



# 2019 First Quarter Report Presentation

---

12 APRIL 2019



A modern  
mining company

# Disclaimer

## Forward Looking Statements

This presentation has been prepared by OZ Minerals Limited (**OZ Minerals**) and consists of written materials/slides for a presentation concerning OZ Minerals. By reviewing/attending this presentation, you agree to be bound by the following conditions.

No representation or warranty, express or implied, is made as to the fairness, accuracy, or completeness of the information, contained in the presentation or of the views, opinions and conclusions contained in this material. To the maximum extent permitted by law, OZ Minerals and its related bodies corporate and affiliates, and its respective directors, officers, employees, agents and advisers disclaim any liability (including, without limitation any liability arising from fault or negligence) for any loss or damage arising from any use of this material or its contents, including any error or omission there from, or otherwise arising in connection with it.

Some statements in this presentation are forward-looking statements. Such statements include, but are not limited to, statements with regard to capacity, future production and grades, projections for sales growth, estimated revenues and reserves, targets for cost savings, the construction cost of new projects, projected capital expenditures, the timing of new projects, future cash flow and debt levels, the outlook for minerals and metals prices, the outlook for economic recovery and trends in the trading environment and may be (but are not necessarily) identified by the use of phrases such as "will", "expect", "anticipate", "believe" and "envisage". By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future and may be outside OZ Minerals' control. Actual results and developments may differ materially from those expressed or implied in such statements because of a number of factors, including levels of demand and market prices, the ability to produce and transport products profitably, the impact of foreign currency exchange rates on market prices and operating costs, operational problems, political uncertainty and economic conditions in relevant areas of the world, the actions of competitors, activities by governmental authorities such as changes in taxation or regulation.

Given these risks and uncertainties, undue reliance should not be placed on forward-looking statements which speak only as at the date of the presentation. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, OZ Minerals does not undertake any obligation to publicly release any updates or revisions to any forward looking statements contained in this presentation, whether as a result of any change in OZ Minerals' expectations in relation to them, or any change in events, conditions or circumstances on which any such statement is based.

Certain statistical and other information included in this presentation is sourced from publicly available third party sources and has not been independently verified.

All figures are expressed in Australian dollars unless stated otherwise.

This presentation should be read in conjunction with the Quarterly Report released today.

# Compliance Statements

## **Prominent Hill Production Targets Cautionary Statement**

Production Targets for the Prominent Hill Underground only are based on:

Proved Ore Reserve 64%  
Probable Ore Reserve 27%  
Measured Mineral Resource 1%  
Indicated Mineral Resource 1%  
Inferred Mineral Resource 7%

Production Targets for the entire Prominent Hill asset are based on:

Proved Ore Reserve 77%  
Probable Ore Reserve 17%  
Measured Mineral Resource 1%  
Indicated Mineral Resource 1%  
Inferred Mineral Resource 4%

The modifying factors used in the estimation of the Ore Reserve were also applied to the Mineral Resources in the generation of the production target. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production targets will be realised.

The Ore Reserve and Mineral Resource Estimate underpinning these Production Targets were prepared by a Competent Person in accordance with the JORC Code 2012. The production targets are the result of detailed studies based on the actual performance of our existing mines and processing plant. These studies include the assessment of mining, metallurgical, ore processing, marketing, government, legal, environmental, economic and social factors.

## **Prominent Hill Resources and Reserves**

The information on Prominent Hill Mineral Resources and Ore Reserves in this presentation is extracted from the document entitled "Prominent Hill 2018 Mineral Resource and Ore Reserve Statement and Explanatory Notes" released on 12 November 2018 and available at [www.ozminerals.com/operations/resources-reserves](http://www.ozminerals.com/operations/resources-reserves). OZ Minerals confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. OZ Minerals confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

# Compliance Statements

## **Carrapateena Production Targets Cautionary Statement**

Production targets for the Carrapateena sub level cave are based on:

Probable Ore Reserves: 94%

Inferred Mineral Resources: 6%

Production targets for the Carrapateena Block Cave Expansion are based on:

Measured Mineral Resource 41%

Indicated Mineral Resource 46%

Inferred Mineral Resource 13%

Further evaluation work and appropriate studies for the Carrapateena Block Cave Expansion are required before OZ Minerals will be in a position to estimate any ore reserves or to provide any assurance of an economic development case.

There is a low level of geological confidence associated with Inferred Mineral Resources. There is no certainty that further exploration work and studies will result in the determination of Inferred Mineral Resources or that the production targets will be realised.

The Ore Reserve and Mineral Resource estimates underpinning the production targets were prepared by a Competent Person in accordance with the JORC Code 2012. The material assumptions used in the estimation of the production targets and associated financial information referred to in this presentation can be found in the Carrapateena Mineral Resource Statement as at 6 March 2019 released on 6 March 2019, the Carrapateena Feasibility Study Update released on 24 August 2017 and the Carrapateena Ore Reserve Statement as at 4 August 2017 released on 24 August 2017.

## **Carrapateena Resources and Reserves**

The information on the 587 Mt Carrapateena Mineral Resource in this presentation is extracted from the document entitled "Carrapateena Project Mineral Resource Statement and Explanatory Notes as at 6 March 2019" released on 6 March 2019 and available at [www.ozminerals.com/operations/resources-reserves](http://www.ozminerals.com/operations/resources-reserves). OZ Minerals confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. OZ Minerals confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

The information on Carrapateena Ore Reserves in this presentation is extracted from the document entitled "Carrapateena Project Ore Reserve Statement and Explanatory Notes as at 4 August 2017" released on 24 August 2017 and available at [www.ozminerals.com/operations/resources-reserves](http://www.ozminerals.com/operations/resources-reserves). OZ Minerals confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. OZ Minerals confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

## **Carrapateena Resource copper equivalent calculation**

The copper equivalent percent was calculated using the following formula:  $CuEq \% = Cu \% + (0.5 * Au \text{ g/t})$ . Copper equivalent has been calculated using a copper price of \$US 2.96/lb, a gold price of \$US 1305/oz, a copper recovery of 91% and a gold recovery of 73%.



# A Modern Mining Company Strategy

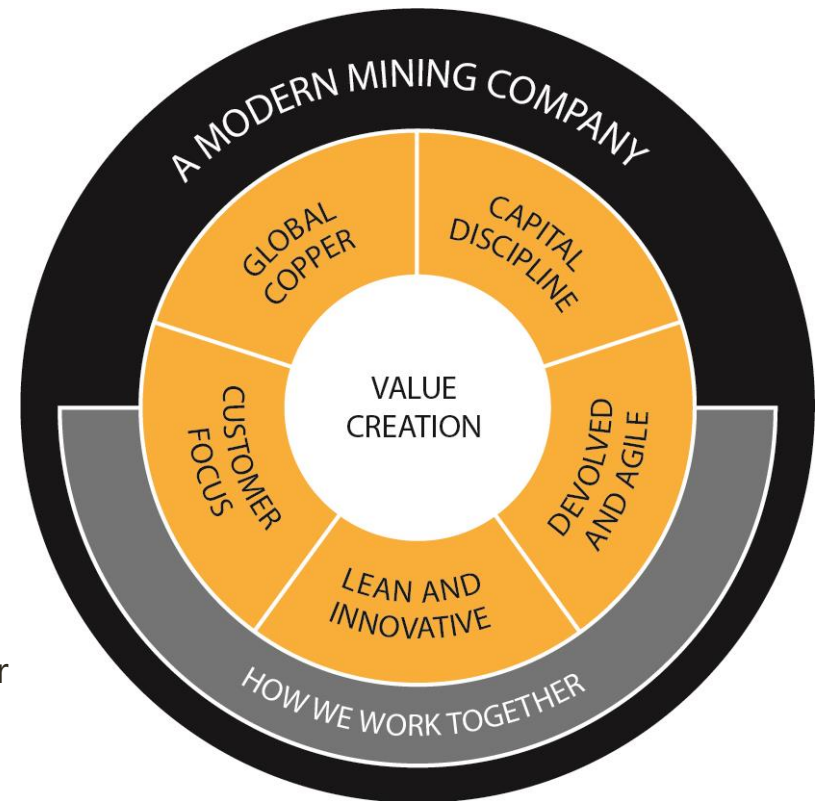
Reflecting the next phase of value creation growth

## What we do

- **Global copper** – Copper as driver of value; strategic exposure to base and precious metals
- **Capital discipline** – Spending on things we need that represent best value and make a difference
- **Devolved and agile** – Embracing a devolved model to unlock discretionary effort and value; assets that easily bolt on or off
- **Lean and innovative** – Delivering bottom half cost curve and superior operating performance; lean principles to drive innovative solutions
- **Customer focus** – Leveraging global asset base to develop partnerships with customers

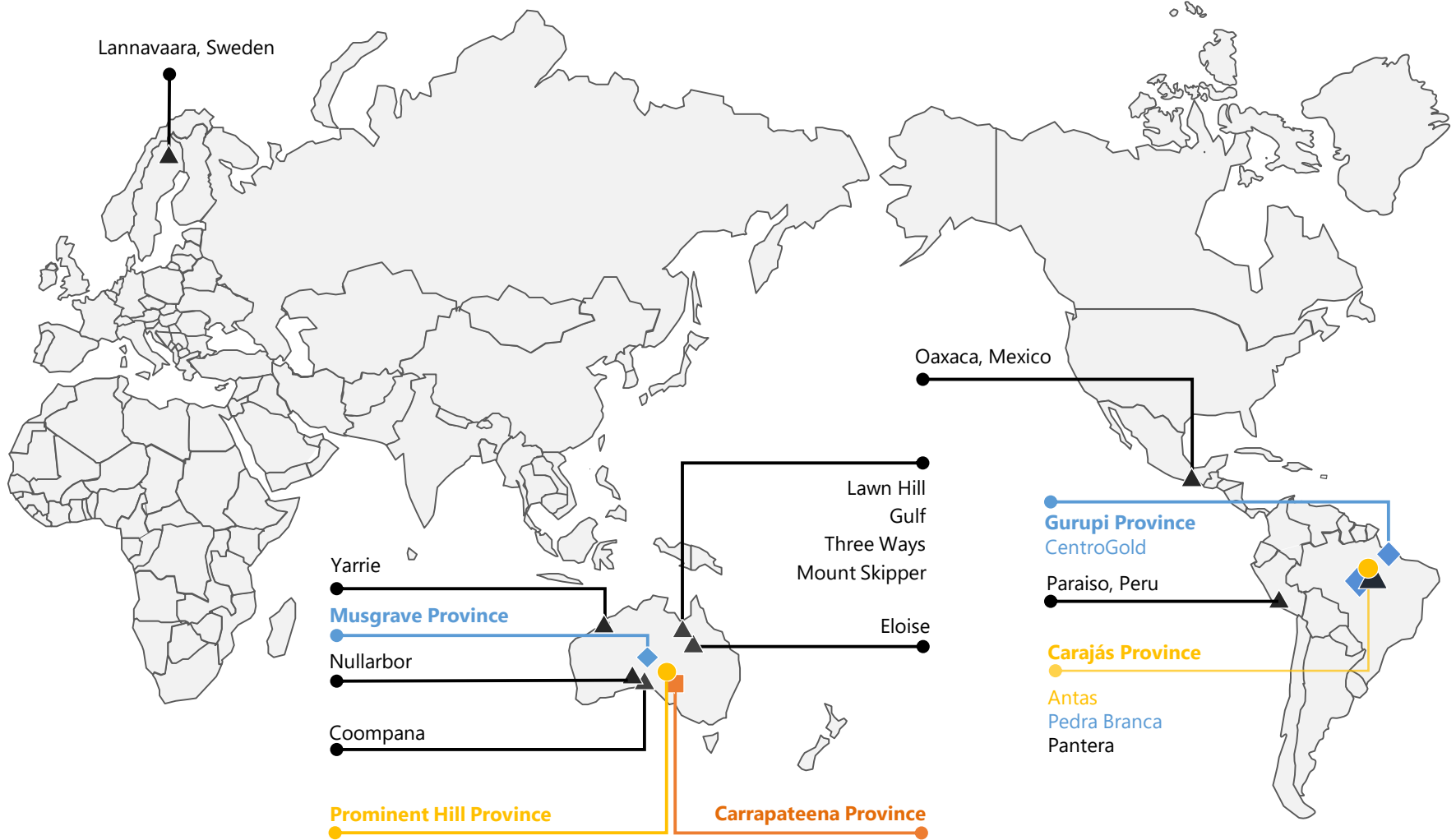
## How we work

- Driving inclusion and diversity, resulting in superior performance
- Working safely, unlocking innovation, embracing change and consistently delivering
- Our people are our ambassadors



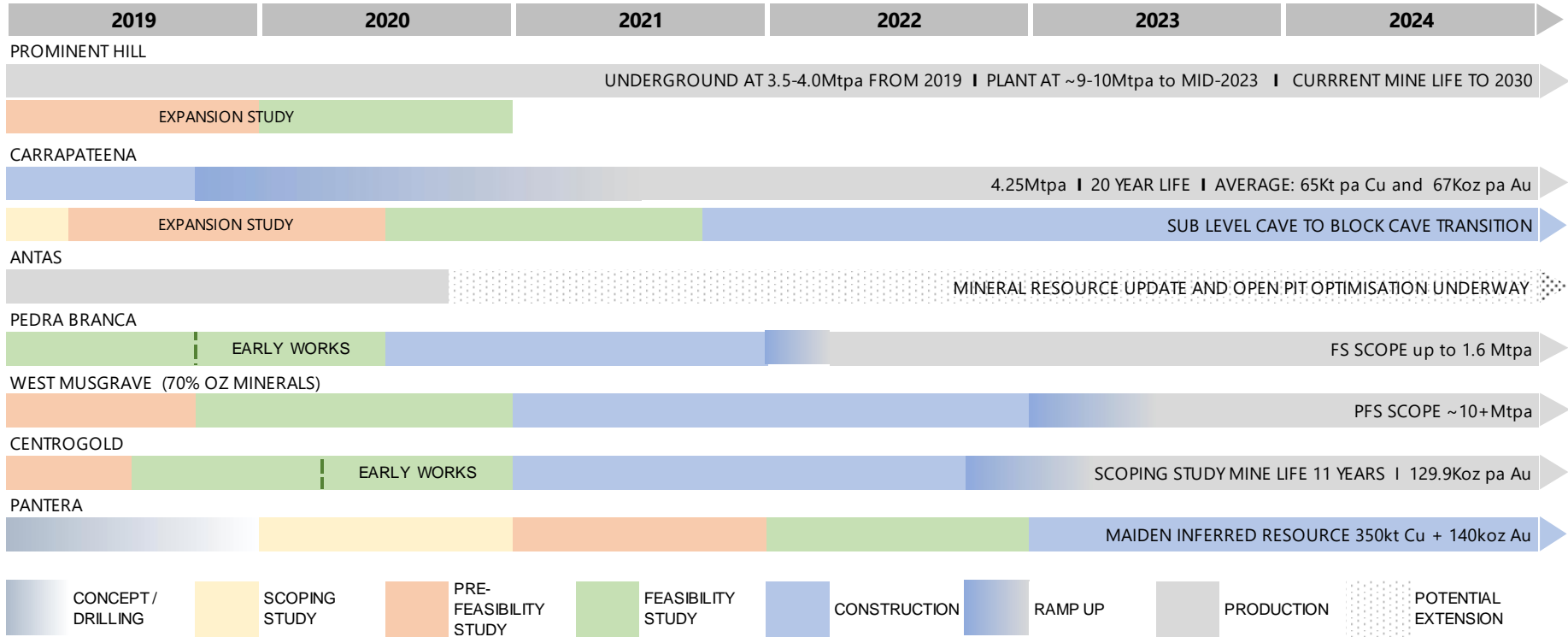
# Company Snapshot

● Operating Mine   ■ Mine in construction   ◆ Study phase   ▲ Exploration



# Asset Timeline\*

Multiple projects progressing through build and study phases



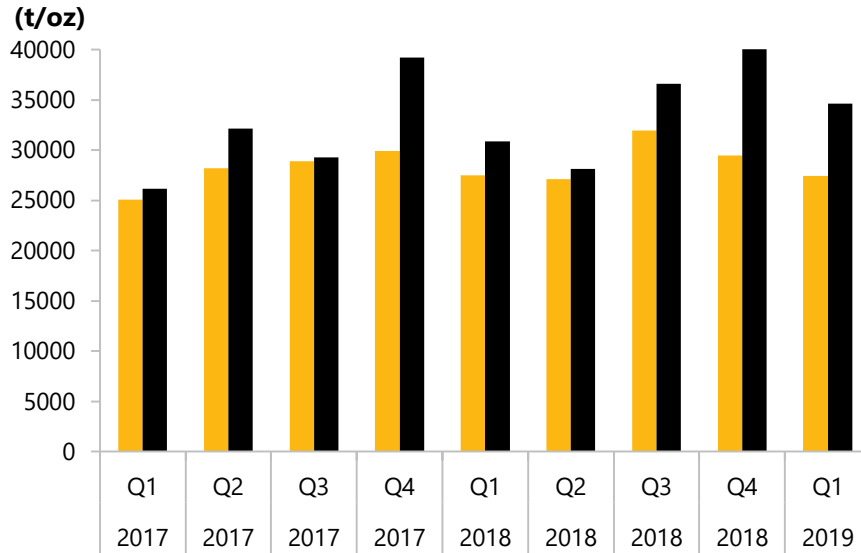
\*Indicative timeline assumes required study hurdles and proposed timeframes achieved. Previously announced project parameters stated.

# Summary

ITEM	Q1
Contained Copper produced (t)	● 27,442
Contained Gold produced (oz)	● 34,648
All-In Sustaining Cost US c/lb	● 104
C1 cost US c/lb	● 61

● Favourable to annual guidance    ● Unfavourable to annual guidance

## CONTAINED COPPER AND GOLD PRODUCED



■ Copper ■ Gold

## STRONG START TO 2019

- / Carrapateena development reaches first ore; project on schedule for Q4 commissioning
  - / Block Cave Expansion progresses to pre-feasibility and Life of Province planning to scoping study
- / Prominent Hill on track for guidance; explorer challenge generates global interest
- / West Musgrave resource update improves confidence in Nebo-Babel; OZ Minerals moves to 70% ownership
- / Carajás and Gurupi province drilling and studies continue with updates scheduled for Q2
- / Planning commences across multi-site exploration alliance entered with Red Metal Limited
- / Cash balance remains strong at \$342 million after \$116 million investment into Carrapateena and \$48 million dividend

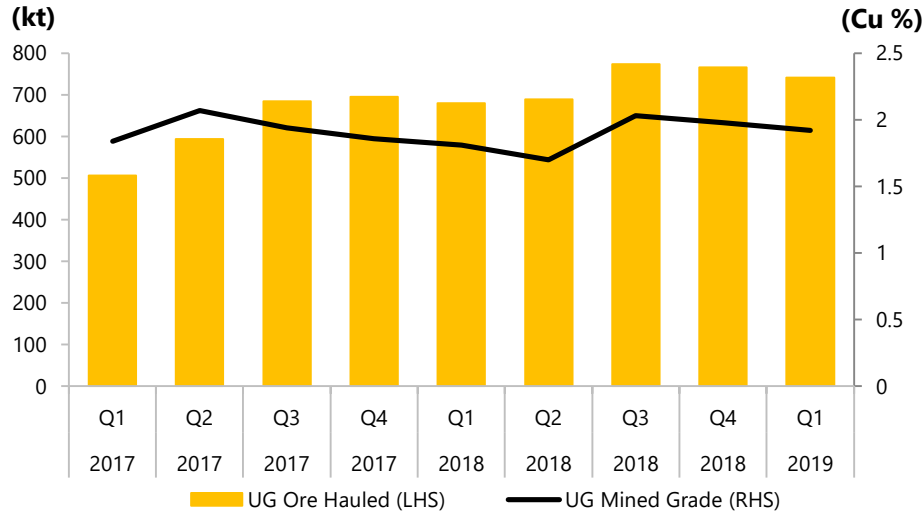
## UPCOMING ACTIVITY

- / Prominent Hill gold trial review to be completed mid-2019
- / West Musgrave completion of current phase of work in Q2 with market update in Q3
- / Antas Mineral Resource and Ore Reserve update and 2019 guidance; Pedra Branca Mineral Resource update
- / CentroGold Pre-Feasibility Study
- / Drilling: Jericho, Succoth, One Tree Hill, Antas Near Mine/Regional, Canaa West, Pantera, Gurupi, CentroGold

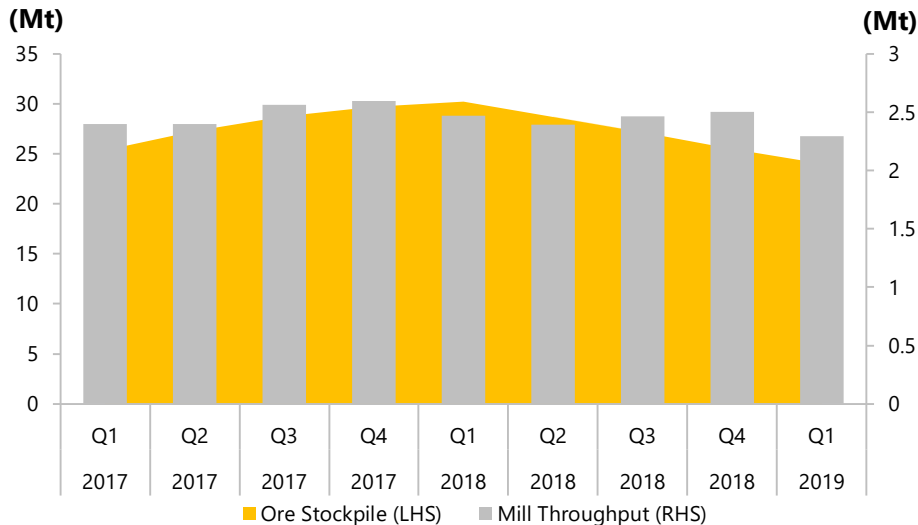


# Prominent Hill Performance

## UNDERGROUND ORE HAULED AND GRADE



## STOCKPILES AND MILL THROUGHPUT



## PERFORMANCE

- ✓ Copper and gold production on track for annual guidance
- ✓ Underground ramp-up slowed by manning issues and equipment availability; action taken to address operational constraints
- ✓ Underground mine produced 742kt of ore at 1.92% copper
- ✓ Malu paste plant construction platform and perimeter access road completed
- ✓ Gold trial activities completed successfully; data analysis and interpretation to run through Q2
- ✓ Expansion study diamond drill platform development completed; drilling commenced with ~2.9km achieved during quarter

## UPCOMING ACTIVITY

- ✓ Extension study phase one diamond drilling scheduled for completion in Q2
- ✓ Partnership project to install tramp metal detection system in ROM loader buckets to commence in Q2
- ✓ Gold trial analysis and review to be completed mid-2019



A modern mining company

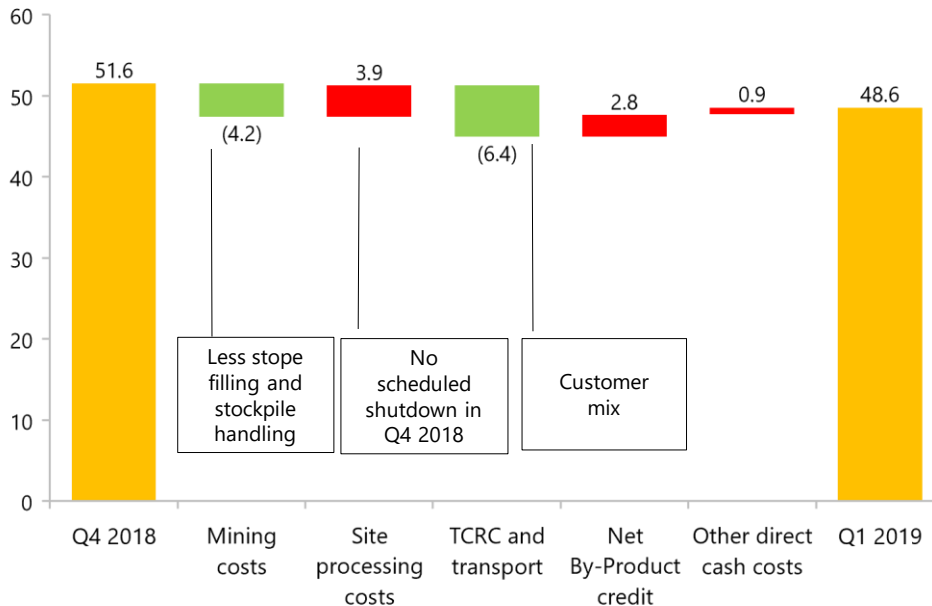
# Prominent Hill Cost Performance

ITEM	Q1
All-In Sustaining Cost US c/lb	91
C1 costs US c/lb	49

● Favourable to annual guidance    ● Unfavourable to annual guidance

## C1 COST ANALYSIS

(US c/lb)



## COST PERFORMANCE

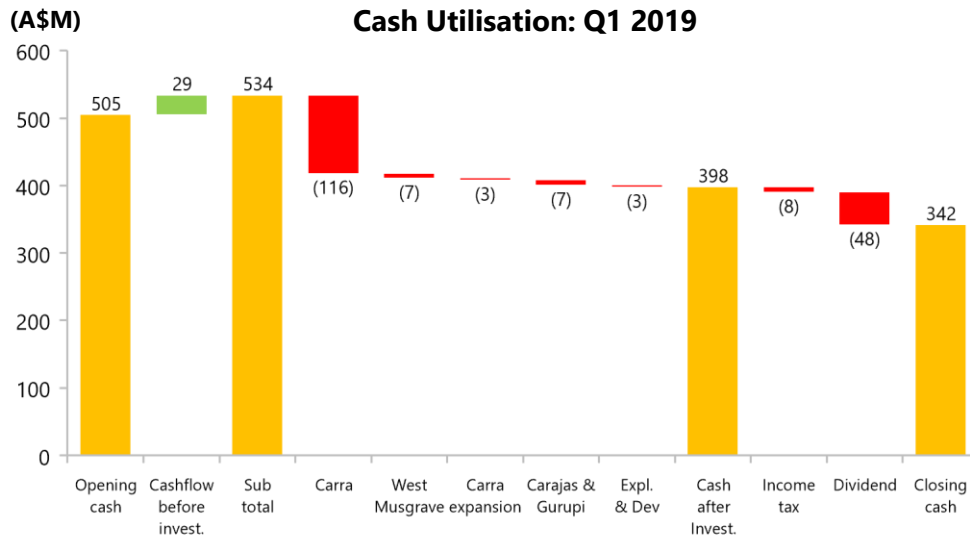
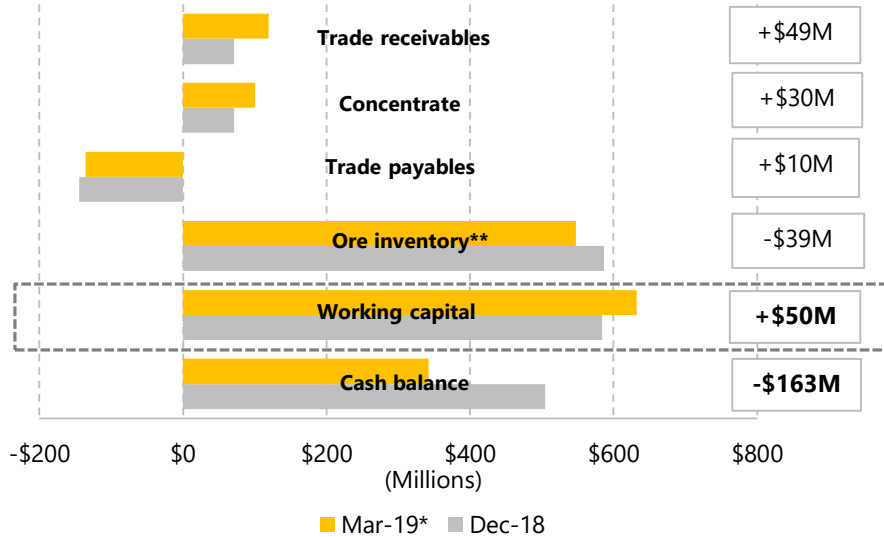
- / Q1 costs slightly below prior quarter:
  - / All-In Sustaining Cost of US 91c/lb
  - / C1 costs of US 49c/lb
- / Mining costs lower due to less stope filling and lower ore stockpile handling costs
- / Processing costs higher with scheduled shutdown including reline of the SAG Mill and planned replacement of a mill drive gearbox
- / TCRC and transport costs lower primarily due to customer mix

## UPCOMING ACTIVITY

- / Prominent Hill costs expected to trend higher through 2019 in line with annual guidance:
  - / All-In Sustaining Costs of US 110-120c/lb
  - / C1 costs of US 65c-75c/lb

# Cash Generation

## WORKING CAPITAL MOVEMENTS - QUARTER



## CASH MOVEMENTS

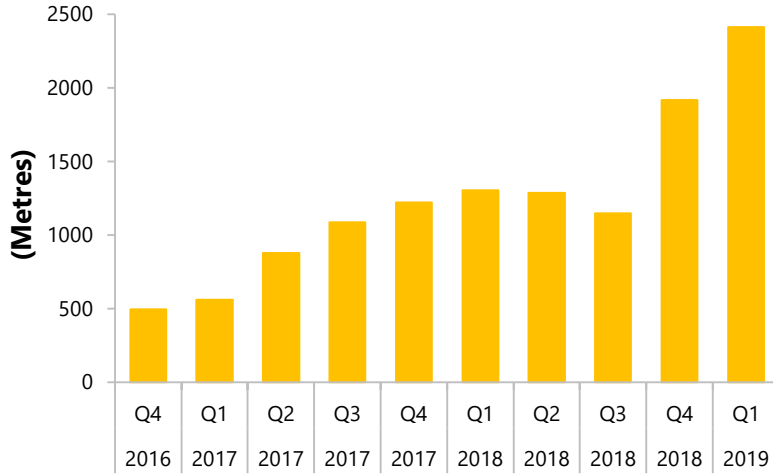
- / Cash balance of \$342 million\* at 31 March; revolver cash advance facility extended to \$300 million
- / Trade receivables increased by \$49 million due to shipment timing late in the quarter
- / Concentrate inventory increased by \$30 million in readiness for early Q2 shipment
- / Net ore inventory reduction of \$39 million following open pit stockpile processing
- / Carrapateena project cash investment of \$116 million (\$128 million of capital expenditure)
- / 2018 final fully franked dividend of \$48 million (15 cps) paid in March

## UPCOMING ACTIVITY

- / Ongoing growth capital expenditure through 2019 to further reduce cash balance
- / Ore inventory balance to continue depleting with processing of open pit ore stockpiles to mid-2023

# Carrapateena Development Progress

## QUARTERLY DECLINE ADVANCE



## PROJECT PROGRESS

- / First ore reached ore as development rates increase with additional work areas available
- / Total decline development on track at 12,303 metres (3,959 metres from surface to face of Tjati decline); vertical depth below surface is 575 metres
- / First production level access commenced
- / Primary ventilation system progressed to plan with two surface vent rises and the first internal rise now complete
- / Minerals processing plant and non-process infrastructure construction progressing to schedule
- / High voltage powerline over 65% complete
- / Tailings Storage Facility construction progressing to schedule
- / Northern wellfield site works commenced
- / Mine area borrow pit works completed

## UPCOMING ACTIVITY

- / Underground development rates to continue increasing as further working areas become available
- / Primary vent fan civils to commence
- / First concrete pour in underground crusher chamber
- / Southern access road upgrade completion
- / Tailings storage facility completion
- / Underground infrastructure design completion

## MAIN TSF EMBANKMENT



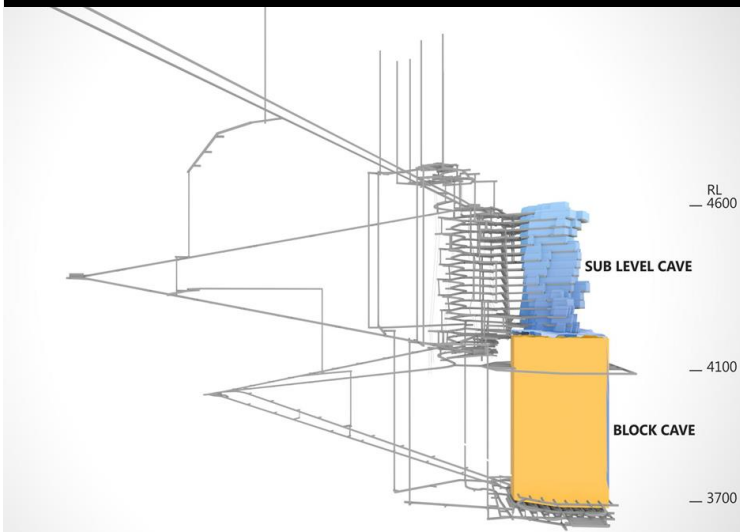
# Carrapateena Province Expansion

## Block Cave Expansion progresses to pre-feasibility

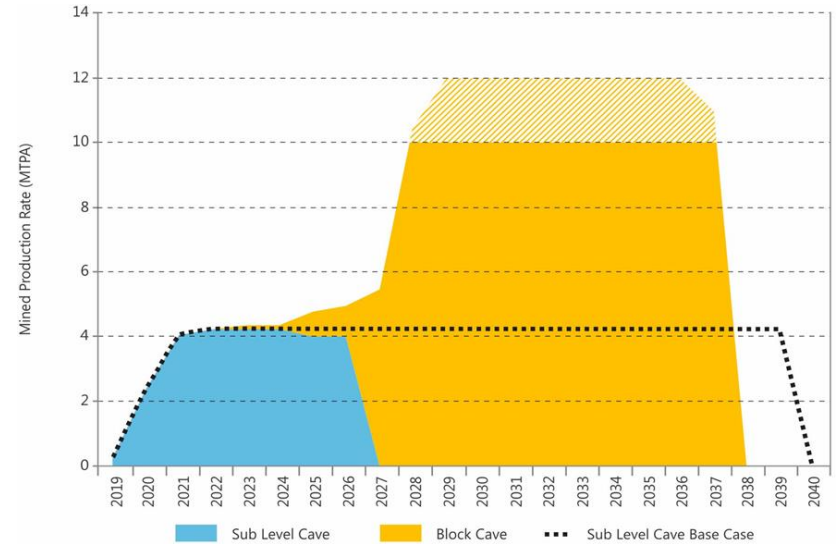
### BLOCK CAVE EXPANSION SCOPING STUDY COMPLETED

- / Conversion of the lower portion of the Carrapateena sub level cave to a block cave from 2026:
  - / Increase in mine throughput rate from 4.25 Mtpa to 10–12 Mtpa\*
  - / Increase in life of mine average copper production to ~105–125 ktpa from 2026\*
  - / Reduction of life of mine all-in sustaining costs to ~US 90–95 c/lb
  - / Access to higher grade bornite mineralisation via the top-down sub level cave followed by a bottom-up block cave

### PROPOSED MINE LAYOUT



### INDICATIVE PRODUCTION PROFILE



- / Block cave expansion can occur without impeding existing sub level cave delivery, ramp-up or ongoing operation
- / Pre-production capital of circa A\$1.0 – A\$1.3 billion
- / Carrapateena Resource increased to ~587 Mt at ~0.8% CuEq\*\* enabled by block cave option in lower portion
- / Block Cave Expansion unlocks possible future value accretive options for the Carrapateena Life of Province Plan
- / Sub level cave capital payback achieved before Block Cave Expansion major development spend



# West Musgrave

## COMMUNITY CONSULTATION WORKSHOPS



## PROCESSING PLANT CONCEPT



## ACTIVITY DURING QUARTER

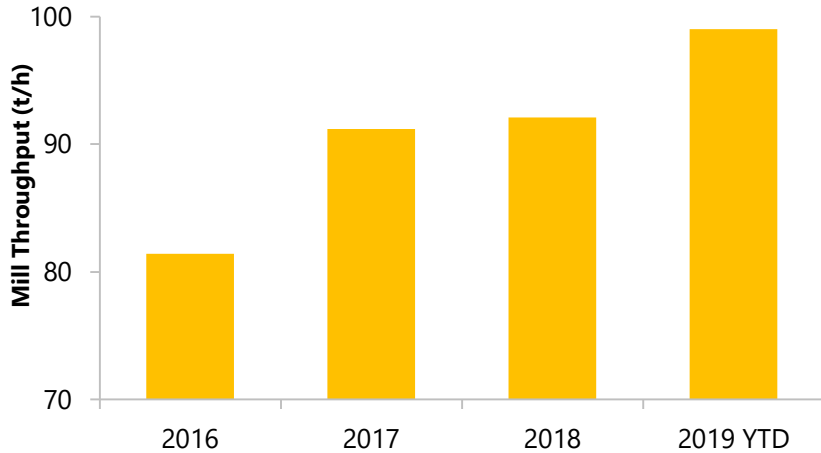
- / Core work progressed including mining cut off grade and production rate selection, mine design and engineering of process plant and non-process infrastructure
- / New opportunities pursued in mine automation, new flotation flowsheet and new process equipment options; workforce planning to quantify benefit of an off-site operations centre
- / Metallurgical variability test work completed on all ore types present in deposits; consistent results confirm recovery and concentrate quality targets can be met
- / Resource update for Nebo and Babel deposits completed; resource confidence improves with increased proportion of Indicated Resources
- / Successful community consultation workshops held; planning for mine access agreement and regulatory approvals progressing
- / OZ Minerals moved to 70% ownership of the project

## UPCOMING ACTIVITY

- / Completion of current phase of work in late Q2 / early Q3 with an update to be provided Q3
- / Continuation of opportunity assessments to increase value
- / Continuation of infill drilling program, community and regulatory consultation processes

# Carajás and Gurupi Province Activity

## ANTAS PROCESSING PLANT THROUGHPUT



## ANTAS RESOURCE DRILLING



## ACTIVITY DURING QUARTER

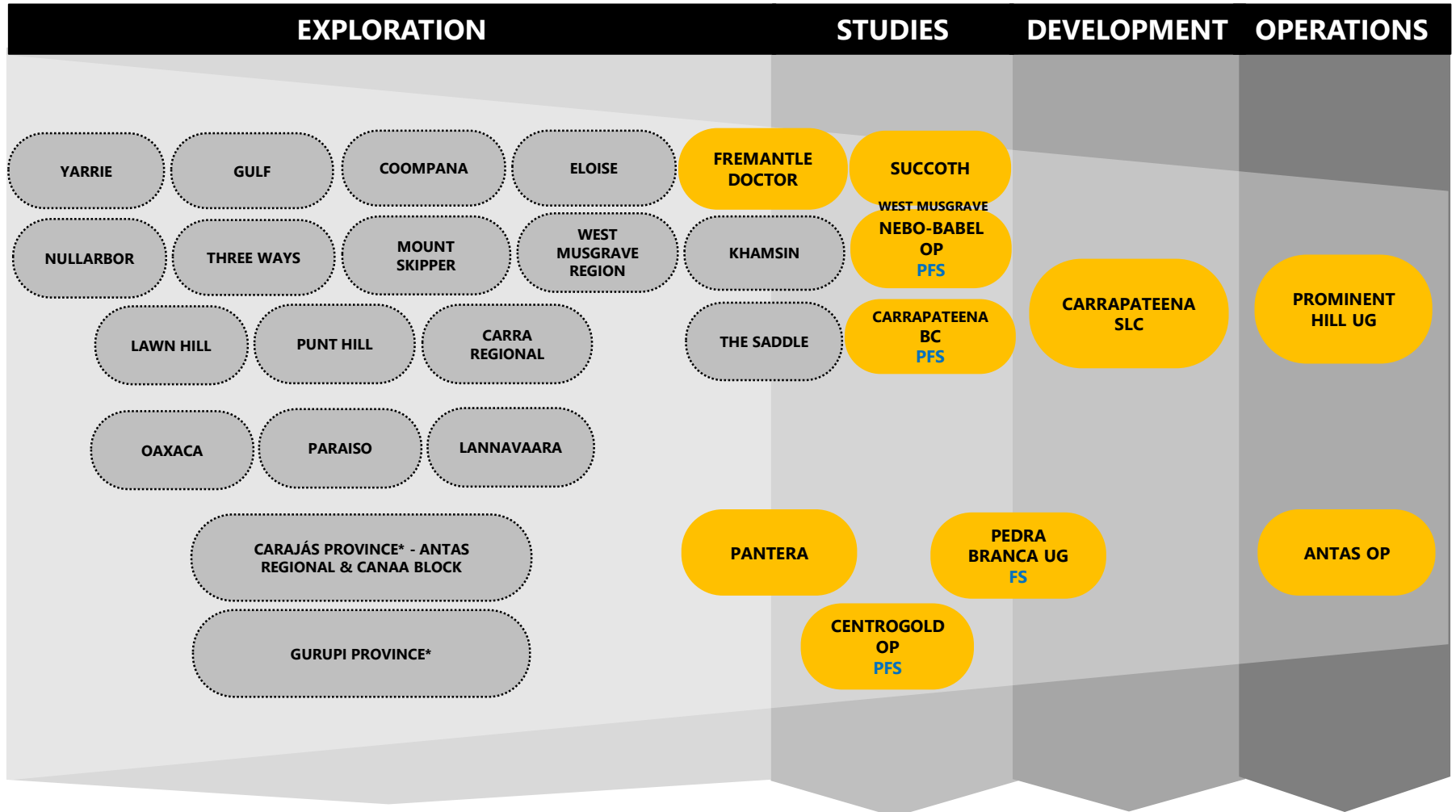
- / **Carajás Province:** Antas produced 1,867 tonnes of copper and 1,701 ounces of gold in Q1
  - / Metal in concentrate reflects lower realised grades, mining of stage three cut-back and lower equipment availability
  - / Record plant throughput and plant ore tonnes milled in January as operational improvements embedded
  - / Review of open pit Mineral Resource underway
- / Resource delineation drilling under Antas North open pit underway, testing at depth for underground mining potential
- / Resource delineation drilling successfully completed ahead of schedule at Pedra Branca East with four drill rigs completing ~9,000m; Mineral Resource update progressing
- / **Gurupi Province:** Resource delineation drilling continued into the Blanket and Contact deposits at CentroGold; Mineral Resource updates and permitting activities continued
- / CentroGold PFS nearing completion

## UPCOMING ACTIVITY

- / Antas 2019 guidance to be released Q2 following completion of the Mineral Resource and Ore Reserve update and revised mine plan
- / Completion of Pedra Branca Mineral Resource update
- / Completion of CentroGold PFS

# Growth Pipeline

Operations, projects and a growing pipeline of opportunities



\* Multiple targets under review



No Resource estimate



Resource estimate

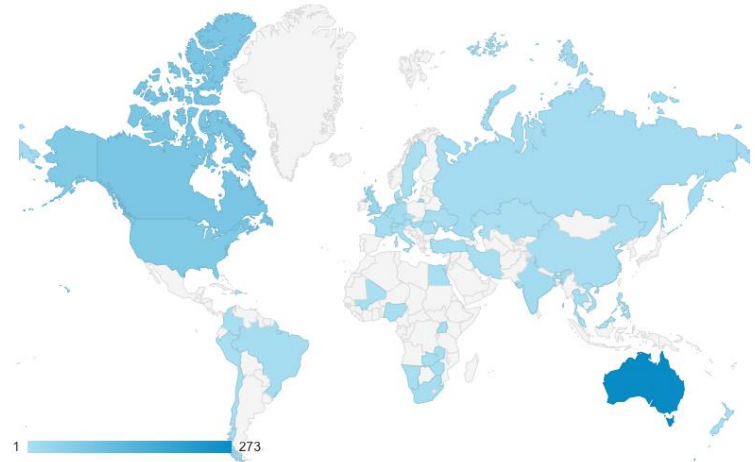
FS: Feasibility Study  
PFS: Pre-Feasibility Study

# Explorer Challenge Update

## Crowdsourcing exploration at Mount Woods

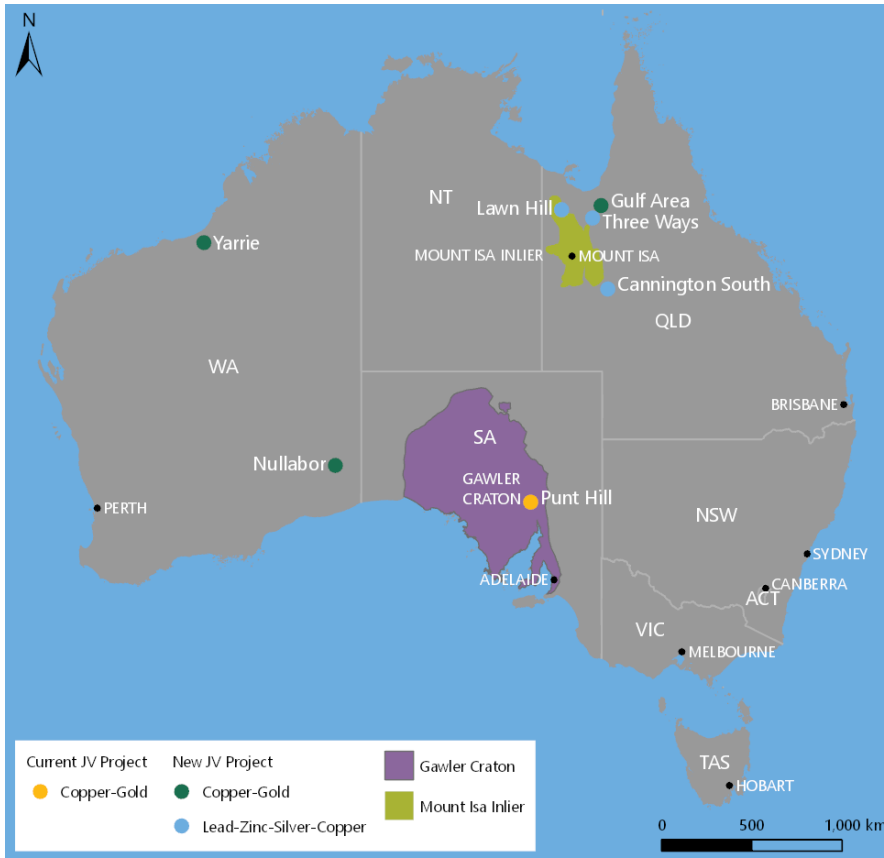
- / 40% into the competition with 8 weeks to go
- / Over 1,000 active competitors from 64 countries across main challenge and data science stream:
  - / International universities
  - / Geospatial consultants
  - / Data scientists
  - / A.I. companies
  - / Geoscientists and more
- / 4327 datasets / 6.37Tb downloaded by competitors
- / Drilling database is the most downloaded, followed by core tray photos
- / Over 2000 views on the Explorer YouTube Channel with Data Nerds vs Rock Lickers promotion the most viewed

### LOCATION OF EXPLORER COMPETITORS COLOURED BY DENSITY



# Red Metal Alliance

## RED METAL ALLIANCE PROJECT LOCATIONS



## MULTI-STAGE DISCOVERY ALLIANCE

- / Six new projects targeting large base metal deposits in WA and QLD
- / Projects located within highly endowed and emerging mineral provinces
- / Red Metal is a respected explorer with strong technical ability
- / Agreement provides mechanism whereby other new projects may be added
- / OZ Minerals has committed to spending \$8.05 million in exploration over first two years across the six projects
- / OZ Minerals can earn a 51% interest in each project through expenditure (ranges from \$7 million – \$15 million) over four years

## UPCOMING ACTIVITY

- / Ground geophysics scheduled to commence on Nullabor and Three Ways Projects
- / Heritage surveys prior to drill testing planned at Mt Skipper Project



# 2019 Key Milestones

Business Area	Milestone	2019			
		Q1	Q2	Q3	Q4
Prominent Hill Province	Haulage Feasibility Study				
	Updated Mineral Resource and Ore Reserve Statement				
Carrapateena Province	Province expansion Scoping Study				
	First commercial concentrate production				
	Updated Mineral Resource and Ore Reserve Statement				
West Musgrave Province	Mineral Resource update for Nebo-Babel				
	70% earn-in to project				
	Pre-Feasibility Study				
Carajás Province	Antas Mineral Resource and Ore Reserve update + 2019 guidance				
	Pedra Branca Mineral Resource update				
	Pedra Branca early works decision / commencement				
Gurupi Province	CentroGold Pre-Feasibility Study				
	CentroGold Mineral Resource update				
Strategic Operational Projects	CTP decision on next steps				

## 2019 Guidance

GUIDANCE	2019*		
	PROMINENT HILL	CARRAPATEENA	TOTAL
Copper Production (tonnes)	95,000-105,000	2,000-4,000	<b>97,000-109,000</b>
Gold Production (ounces)	115,000-125,000	3,000-6,000	<b>118,000-131,000</b>
Underground Ore Movement (Mt)	3.7-4.0		
Underground Sustaining Capital Expenditure (A\$M)	50-60		<b>50-60</b>
Site Sustaining Capital Expenditure (A\$M)	12-15	4-6	<b>16-21</b>
Growth Capital Expenditure (incl. mine development) (A\$M)	35-45	540-570 <sup>3,4</sup>	<b>575-615</b>
AISC (US c/lb) <sup>2</sup>	110-120	185-195	<b>110-120</b>
C1 Costs (US c/lb) <sup>2</sup>	65-75 <sup>1</sup>	135-145	<b>65-75</b>
Exploration (A\$M)			<b>30-35</b>
Project studies and drilling commitments to next stage gate (A\$M)			<b>75-80<sup>5</sup></b>

\* 2019 guidance for Antas will be released in Q2 upon completion of the Mineral Resource and Ore Reserve update and revised mine plan

<sup>1</sup> US dollar denominated C1 costs for Prominent Hill will benefit by US1.5c per US1c reduction in the AUD/USD exchange rate.

<sup>2</sup> AUD/USD of 0.73 has been used in converting A\$ costs to US\$ for C1 and AISC guidance

<sup>3</sup> Additional commissioning expenditure of A\$40-A\$45 million in 2019 will be offset on sale of concentrate from commissioning ore in Q1 2020. Guidance does not include copper produced from ore mined during mine construction.

<sup>4</sup> Carrapateena growth capital expenditure includes pre-production capital (A\$465-A\$485 million), mine development (A\$30-A\$35 million) and underground infrastructure development (A\$45-A\$50 million)

<sup>5</sup> Project studies and drilling costs of A\$75-A\$80 million reflects anticipated expenditure on Board approved studies to their next milestone. Should the Board approve a project to proceed to a further milestone, additional funds will be incurred and guidance will be updated as required.