the diamond core, RC and Aircore chips in the field to verify the correlation of mineralised zones between assay results and lithology, alteration and mineralization.<br>• All holes are digitally logged in the field and all primary data is forwarded to Ramelius' Database Administrator (DBA) in Perth where it is imported into Datashed, a commercially available and industry accepted database software package. Assay data is electronically merged when received from the laboratory. The responsible project geologist reviews the data in the database to ensure that it is correct and has merged properly and that all the drill data collected in the field has been captured and entered into the database correctly.<br>• 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.<br>• No adjustments or calibrations are made to any of the assay data recorded in the database.<br>• No new mineral resource estimate is included in this report. |
| *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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • All drill hole collars are picked up using accurate DGPS or mine survey control. All down hole surveys are collected using downhole Eastman single shot or gyro surveying techniques provided by the drilling contractors.<br>• All Mt Magnet and Edna May holes are picked up in MGA94 – Zone 50 grid coordinates. Vivien underground drilling is MGA94 - Zone 51.<br>• DGPS RL measurements captured the collar surveys of the drill holes prior to the resource estimation work. |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*<br>• *Whether sample compositing has been applied.* | • Most RC drilling is infilling and stepping out from the prospects, nominally on 20m centres plus looking for extensions to the known mineralised systems. Good continuity has been achieved from the RC drilling. Diamond drilling at Edna May is designed to allow for lode continuity predictions between the holes.<br>• Given the previous limited understanding of the target horizons infill drilling (whether diamond or RC) is necessary to help define the continuity of mineralisation.<br>• No sampling compositing has been applied within key |

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| | | 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.*<br>• *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 core drilling and RC drilling is completed orthogonal to the interpreted strike of the target horizon(s), plunge projection of higher grade shoots, with the exception of Eridanus. Here the drilling is parallel to the strike of the Eridanus Granodiorite but orthogonal to predicted cross cutting lodes. Aircore drilling is completed on systematic MGA E-W or N-S traverses with holes nominally 40-50m apart. |
| *Sample security* | • *The measures taken to ensure sample security.* | • Sample security is integral to Ramelius' sampling procedures. All bagged samples are delivered directly from the field to the assay laboratory in Perth, whereupon the laboratory checks the physically received samples against Ramelius' sample submission/dispatch notes. |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | • Sampling techniques and procedures are reviewed prior to the commencement of new work programmes to ensure adequate procedures are in place to maximize the sample collection and sample quality on new projects. 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.*<br>• *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 at Mount Magnet, Edna May and Vivien gold mines all in Western Australia (owned 100% by Ramelius Resources Limited's or its 100% owned subsidiaries). The Mt Magnet and Vivien tenements are located on pastoral/grazing leases. Tampia is located over private farm land where the veto on the top 30m has been removed via executed compensation agreement(s) with the various landowners. Edna May is within the Westonia Common. Heritage surveys are completed prior to any ground disturbing activities in accordance with Ramelius' responsibilities under the Aboriginal Heritage Act in Australia.<br>• 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.* | • Exploration and mining by other parties has been reviewed and is used as a guide to Ramelius' exploration activities. Previous parties have completed shallow RAB, Aircore drilling and RC drilling and shallow open pit mining has previously occurred at Mt Magnet, Vivien and Edna May. This report concerns only exploration results generated by Ramelius during the up until June 30 2019, that were not previously reported to the ASX. |

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| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | • The targeted mineralisation at all projects is typical of orogenic structurally controlled Archaean gold lode systems. In all instances the mineralisation is controlled by anastomosing shear zones/fault zones passing through competent rock units, brittle-ductile shearing is common in the gneissic rocks. |
| *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:*<br>○ *easting and northing of the drill hole collar*<br>○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>○ *dip and azimuth of the hole*<br>○ *down hole length and interception depth*<br>○ *hole length.*<br>• *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.* | • All the drill holes reported in this report have the following parameters applied. All drill holes completed, including holes with no significant results (as defined in the Attachments) are reported in this announcement.<br>• Easting and northing are given in MGA94 coordinates as defined in the Attachments for Mount Magnet and Edna May. NAD27(USA) is used in Nevada.<br>• RL is AHD<br>• Dip is the inclination of the hole from the horizontal. Azimuth is reported in magnetic degrees as the direction the hole is drilled. MGA94 and magnetic degrees vary by <10 in the project area. All reported azimuths are corrected for magnetic declinations.<br>• Down hole length is the distance measured along the drill hole trace. Intersection length is the thickness of an anomalous gold intersection measured along the drill hole trace.<br>• Hole length is the distance from the surface to the end of the hole measured along the drill hole trace.<br>• No results currently available from the exploration drilling are excluded from this report. Gold grade intersections >0.4 g/t Au within 4m Aircore composites or >0.5 g/t Au within single metre RC samples (with up to 4m of internal dilution) are considered significant in the broader mineralised host rocks. Diamond core samples are generally cut along geological contacts or up to 1m maximum.<br>• Gold grades greater than 0.5 g/t Au are highlighted where good continuity of higher grade mineralization is observed. 0.1 g/t Au cut-offs are used for reconnaissance exploration programmes. |
| *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.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • The first gold assay result received from each sample reported by the laboratory is tabled in the list of significant assays. Subsequent repeat analyses when performed by the laboratory are checked against the original to ensure repeatability of the assay results.<br>• Weighted average techniques are applied to determine the grade of the anomalous interval when geological intervals less than 1m have been sampled.<br>• Exploration drilling results are generally reported using a 0.5 g/t Au lower cut-off for RC and diamond or 0.1 g/t Au for Aircore drilling (as described above and reported in the Attachments) and may include up to 4m of internal dilution. Significant resource development drill hole assays are reported greater than 0.5 or 8.0 g/t Au and are also reported separately. For example, the broader plus 1.0 g/t Au intersection of 6.5m @ 30.5 g/t Au contains a higher- |

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| | | grade zone running plus 8 g/t Au and is included as 4m @ 48.5 g/t Au. Where extremely high gold intersections are encountered as in this example, the highest-grade sample interval (eg 1.0m @ 150 g/t Au) is also reported. All assay results are reported to 3 significant figures in line with the analytical precision of the laboratory techniques employed.<br>• 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.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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').* | • The intersection length is measured down the length of the hole and is not usually the true width. When sufficient knowledge on the thickness of the intersection is known an estimate of the true thickness is provided in the Attachments.<br>• The known geometry of the mineralisation with respect to the drill holes reported in this report is now well constrained. |
| *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.* | • Detailed drill hole plans and sectional views of Eridanua, Vivien and Edna May have been provided previously. Given the interpreted shallow dips of the multiple mineralisation lodes longsections and cross-sectional view (orthogonal to the plunging shoots) is considered the best 2-D representation of the known spatial extent of the mineralization intersected to date. |
| *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.* | • All drill holes completed to date are reported in this report and all material intersections as defined) 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).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Future exploration includes step out RC and diamond drilling below deposits to define the full depth extent of the mineralisation discovered to date. |