



# Youanmi Gold Project Scoping Study

**OCTOBER 2022**

Alex Passmore | Managing Director



# Cautionary Statement

The Scoping Study referred to in this ASX release has been undertaken to evaluate the potential development of the Youanmi Gold Project (“Project”) near Mt Magnet, approximately 480 kilometres northeast of Perth, Western Australia. Rox Resources Limited (“Rox Resources, Rox, the Company”) owns 70% and is the operator of the Project. The Scoping Study is prepared based on a 100% basis and is a preliminary technical and economic study of the potential viability of the Youanmi Gold Project. It is based on low accuracy level technical and economic assessments that are not sufficient to support estimation of Ore Reserves. Infill drilling and evaluation work and appropriate studies are required before Rox Resources will be able to estimate Ore Reserves or to provide assurance of an economic development case. The Scoping Study has been completed to a level of accuracy of +/- 40%.

Of the Mineral Resources scheduled for extraction in this Scoping Study production target plan, approximately 79% are classified as Indicated and 21% as Inferred in the first three years and 63% are classified as Indicated and 37% as Inferred over the evaluation period. There is a low level of geological confidence associated with Inferred Mineral Resources, and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

The Youanmi Gold Project has been mined successfully over four main campaigns since discovery of the original orebody in 1894, with approximately 667koz Au produced. The Company therefore considers the Youanmi Gold Project to be a very mature project which increases the confidence of converting the current Mineral Resources into Ore Reserves.

Rox Resources confirms that the Project is financially viable when excluding Inferred Resources in the production target schedule.

The Company believes that it has a reasonable basis for providing these forward-looking statements and the forecast financial information based on material assumptions outlined in this release. One of the key assumptions is that the funding for the Project will be available when required. While the Company considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the range of outcomes indicated in the Scoping Study, funding in the order of approximately \$134m will likely be required comprising of approximately \$99m in pre-production capital expenditure and approximately \$35m in working capital and assumed financing charges. There is no certainty that the Company will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Rox Resources’ shares. It is also possible that Rox Resources could pursue other value realisation strategies such as a sale, partial sale or joint venture of the Youanmi Gold Project. If it does, this could materially reduce the Company’s proportionate ownership of the Project. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

# Disclaimers and Competent Person Statement



## Forward-Looking Statements

This presentation has been prepared by Rox Resources Limited. This document contains background information about Rox Resources Limited current at the date of this presentation. The presentation is in summary form and does not purport to be all inclusive or complete. Recipients should conduct their own investigations and perform their own analysis in order to satisfy themselves as to the accuracy and completeness of the information, statements and opinions contained in this presentation.

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Refer to Rox Resources Limited ASX release 19 October 2022, for the Youanmi Gold Project Scoping Study details. Rox Resources Limited confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning that release continue to apply and have not materially changed.

## Competent Person Statements

### Exploration Results

The information in this report that relates to previous Exploration Results was prepared and first disclosed under the JORC Code 2012 and has been properly and extensively cross-referenced in the text to the date of the original announcement to the ASX.

Where reference is made to previous releases of exploration results in this announcement, the Company confirms that it is not aware of any new information or data that materially affects the information included in those announcements and all material assumptions and technical parameters underpinning the exploration results included in those announcements continue to apply and have not materially changed.

The information in this report that relates to previous Exploration Results was prepared and first disclosed under the JORC Code 2012 and has been properly and extensively cross-referenced in the text to the date of the original announcement to the ASX.

### Resource Statements

The Statement of Estimates of Mineral Resources for the Youanmi Near Surface Resource was reported by Rox in accordance with ASX Listing Rule 5.8 in the announcement released to the ASX on 20th April 2022. Rox confirms it is not aware of any new information or data that materially affects the information included in the previous announcements and that all material assumptions and technical parameters underpinning the estimates in the previous announcements continue to apply and have not materially changed.

The Statement of Estimates of Mineral Resources for the Youanmi Underground Resource was reported by Rox in accordance with ASX Listing Rule 5.8 in the announcement released to the ASX on 20th January 2022. Rox confirms it is not aware of any new information or data that materially affects the information included in the previous announcements and that all material assumptions and technical parameters underpinning the estimates in the previous announcements continue to apply and have not materially changed.

The Statement of Estimates of Mineral Resources that relates to gold Mineral Resources for the Mt Fisher project was reported by Rox in accordance with ASX Listing Rule 5.8 in the announcement released to the ASX on 11th July 2018. Rox confirms it is not aware of any new information or data that materially affects the information included in the previous announcements and that all material assumptions and technical parameters underpinning the estimates in the previous announcements continue to apply and have not materially changed.

### International Financial Reporting Standards

This announcement contains certain financial measures relating to the Scoping Study that are not recognised under International Financial Reporting Standards (IFRS). Although the Company believes these measures provide useful information about the financial forecasts derived from the Scoping Study, they should not be considered in isolation or as a substitute for measures of performance or cash flow prepared in accordance with IFRS. As these measures are not based on IFRS, they do not have standardised definitions and the way the Company calculates these measures may not be comparable to similarly titled measures used by other companies. Consequently, undue reliance should not be placed on these measures.

### Other

All financial results are provided in Australian dollars unless stated otherwise.



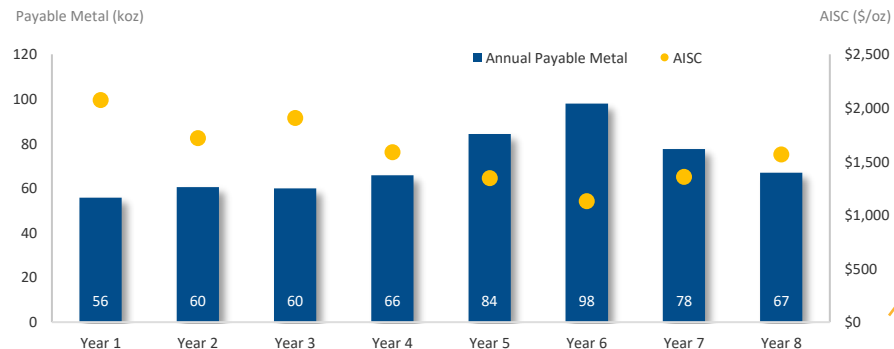
## PROJECT OVERVIEW

# Youanmi Gold Project

- Rox holds a 70% interest in the Youanmi Gold Mine (OYG Joint Venture) and is Manager of the JV
- Scoping Study outlines a production target of 569koz Au at an average AISC of \$1,538/oz over 8 years
- Pre-production capital cost of \$99m
- Leverages off existing infrastructure
- Gold and gold-in-concentrate production
- NPV of \$303m, IRR of 45% at a gold price of \$2,450/oz
- Further upside available with future expansions



Annual Payable Metal and AISC (100% basis)<sup>1</sup>





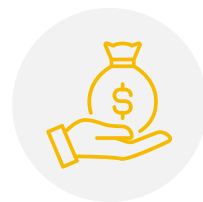









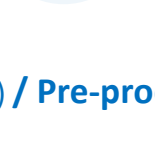
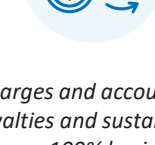


Notes:

1. Payable metal is recovered gold after payability and presented on 100% basis. Rox owns 70% of the OYG joint venture.



# The Project Generates High Quality Outcomes at a Low Capital Cost

 <h2>Mining Physicals</h2>	 <p><b>Total Material Processed</b> 3.9Mt @ 5.0g/t Au</p>	 <p><b>LOM Payable Metal</b> 569koz over 8 years from 3.2Moz resource</p>	 <p><b>Plant Throughput</b> 480ktpa</p>
 <h2>Capital Requirement</h2>	 <p><b>Annual Payable Metal</b> 71koz pa</p>	 <p><b>C1 Cash Cost<sup>1</sup></b> \$1,358/oz</p>	 <p><b>AISC<sup>2</sup></b> \$1,538/oz</p>
 <h2>Financial Outcomes<sup>3</sup></h2>	 <p><b>Pre-Production Capex</b> \$99m</p>	 <p><b>LOM Sustaining Capex</b> \$59m</p>	 <p><b>NPV<sub>5%</sub></b> (unleveraged and pre-tax) \$303m</p>
	 <p><b>IRR</b> (unleveraged and pre-tax) 45%</p>	 <p><b>Payback Period<sup>4</sup></b> (unleveraged and pre-tax) 3.0 years</p>	 <p><b>Capital Intensity<sup>5</sup></b> \$1,386/oz</p>
	 <p><b>NPV (unleveraged and pre-tax) / Pre-production Capital</b> 3.1</p>		

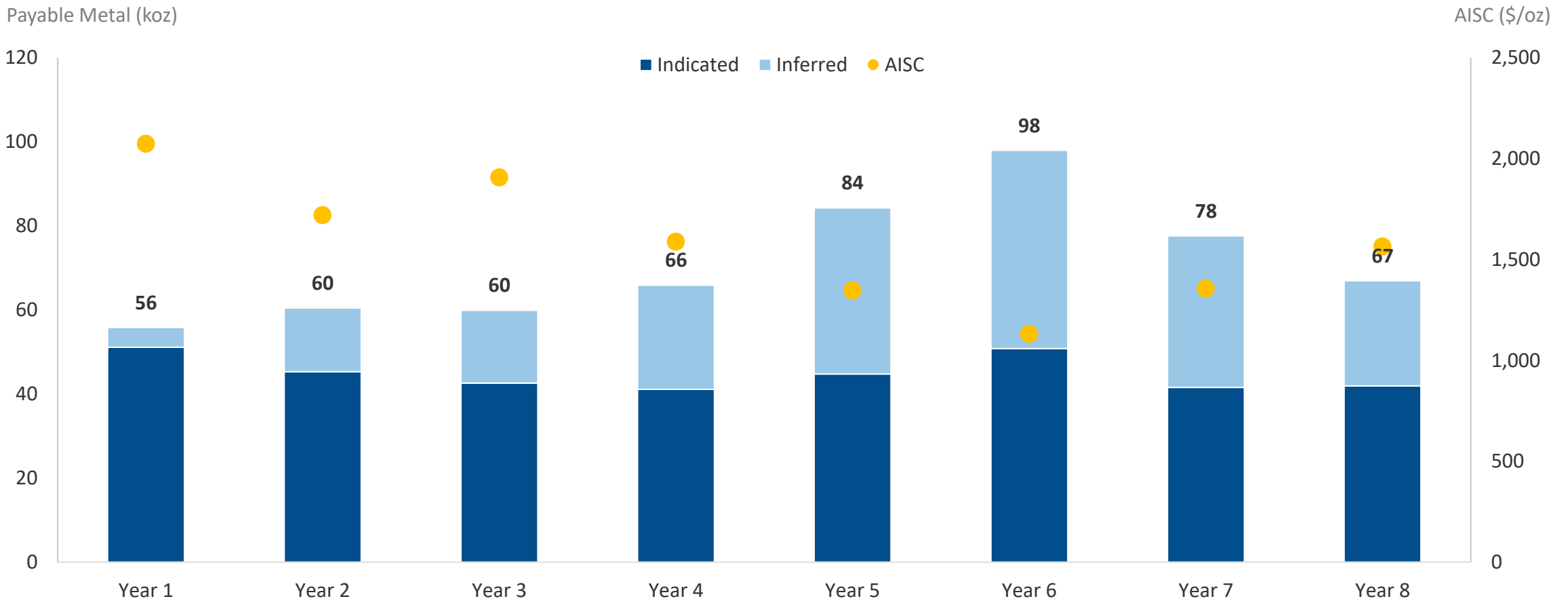
**Notes:**

1. C1 cash cost includes mining, processing, administration, concentrate charges and accounting adjustments for stockpile movements, and is calculated based on payable metal.
2. All-In Sustaining Cost (AISC) per ounce payable includes C1 cash cost, royalties and sustaining capital calculated based on payable metal. It does not include corporate cost, exploration cost and non-sustaining capital.
3. Financial results are unleveraged and pre-tax numbers calculated based on a 100% basis and in Australian dollars unless stated otherwise. Rox owns 70% of the OYG joint venture.
4. Payback period is calculated from the first month of the gold production target.
5. Capital intensity is calculated by dividing pre-production capital by annual payable metal.

# Production Target and AISC

*Total payable metal produced is approximately 569koz with a low AISC of \$1,538/oz over the life-of-mine*

## Annual Payable Metal and All-In Sustaining Cost (AISC) (100% basis)<sup>1</sup>

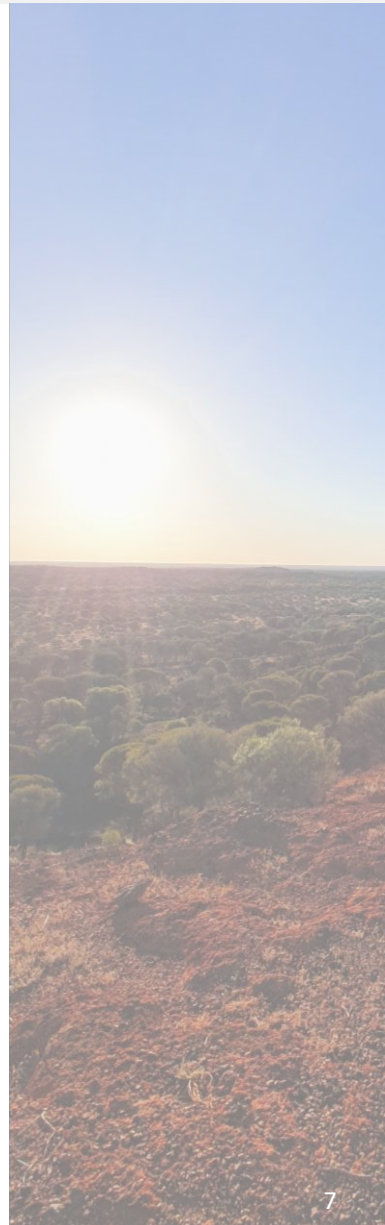
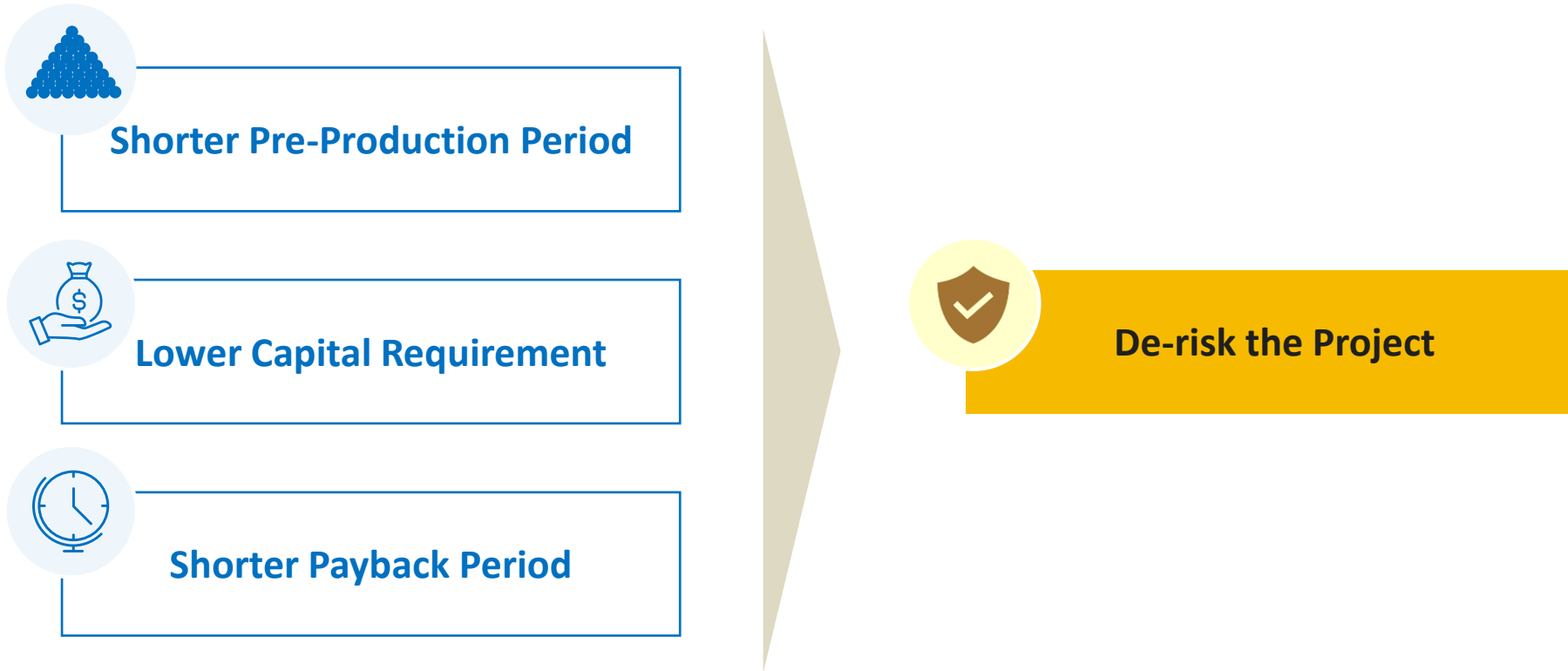


### Notes:

1. Payable metal is recovered gold after payability and presented on a 100% basis. Rox owns 70% of the OYG joint venture.

# Gold Concentrate Production

*The Company has considered various options to develop the Project including producing only concentrates, building an Albion Process plant to produce bullion on site, or various combinations. It has determined that a combination of gold-in-concentrate and carbon-in-leach bullion is the optimum commercialisation strategy for Youanmi.*



# Gold Concentrate Production Advantages

## Main Ore Types at Youanmi

Non - Sulphide

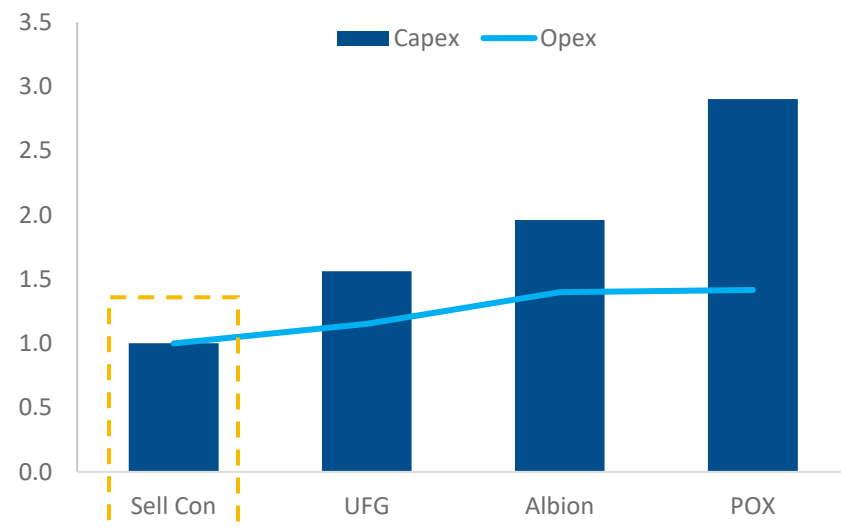
Sulphide

Readily extractable via CIL. Most of this material is in the near surface resource. Some material also within quartz rich lodes in the Underground.

Fine gold associated with Pyrite (75%); and gold associated with Arsenopyrite (25%) which is easily floatable in a simple proven process flow circuit. Concentrate cleaned to make an easily marketable low As saleable concentrate.

## 480 ktpa Plant Relative Capex and Opex (Relative Units)

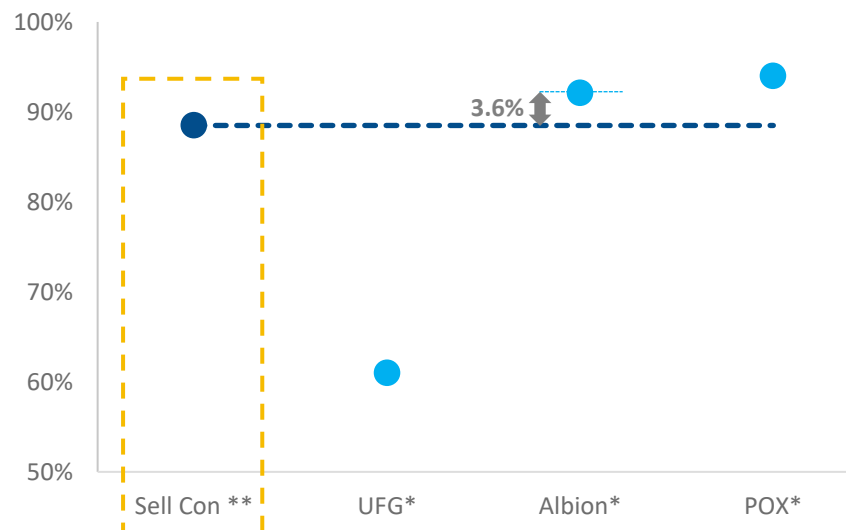
(Unit)



In today's cost environment, with a keen focus on return for capital (capex reduction) concentrate sales presents as a compelling opportunity that was not available to sulphide ores previously.

## Payable Metal / Metal in Feed - Youanmi Sulphides

(%)



Concentrates achieve very high metallurgical recoveries, and with high Au concentrate grades and low As impurity grades high payability is achievable – in the order of 95% gold content.

\* Based on 2021 testwork results refer ASX announcement 21<sup>st</sup> December 2021.

\*\* Based on recent concentrate market public knowledge.

**Combination of concentrate sales and CIL bullion production target preferred process pathway for Youanmi as there is a substantial capital and operating cost benefit in comparison with other options.**

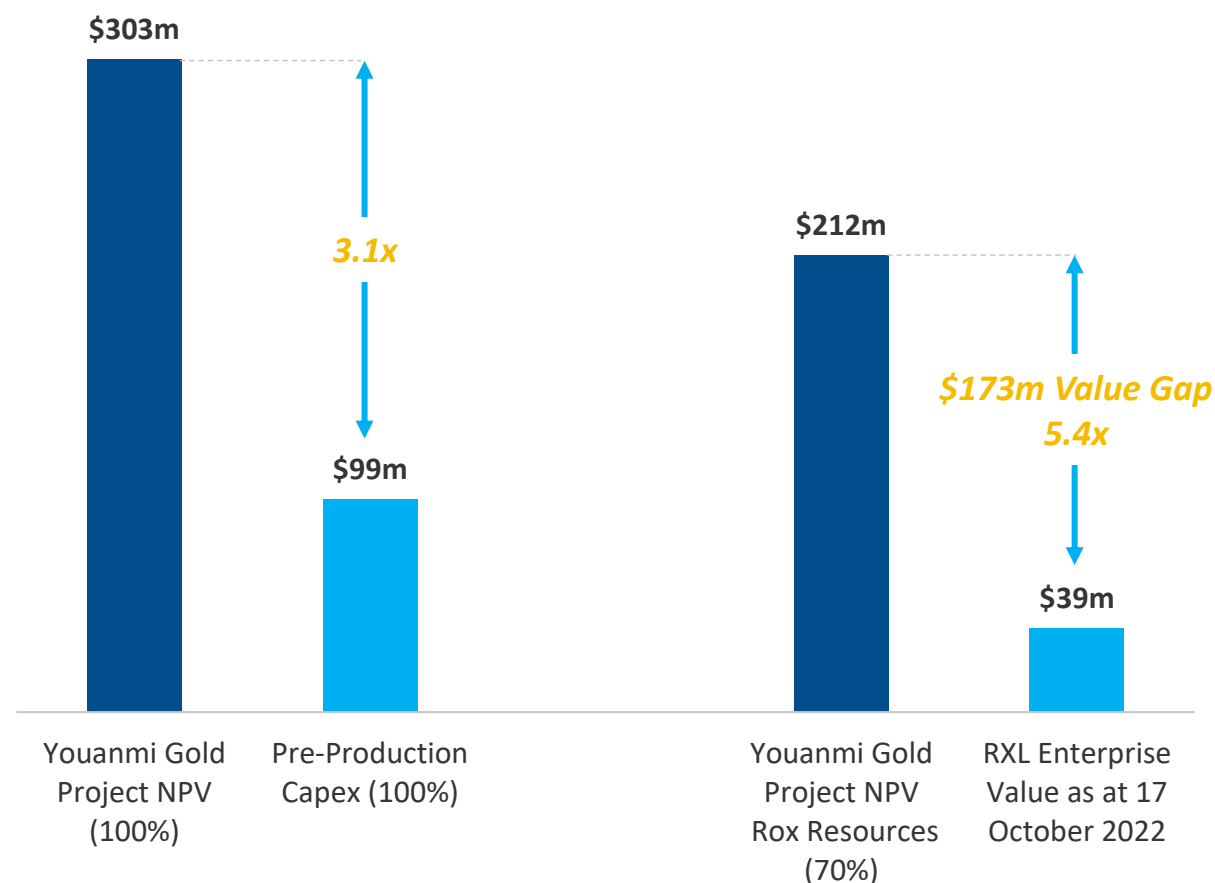


# Capital Requirement

Pre-Production Capital		100%	RXL (70%)
Site Infrastructure	\$m	6	5
Processing Facilities	\$m	66	46
Water Management	\$m	6	4
Underground Development	\$m	19	12
Open Pit	\$m	2	2
<b>Total Pre-Production</b>	<b>\$m</b>	<b>99</b>	<b>69</b>
Sustaining Capital – Life Of Mine			
Underground	\$m	38	27
Other	\$m	21	14
<b>Total Sustaining Capital</b>	<b>\$m</b>	<b>59</b>	<b>41</b>

**Pre-Production Capital  
\$99m**

## Attractive Value Proposition



# Key Study Outcomes<sup>1</sup>

## Key Physicals Assumptions

Life Of Mine	years	8.0
Plant Throughput	ktpa	480

### Open Pit Mining Production Target

Grade	g/t	3.3
Ounces Contained	koz	35

### Underground Mining Production Target

Mine Grade	g/t	5.1
Ounces Contained	koz	592

### Processing Physicals

Ore Processed	kt	3,900
Grade	g/t	5.0
Ounces Contained	koz	624

### Payable Metal<sup>2</sup>

Gold-in-concentrate	koz	510
Gold bullion	koz	59

## Capital Costs

Pre-production Capital	\$m	99
Sustaining Capital	\$m	59
<b>Total</b>	<b>\$m</b>	<b>158</b>

## Operating Costs<sup>3</sup>

Mining Cost	\$/oz	690
Processing Cost	\$/oz	395
Site G&A	\$/oz	35
Transportation Charge	\$/oz	91
Smelter Treatment Charge	\$/oz	147
<b>C1</b>	<b>\$/oz</b>	<b>1,358</b>
Royalty	\$/oz	81
Sustaining Capital	\$/oz	99
<b>AISC</b>	<b>\$/oz</b>	<b>1,538</b>

## Key Financial Assumptions

Gold Price	\$/oz	2,450
Discount Rate	%	5

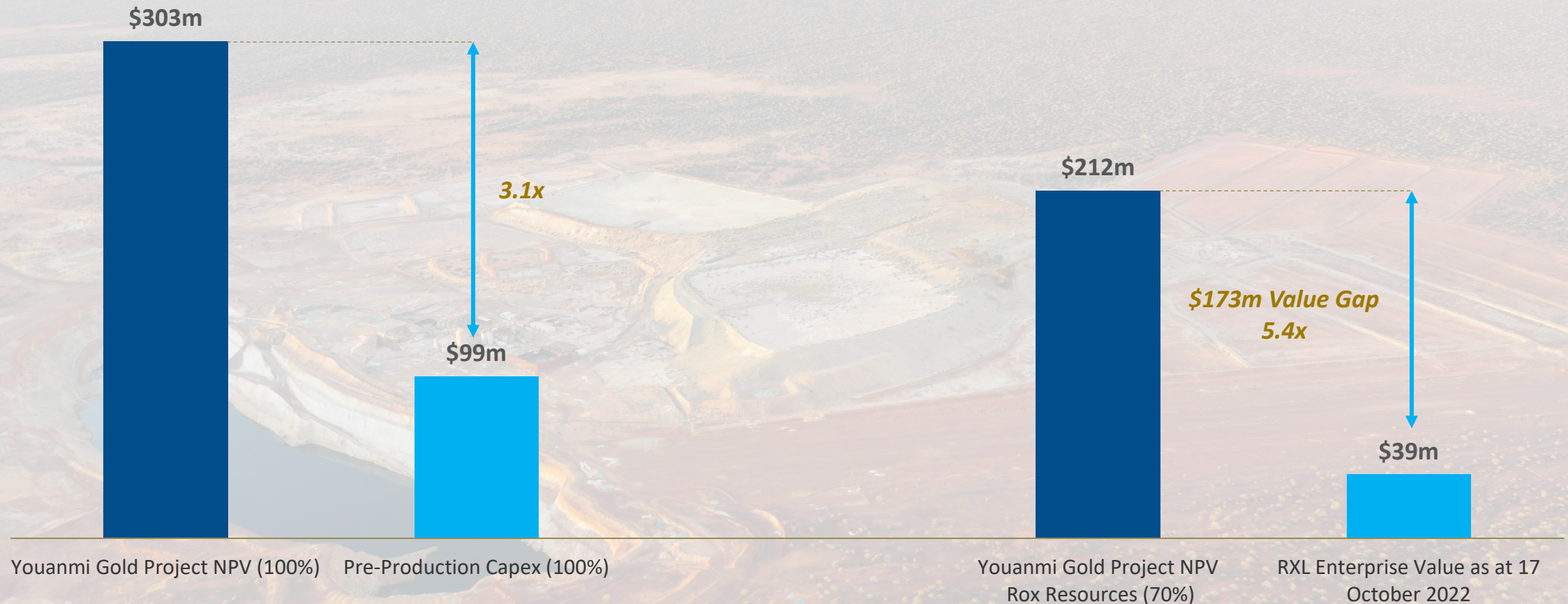
## Project Valuation

<b>EBITDA</b>	<b>\$m</b>	<b>577</b>
<b>Free Cash Flow</b> (undiscounted and pre-tax)	<b>\$m</b>	<b>418</b>
<b>Project NPV</b> (unleveraged and pre-tax)	<b>\$m</b>	<b>303</b>
<b>Project IRR</b> (unleveraged and pre-tax)	<b>%</b>	<b>45</b>
<b>Payback Period<sup>4</sup></b> (unleveraged and pre-tax)	<b>years</b>	<b>3.0</b>
<b>Capital Intensity<sup>5</sup></b>	<b>\$/oz</b>	<b>1,386</b>
<b>NPV / Pre-production Capital</b>	<b>ratio</b>	<b>3.1</b>

#### Notes:

1. All numbers are presented on a 100% basis and in Australian dollars unless stated otherwise. Rox owns 70% of the OYG joint venture.
2. Payable metal is recovered gold after payability.
3. Operating costs are calculated based on payable metal.
4. Payback period is calculated from the first month of gold production.
5. Capital intensity is calculated by dividing pre-production capital by the annual production target.

# Attractive Value Proposition



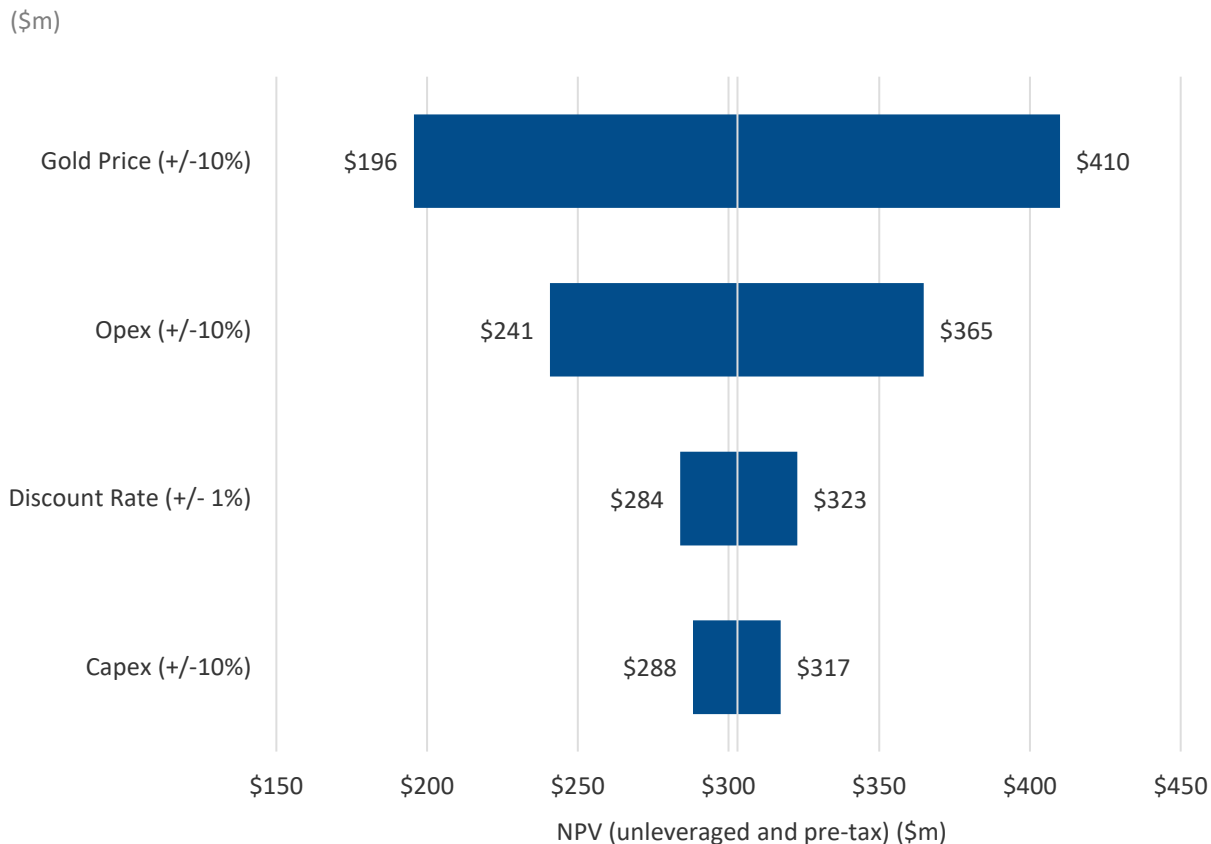
Notes:

1. Financial results are unleveraged and pre-tax numbers calculated based on a 100% basis and in Australian dollars unless stated otherwise. Rox owns 70% of the OYG joint venture.

# Project Sensitivity Analysis

*The Project shows robust financial returns under various downside scenarios. NPV is most sensitive to movements in gold price and more resilient to the rest of the variables.*

Project NPV (unleveraged and pre-tax) Sensitivity Analysis<sup>1</sup>



Scenario Analysis – Various Gold Price Assumptions

							Base Case			
Gold Price (A\$/oz)		\$2,000	\$2,100	\$2,200	\$2,300	\$2,400	\$2,450	\$2,500	\$2,600	\$2,700
NPV	\$m	106	150	193	237	281	303	325	368	412
IRR	%	20	26	32	37	43	45	48	54	59
Payback <sup>2</sup>	Years	4.9	4.6	4.0	3.7	3.2	3.0	2.8	2.5	2.3
Annual EBITDA	\$m	41	48	55	62	69	72	76	82	89
LOM EBITDA	\$m	329	384	439	494	549	577	604	659	714
LOM Free Cash Flow	\$m	171	226	281	336	391	418	446	500	555

Notes:

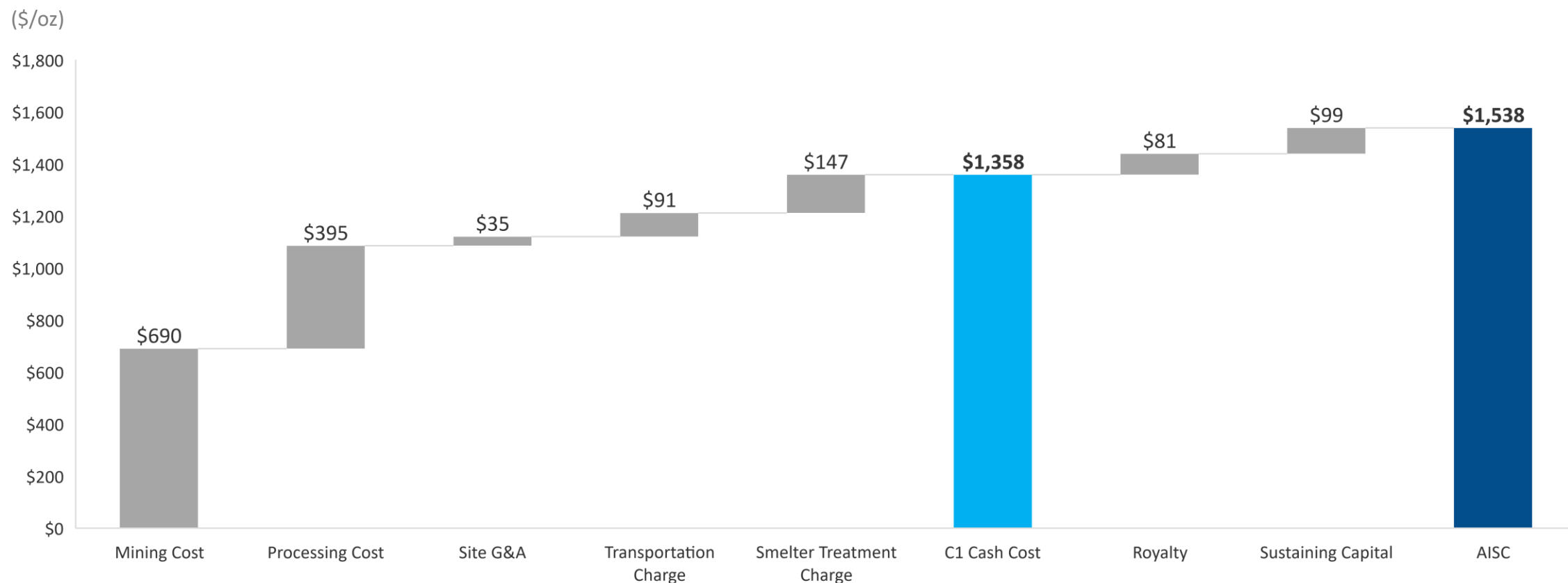
- Financial results are unleveraged and pre-tax numbers calculated based on a 100% basis and in Australian dollars unless stated otherwise. Rox owns 70% of the OYG joint venture.
- Payback period is calculated from the first month of the gold production target.



# Attractive All-In Sustaining Cost

*The Project has an attractive LOM All-In Sustaining Cost (AISC) given the current inflationary cost environment in the mining industry.*

## LOM C1 Cash Cost and AISC Breakdown<sup>1</sup>



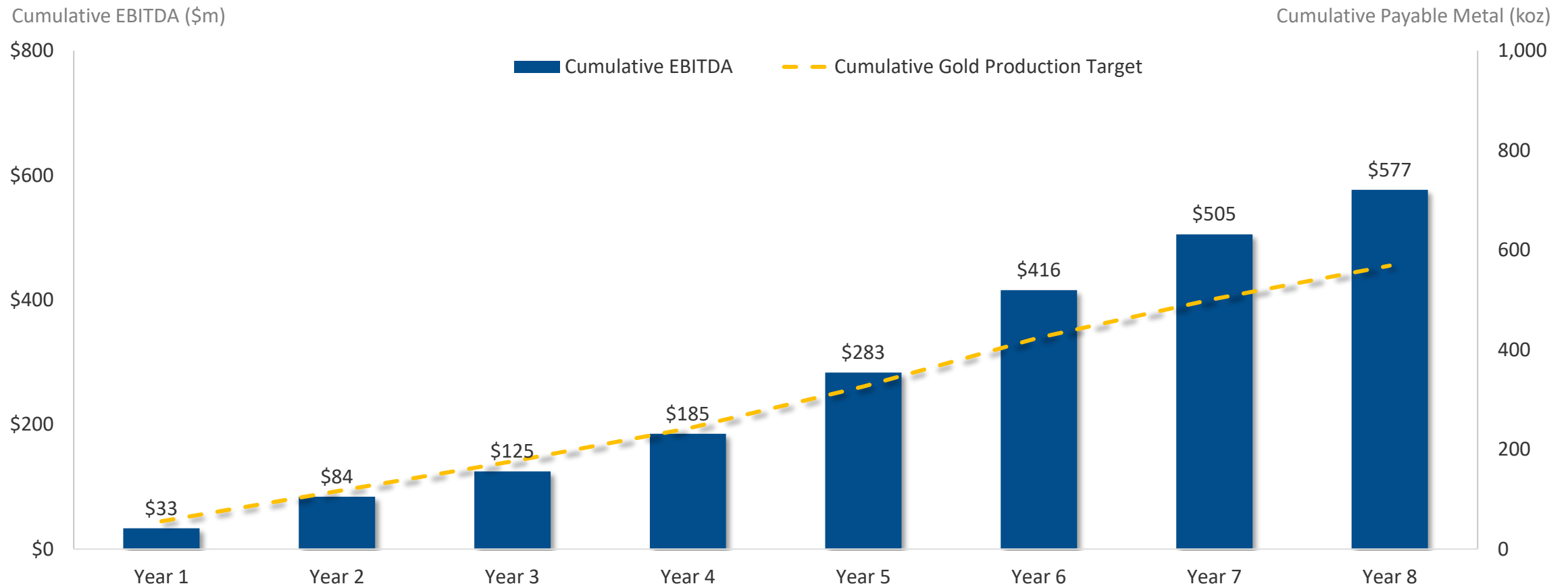
### Notes:

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# Outstanding Project EBITDA

*At a conservative gold price of A\$2,450/oz, the Project is forecast to generate a healthy EBITDA of \$577m over the life-of-mine*

## Cumulative EBITDA and Gold Production Target (100% basis)<sup>1</sup>



### Notes:

1. Numbers are presented after payability on a 100% basis and in Australian dollars unless stated otherwise. Rox owns 70% of the OYG joint venture.

# Upside and Growth Options

*In the current market environment, the Scoping Study has focused on high quality outcomes at a low capital cost. The following factors offer potential medium-term upside to the Scoping Study outcomes.*



## Growth in Near Surface Resource

- Currently 1.0Moz at 1.74g/t of Au<sup>1</sup>
- Not fully captured in this Scoping Study (only 3% of the Near Surface Mineral Resource is included in mining production target (see next slide)) to lower capital and operating costs given current external market pressures on costs
- Underground produces strong cash flows which can de-risk the project and be used to assist with funding the expansion to include open pits
- Further exploration potential to increase near surface resource



## Underground Resource Growth

- Currently 2.2Moz at 6.89g/t of Au<sup>1</sup>; however, only 27% of the Underground Mineral Resource is included in mining production target (see next slide)
- Link Area is open down plunge
- Resource remains open down dip and along strike
- Maximum depth of the Mine Lode interpretation is to approx. -600mRL, 1,060m below the natural surface



## Regional Exploration

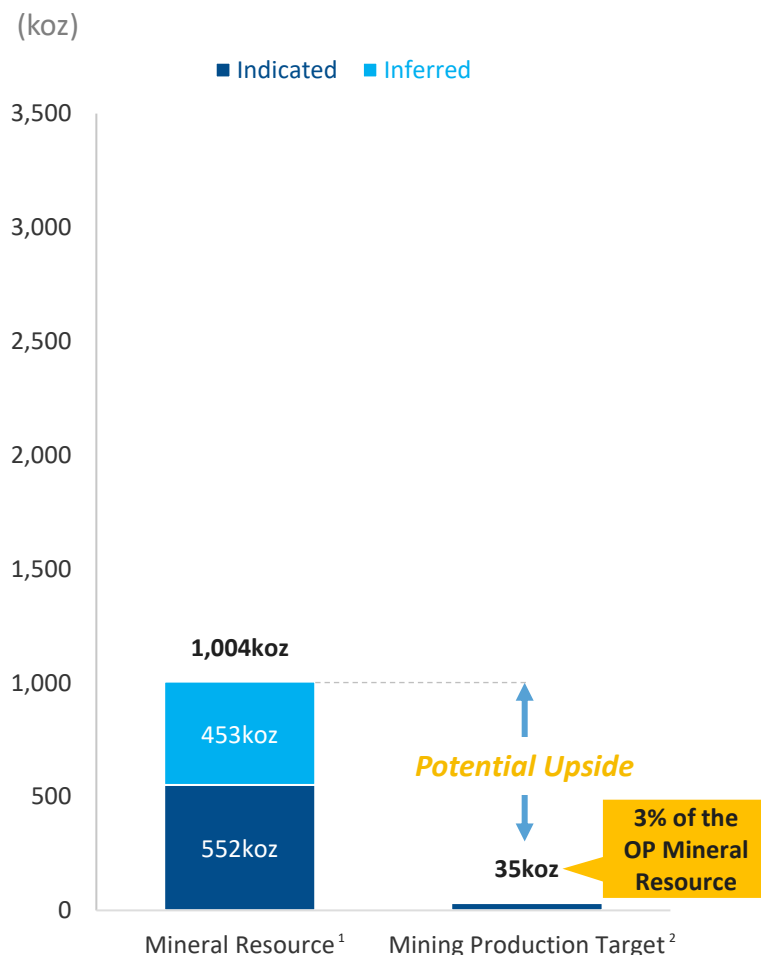
- > 50km strike of Youanmi Shear Zone largely untested by historic drilling
- Follow up drilling (Aircore and RC) planned along strike and down dip of newly identified mineralization
- Regional target generation ongoing on 50km of strike of the Youanmi Shear Zone

### Notes

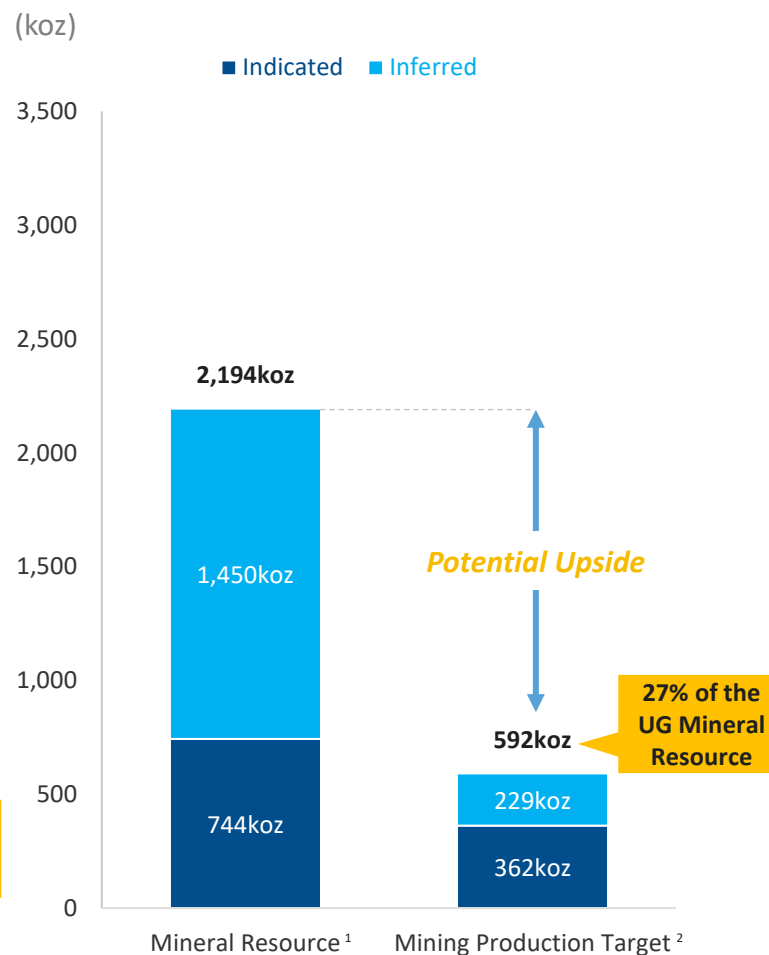
1. Refer ASX announcement 20 April 2022.

# Potential Upside Beyond Production Target

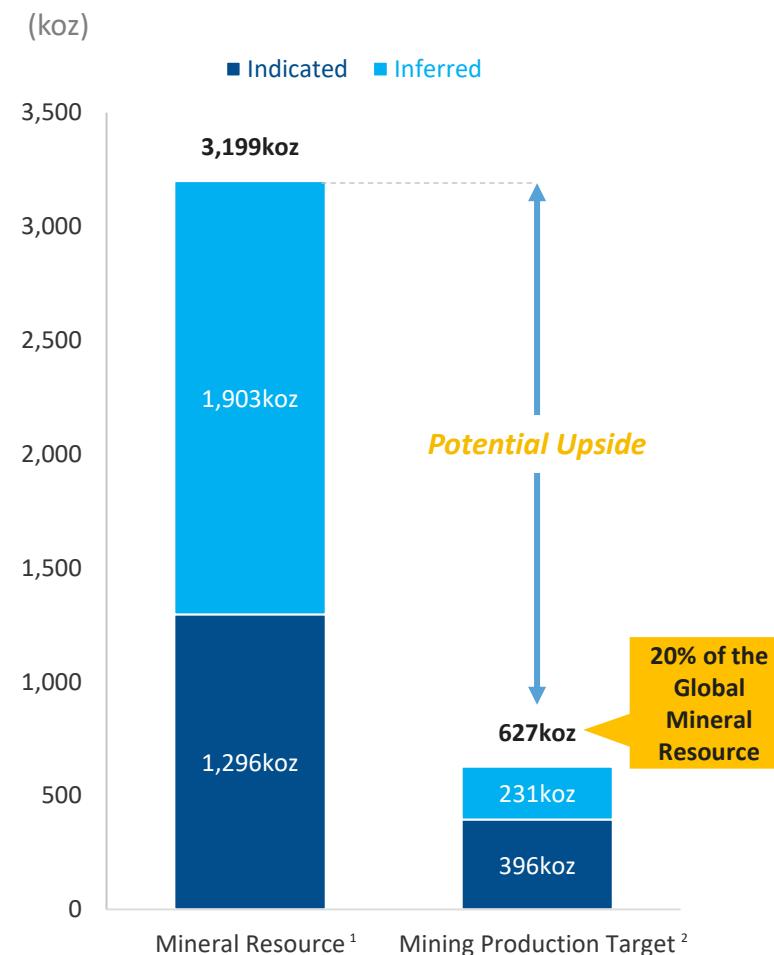
## Potential Upside – Open Pit



## Potential Upside – Underground



## Potential Upside Beyond Production Target



### Notes

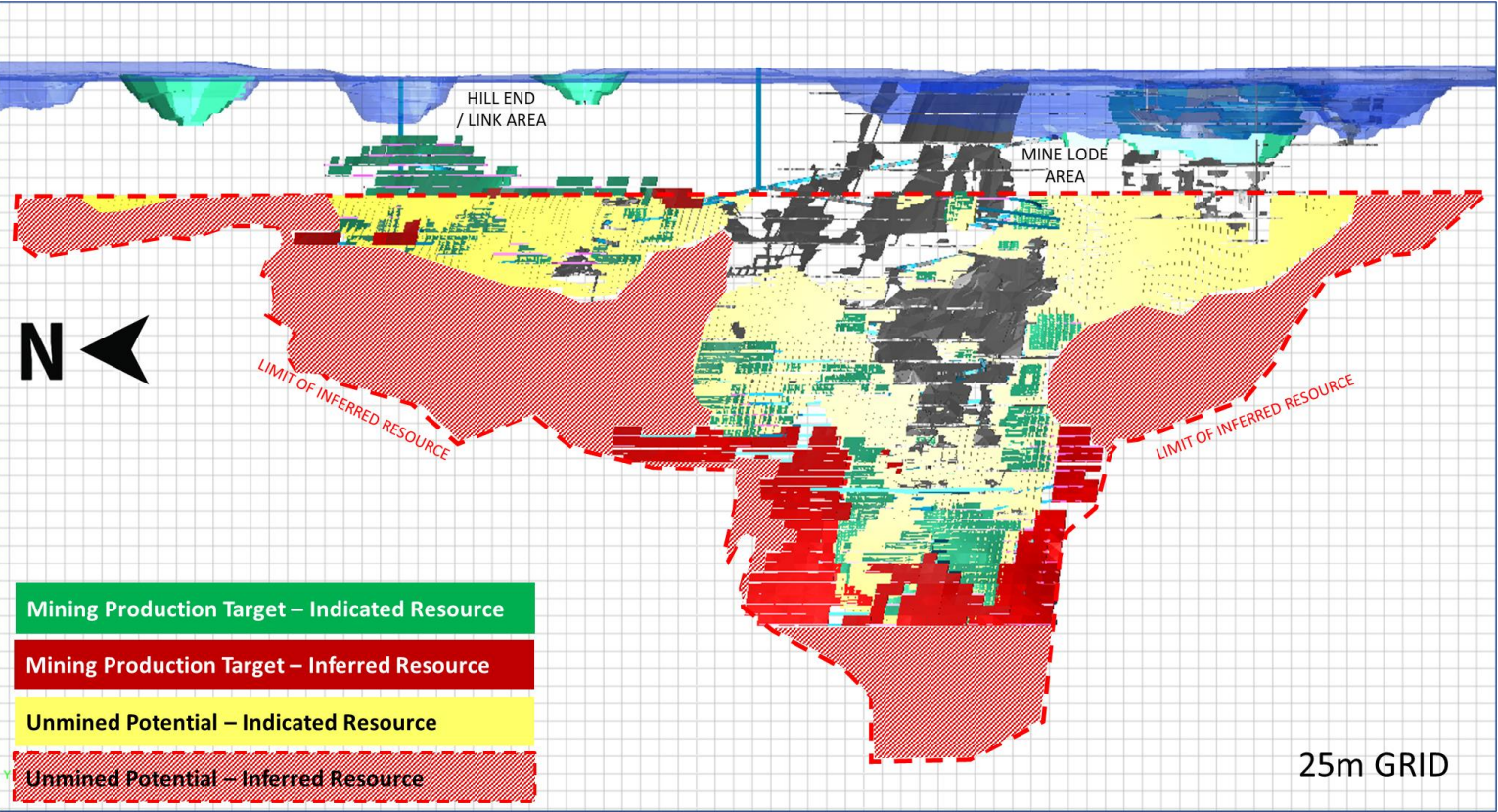
1. Refer ASX announcement 20 April 2022 and Supporting Schedules (slide 25)

2. Mining Production Target is mined ounces which is higher than the payable metal of 569koz as the payable metal is after metallurgical recovery and payability.

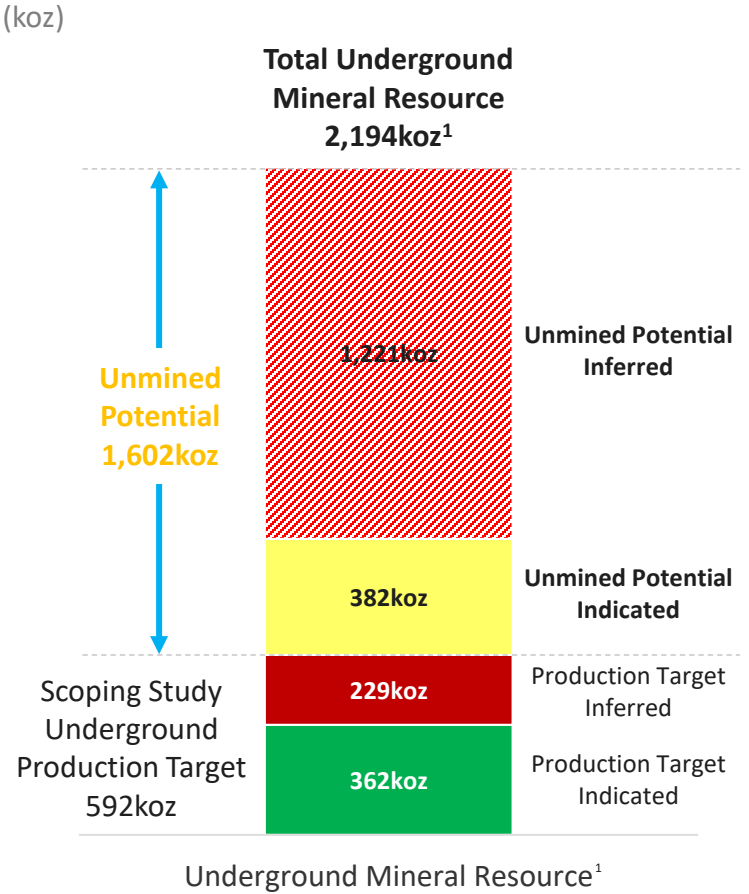


# Project Potential – Underground Resource

Small Mining Envelope Relative to Underground Mining Resource

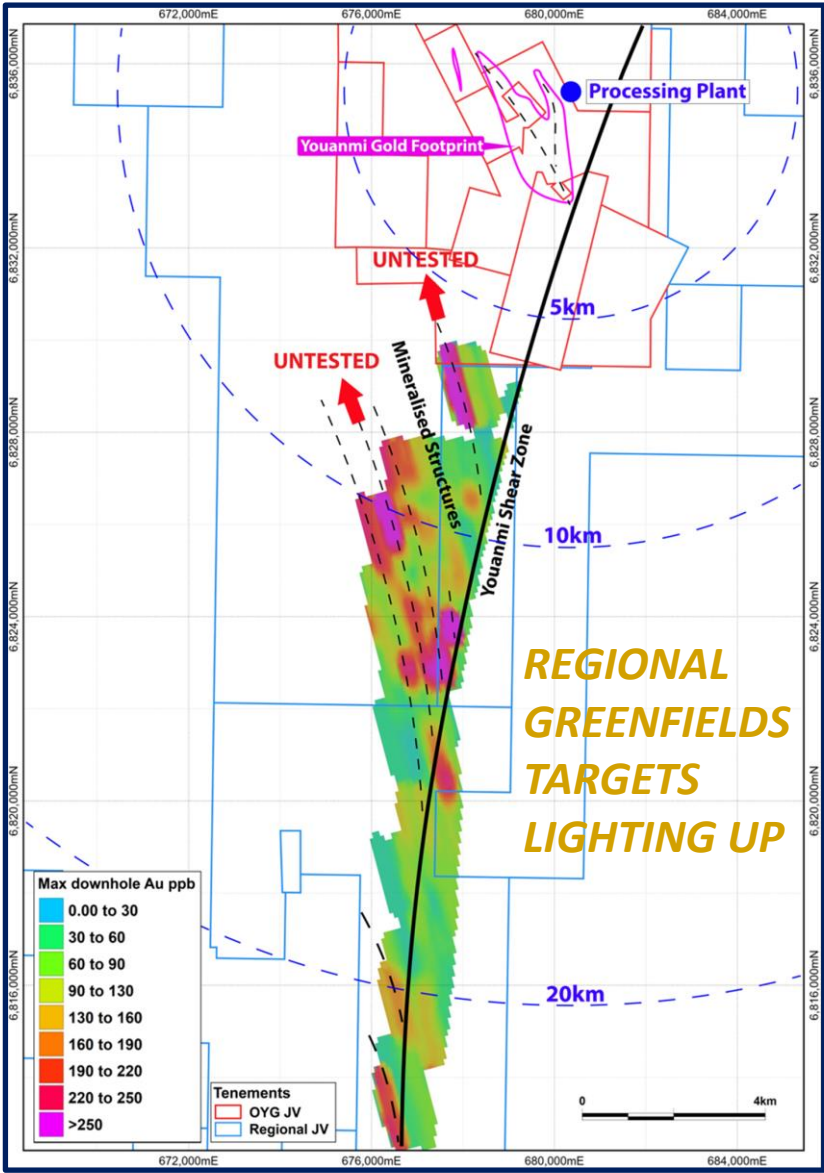
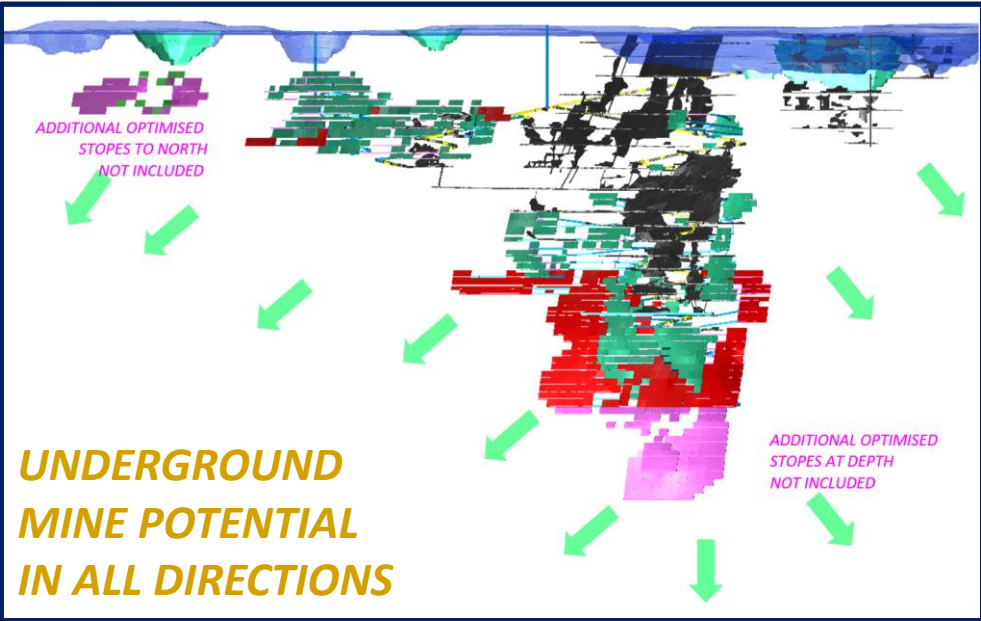
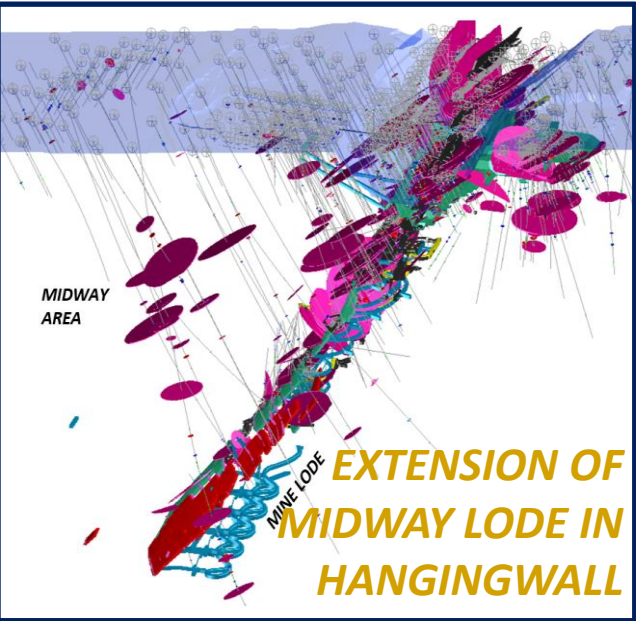
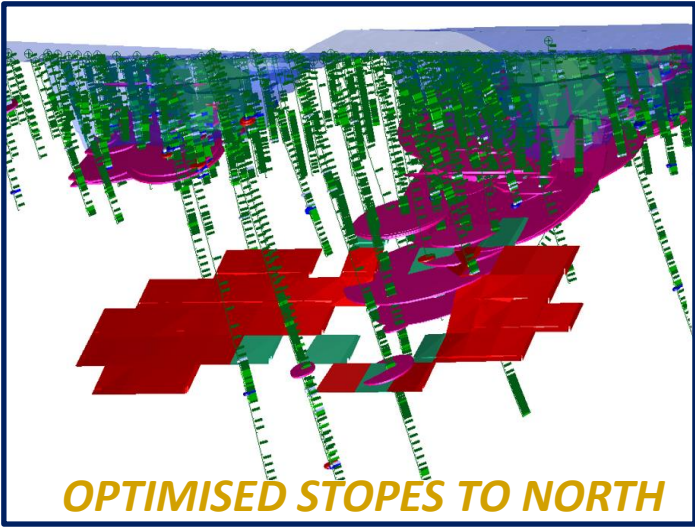
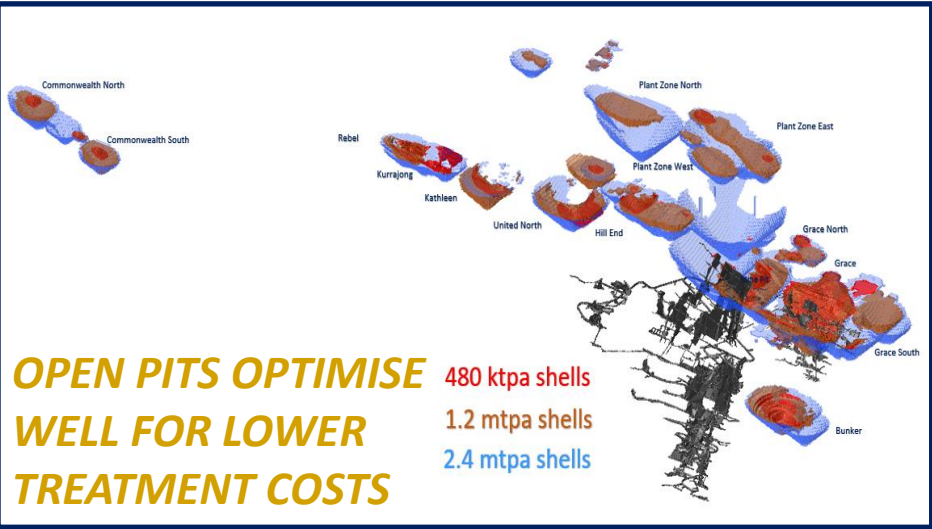


Potential Upside Beyond Production Profile - UG



Notes  
 1. Refer ASX announcement 20 April 2022 and Supporting Schedules (slide 25)

# Additional Potential Opportunities to Extend Project Life / Increase Production Rate





# Next Steps



Inferred to Indicated Resource Conversion



Youanmi Gold Project Resource Update



Further Drilling and Studies (Resource, PFS) to quote reserves



Exploration and Drilling at Youanmi Regional Tenure and Mt Fisher



## ABOUT ROX RESOURCES

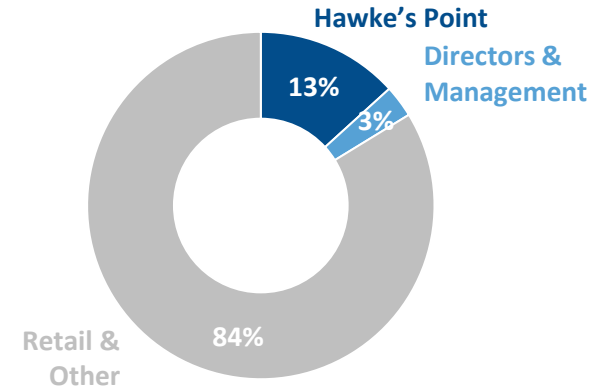
# Corporate Information

Rox Resources Limited (ASX: RXL) is a West Australian focused gold exploration and development Company. It is 70% owner and operator of the historic Youanmi Gold Project near Mt Magnet, approximately 480km northeast of Perth, and wholly owns the Mt Fisher Gold Project approximately 150km from Jundee.

## Capital Structure

ASX Code	RXL
Shares on Issue	168.9m
Share Price (as at 17 October 2022)	\$0.23
Unlisted Options	20.6m
Market Capitalisation	\$38.9m
Cash (as at 30 June 2022)	\$4.4m
Debt	Nil

## Shareholders



Top 20 Holders	31%
Top 70 Holders	44%
Institutional Shareholders	22%

## Board & Management

<b>Stephen Dennis</b>	Chairman
<b>Alex Passmore</b>	Managing Director
<b>John Mair</b>	Non-Executive Director
<b>Robert Ryan</b>	Non-Executive Director
<b>Chris Hunt</b>	Chief Financial Officer
<b>Matt Antill</b>	General Manager – Operations
<b>Gregor Bennett</b>	Exploration Manager

## RXL Share Price History

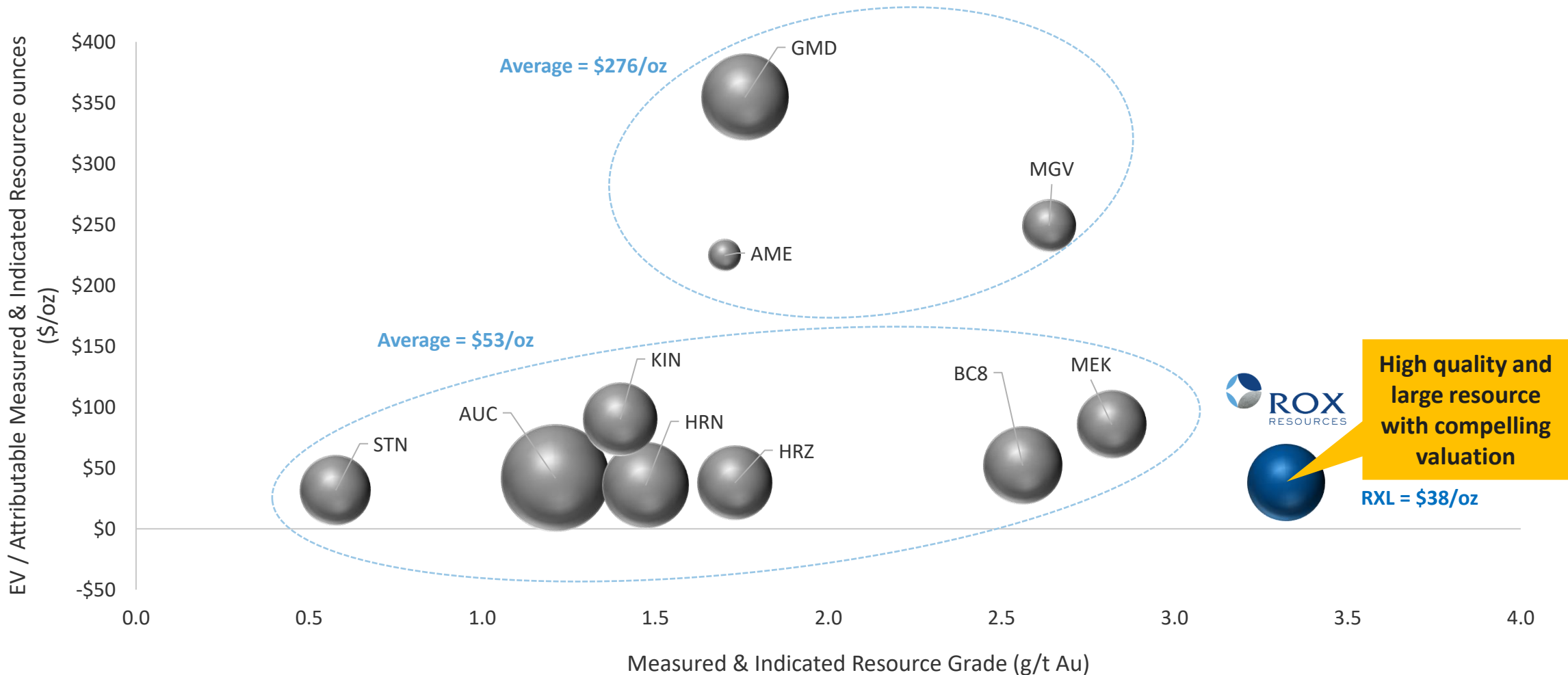




# Comparable Gold Companies

## EV / Attributable Measured & Indicated Resource Ounces vs Grade for Comparable Gold Companies<sup>1</sup>

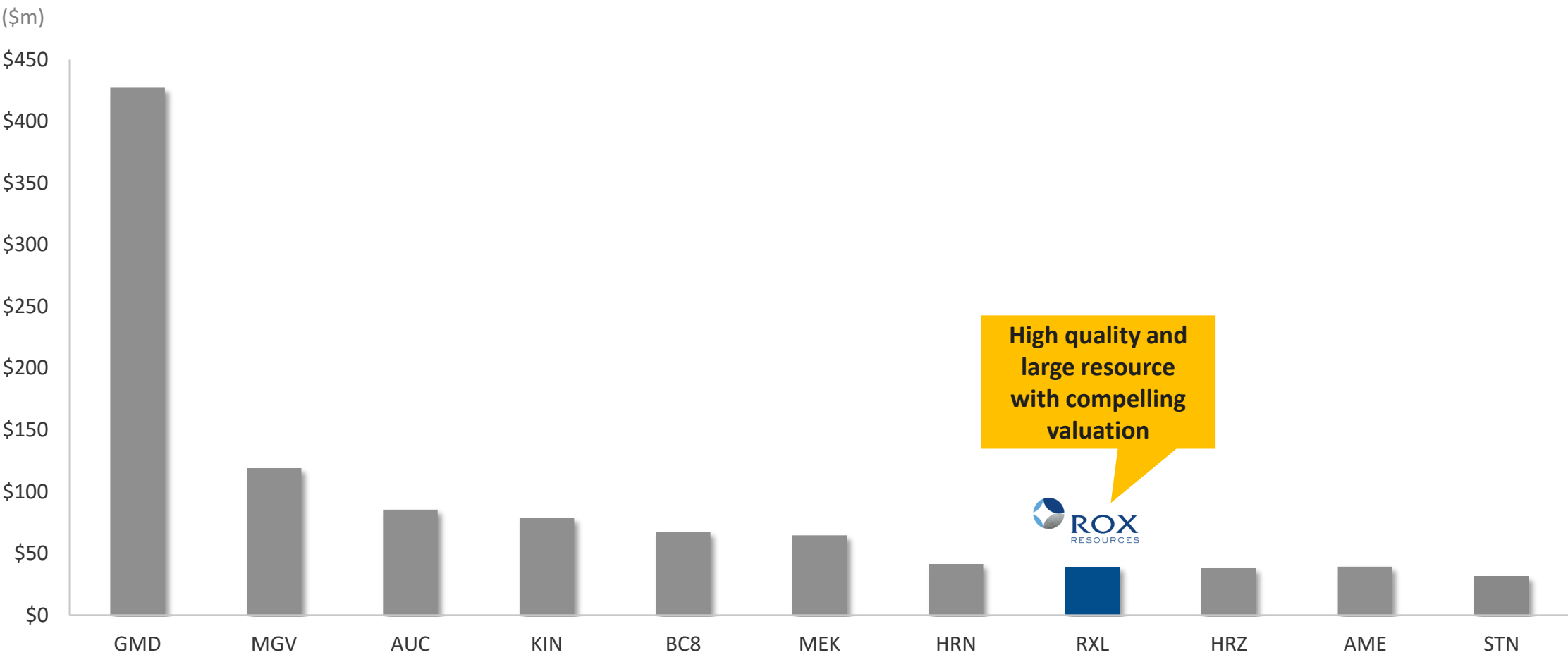
(Bubble size represents attributable measured & indicated resource ounces)



Notes  
1. Refer Appendix 1 for support.

# Comparable Gold Companies <sup>1</sup>

Market Capitalisation (as at 17 October 2022)



Notes  
1. Refer Appendix 1 for support.

# ESG Program

We are pleased to align our reporting to the United Nations **Sustainable Development Goals (SDG's)**, the **Global Reporting Initiative's (GRI) Standards** and the **Task Force for Climate-related Financial Disclosures (TCFD)**.



## 2022 Goals & Progress



Produce our Inaugural Sustainability insert within our Annual Report



Conduct an ESG gap analysis on company policies, standards and action where required



Establish baseline measurements for our material topic



Develop our Employer Value Proposition (EVP)



Commence preliminary studies into our carbon management plan



# Youanmi Gold Project - Supporting Schedules





# Mineral Resources

## Youanmi Mineral Resources

(ASX: RXL 20 Apr 2022)

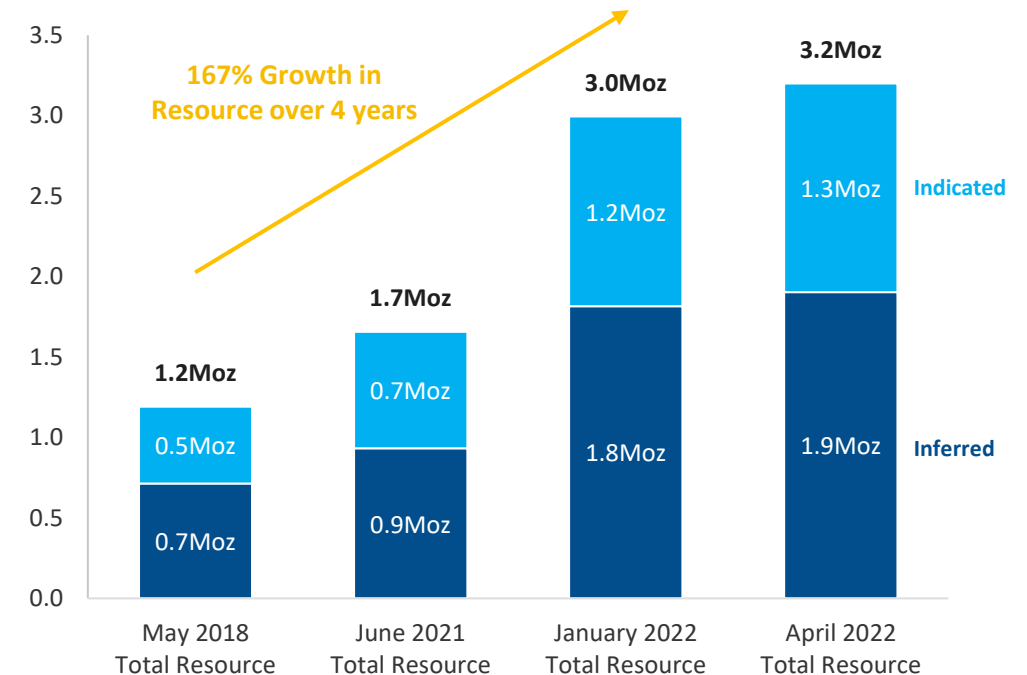
Area	Classification	Cut-off (g/t)	Tonnes (dmt)	Au Grade (g/t)	Au Metal (oz)
Near Surface	Indicated	0.5 <sup>1</sup>	9,070,000	1.89	552,000
Underground	Indicated	3.0	3,060,000	7.55	744,000
<b>Sub-total</b>	<b>Indicated</b>		<b>12,130,000</b>	<b>3.32</b>	<b>1,296,000</b>
Near Surface	Inferred	0.5 <sup>1</sup>	8,930,000	1.58	453,000
Underground	Inferred	3.0	6,840,000	6.59	1,450,000
<b>Sub-total</b>	<b>Inferred</b>		<b>15,770,000</b>	<b>3.75</b>	<b>1,903,000</b>
Near Surface	Ind + Inf	0.5 <sup>1</sup>	18,000,000	1.74	1,004,000
Underground	Ind + Inf	3.0	9,900,000	6.89	2,194,000
<b>Total</b>	<b>Ind + Inf</b>		<b>27,900,000</b>	<b>3.57</b>	<b>3,199,000</b>

Notes

1. Grace 1.5g/t cutoff.

### Resource Growth

(Moz)



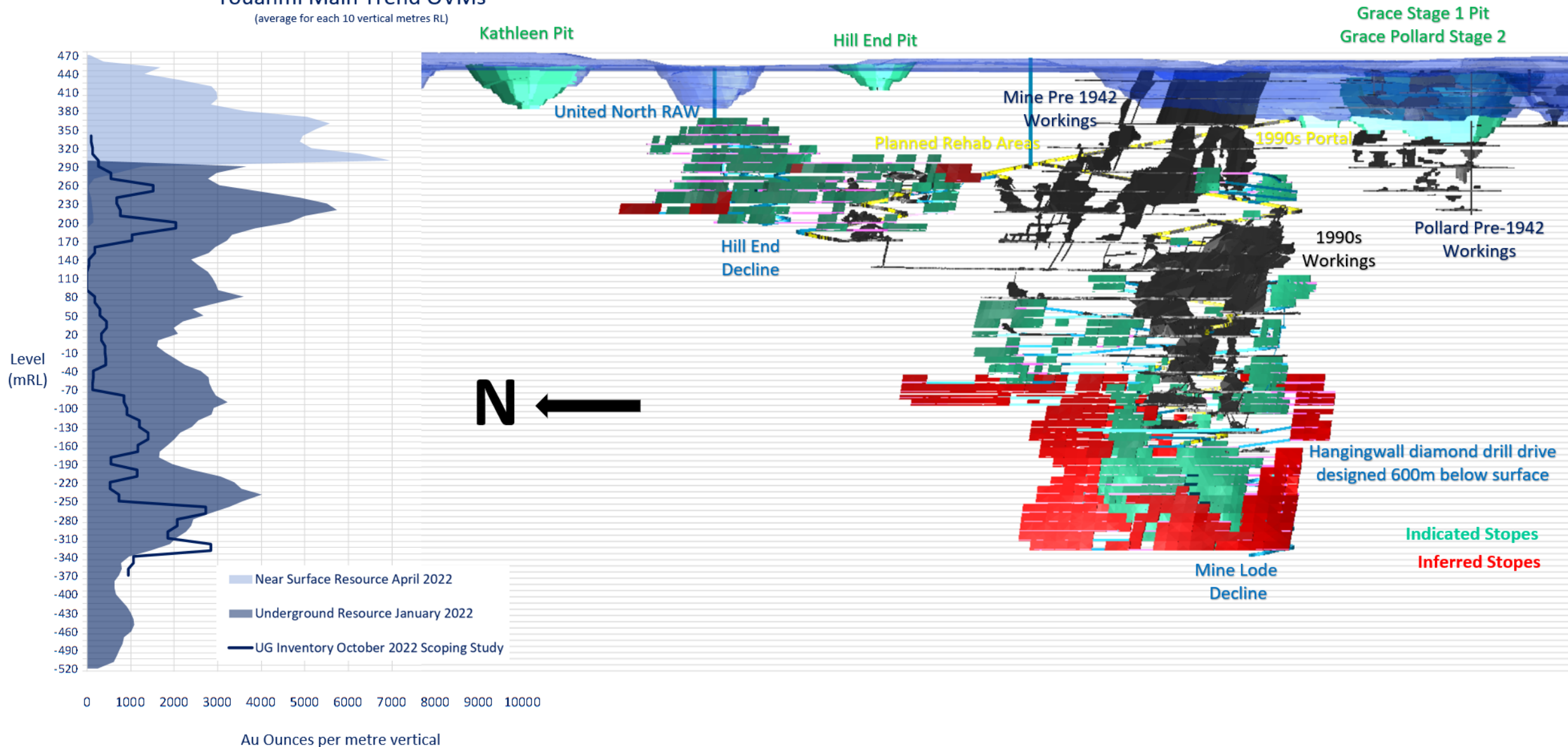
### Competent Person Statements Resource Statement

The Statement of Estimates of Mineral Resources for the Youanmi Near Surface Resource was reported by Rox in accordance with ASX Listing Rule 5.8 in the announcement released to the ASX on 20th April 2022. Rox confirms it is not aware of any new information or data that materially affects the information included in the previous announcements and that all material assumptions and technical parameters underpinning the estimates in the previous announcements continue to apply and have not materially changed.

The Statement of Estimates of Mineral Resources for the Youanmi Underground Resource was reported by Rox in accordance with ASX Listing Rule 5.8 in the announcement released to the ASX on 20th January 2022. Rox confirms it is not aware of any new information or data that materially affects the information included in the previous announcements and that all material assumptions and technical parameters underpinning the estimates in the previous announcements continue to apply and have not materially changed.

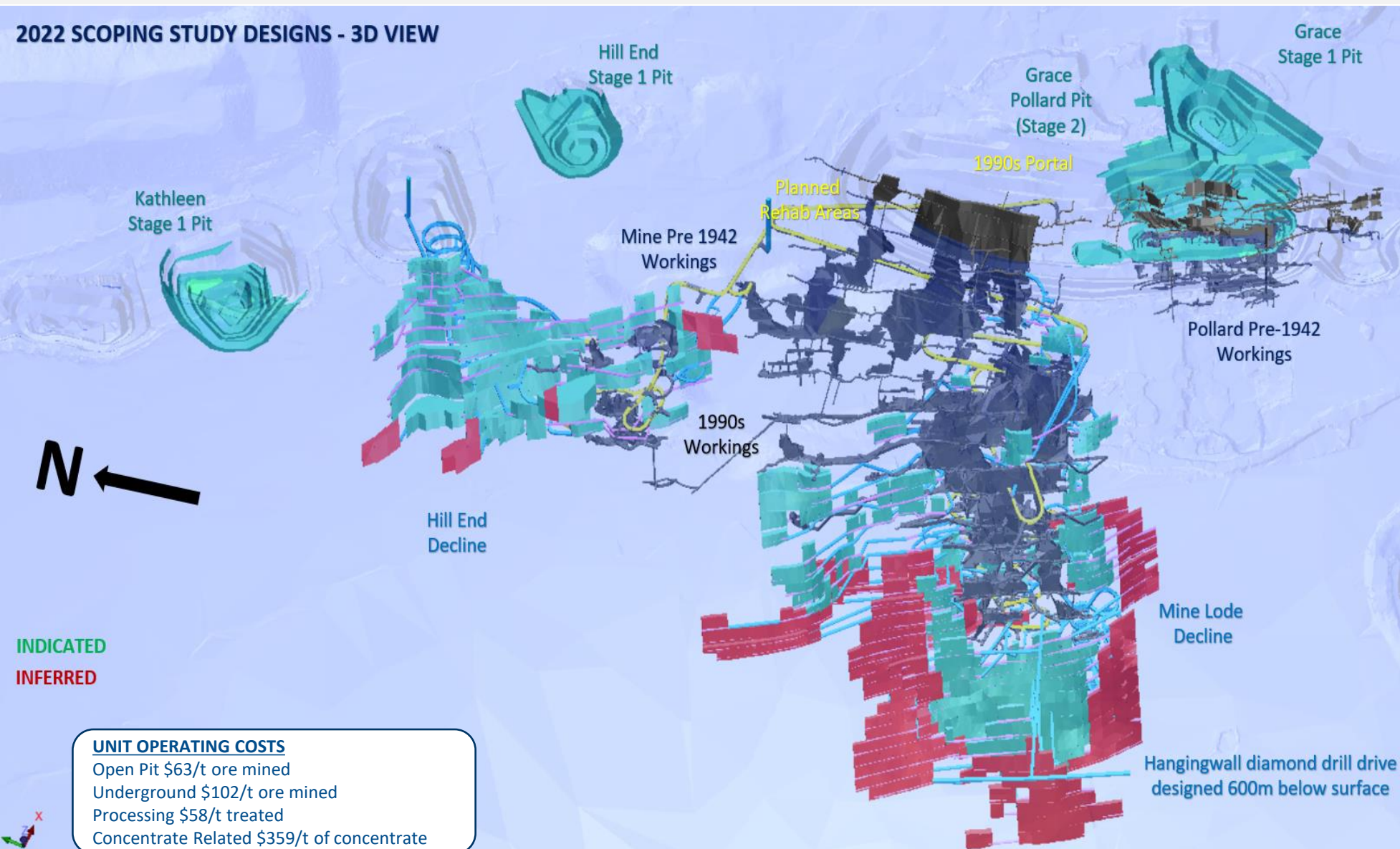
# Youanmi Ounces per Vertical Metre

Youanmi Main Trend OVMs  
(average for each 10 vertical metres RL)



# Mining – Design

## 2022 SCOPING STUDY DESIGNS - 3D VIEW



### Small Open Pits mined in Year 1

- First stage for Kathleen and Hill End Pits
- Grace Stage 1, followed by a second Stage including Pollard.
- Total volume 1.9 mil bcms mined over 6 months using 2x 100t fleets.
- 331kt at 3.3g/t Au for 35koz 96% indicated
- Simple metallurgy free milling gold

### Underground Mine Design

- Rehab 1990s decline at Mine area
- Decline access in footwall (5.5mW x 5.5mH at 1 in 7)
- 15m sublevel uphole bench retreat 64mm production holes – sill and selective pillar placement upper levels and full extraction using paste fill lower levels.
- Min mining width 2.5m with 0.3m HW and 0.2m FW dilution assumed and 15% material loss additional to strategically placed sill pillars.
- 3 to 4 production areas over 1,500 metres of strike.

### Diamond Drill Platform in HW

- Incorporated into mine design
- 600 metres below surface

# Mining – Schedule



## Mining Schedule

- Mine 3 small open pits (Kathleen, Hill End, and Grace Stage 1) and a second stage on Grace / Pollard in the first 6 months (YR0 Q2 to Q4)
- Commence underground mining in second month (one month after open pits commence).
- First 4 months of feed is from open pits (initially standard CIL), first feed material from underground development and stoping is in month 5 from the Hill End area.
- Underground production ramps up to over 40,000 tonnes per month by month 12 and is maintained mostly for the life of mine, with the last 4 months ramping down when stope paste filling impacts steady state production.



## Processing

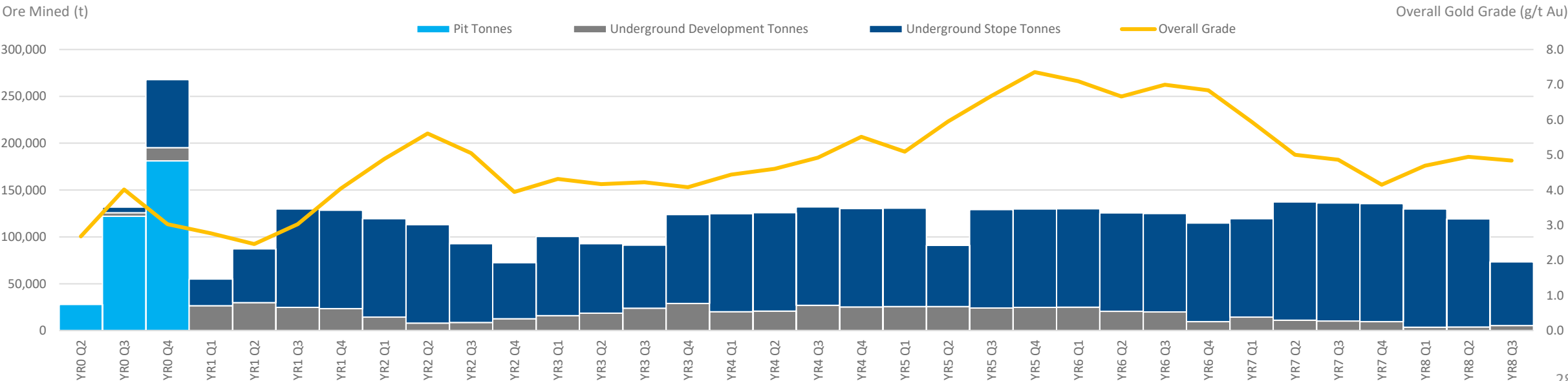
- Processing commences in month 8 initially at a higher rate of 55,000 tonnes per month for open pit softer feed, and then settles back to nameplate production rate of 40,000 tonnes per month. The underground feed comprises of around 5 to 10kt per month from single boom jumbo strike drive development, leaving the balance to make up around 40kt per month from stoping from an average 3 producing areas.
- This requires that approximately 12 production rings be fired per week (based on average stope geometry) from each of three production areas.



## Grade

- Open Pit average grade mined is 3.3g/t Au.
- Underground average grade mined is 5.1g/t Au.
- Average gold head grade for the life of mine achieved is 4.9g/t Au, with mined gold grades averaging 3.6g/t Au in the first 2 years increasing to 5.1g/t Au on average for the last 2 years.

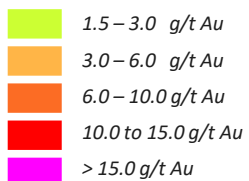
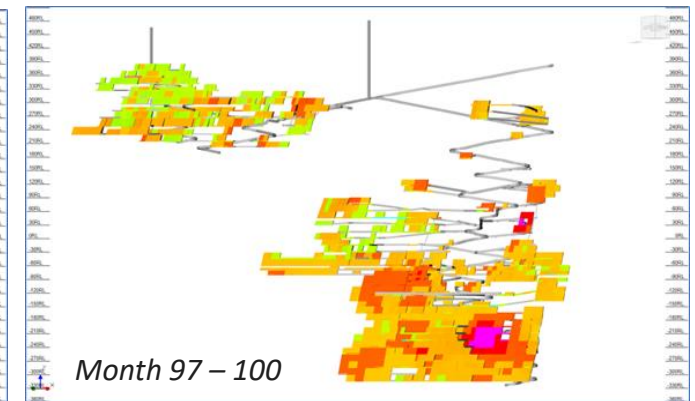
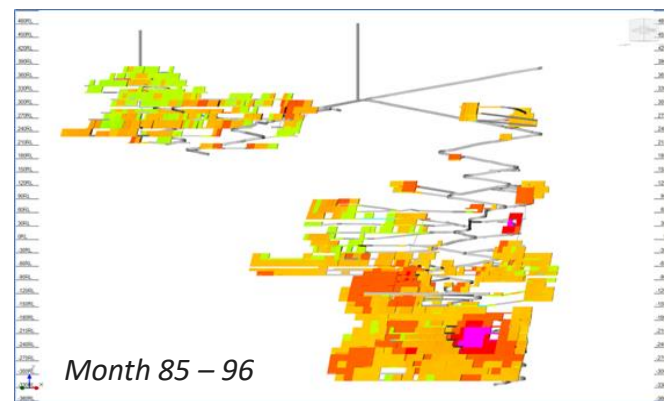
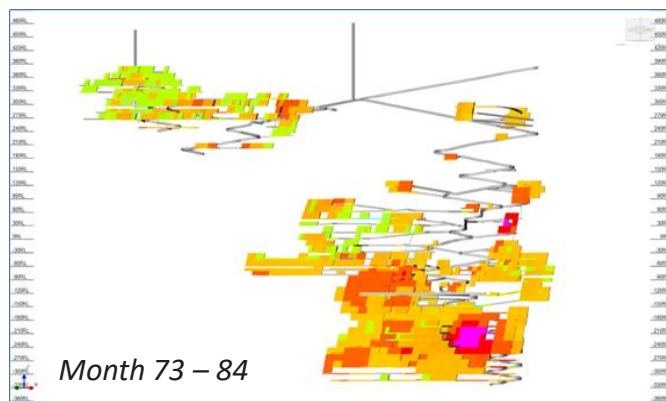
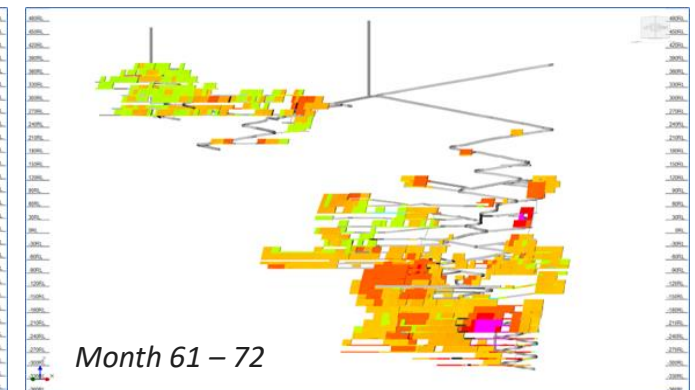
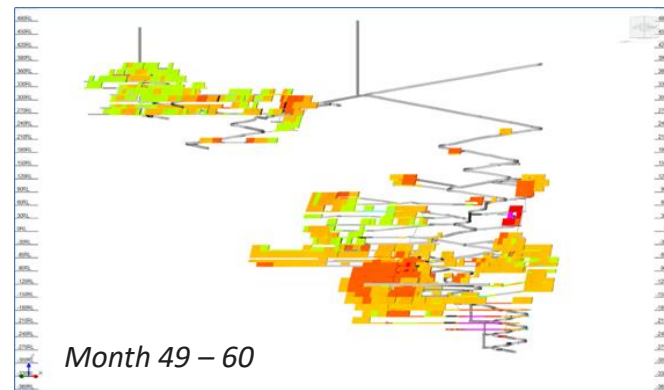
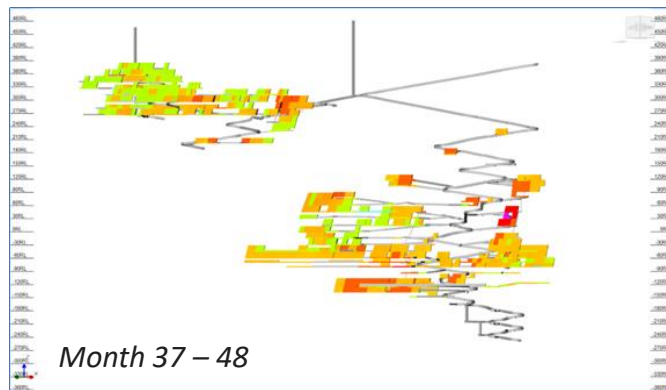
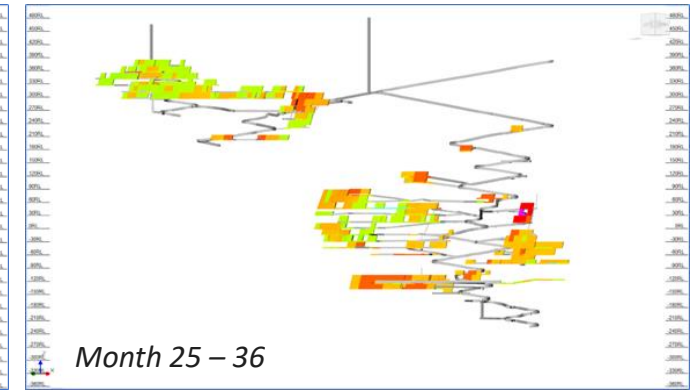
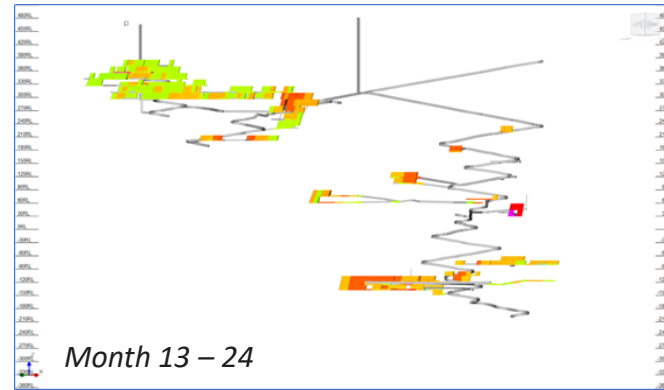
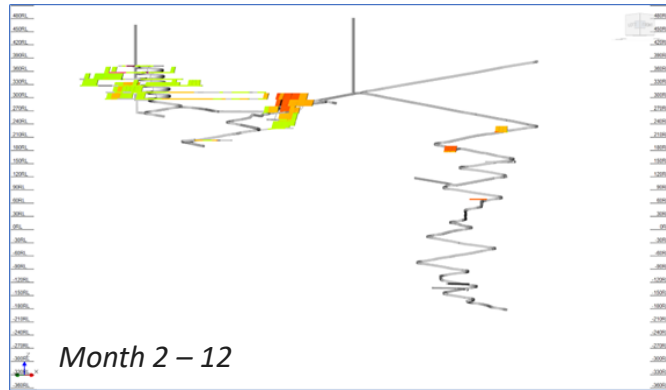
## Mined Tonnes and Grade





# Underground Production Target Schedule

*Year on year  
graphical  
underground  
production  
target schedule  
colour coded by  
Au Grade*



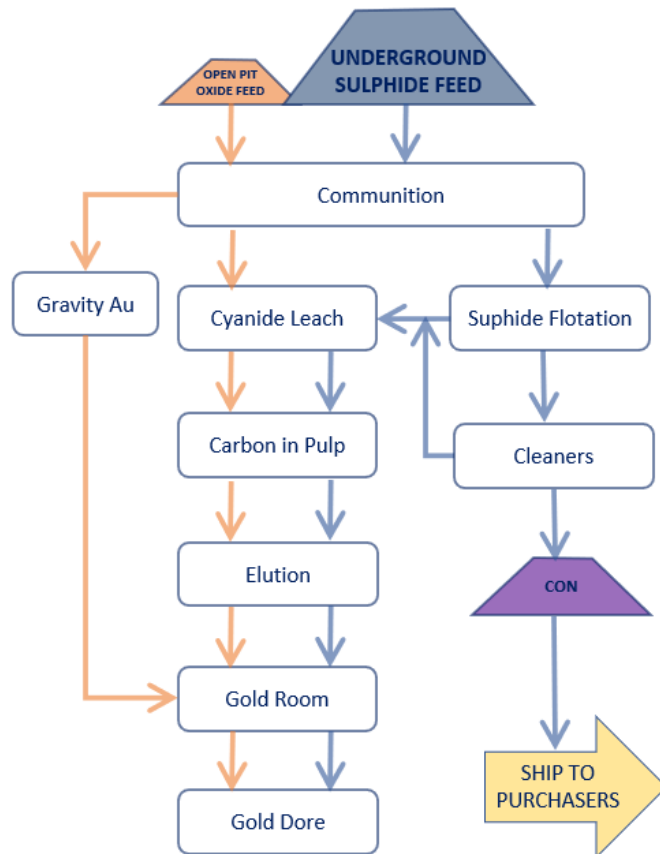


# Process Flowsheet

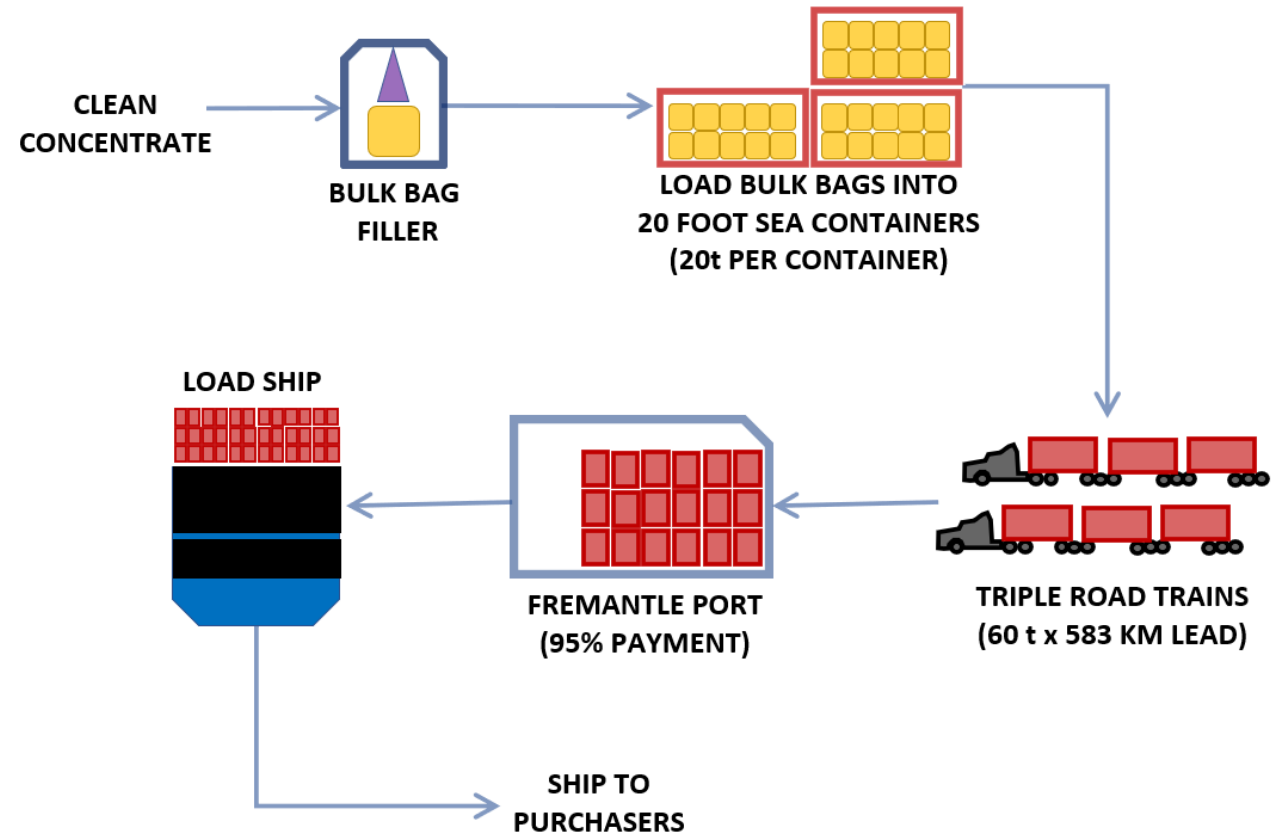
## Process Flowsheet

- The process flow builds on a standard CIL circuit to include a sulphide flotation circuit which captures most of the gold bearing mineralisation into a concentrate which is then cleaned to optimise final gold grade. The concentrate is dried to a suitable moisture content, loaded into 1 tonne bulk bags which are stacked into standard 20-foot sea containers and trucked using triple road trains to Perth (Fremantle Port) where 95% payment is received. From there ships are loaded and make way to final destinations (depending on purchaser).

## Overall Flowsheet



## Concentrate Logistics

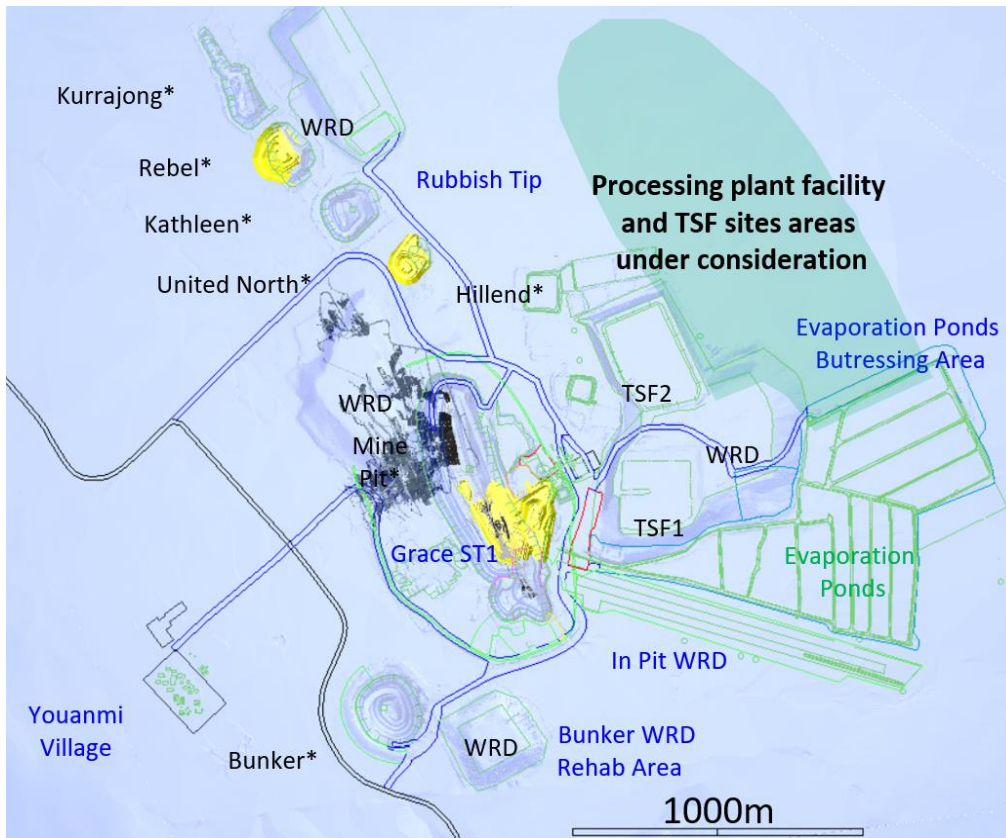


# Processing Plant Layout and Location

## Processing Facilities

- 480kt p.a Carbon-in-Leach plant and sulphide flotation circuit
- Existing TSF has 8-month capacity remaining, then a new dam will be built with 2-year capacity stages.

## Processing Facilities Location



## Processing Plant Layout



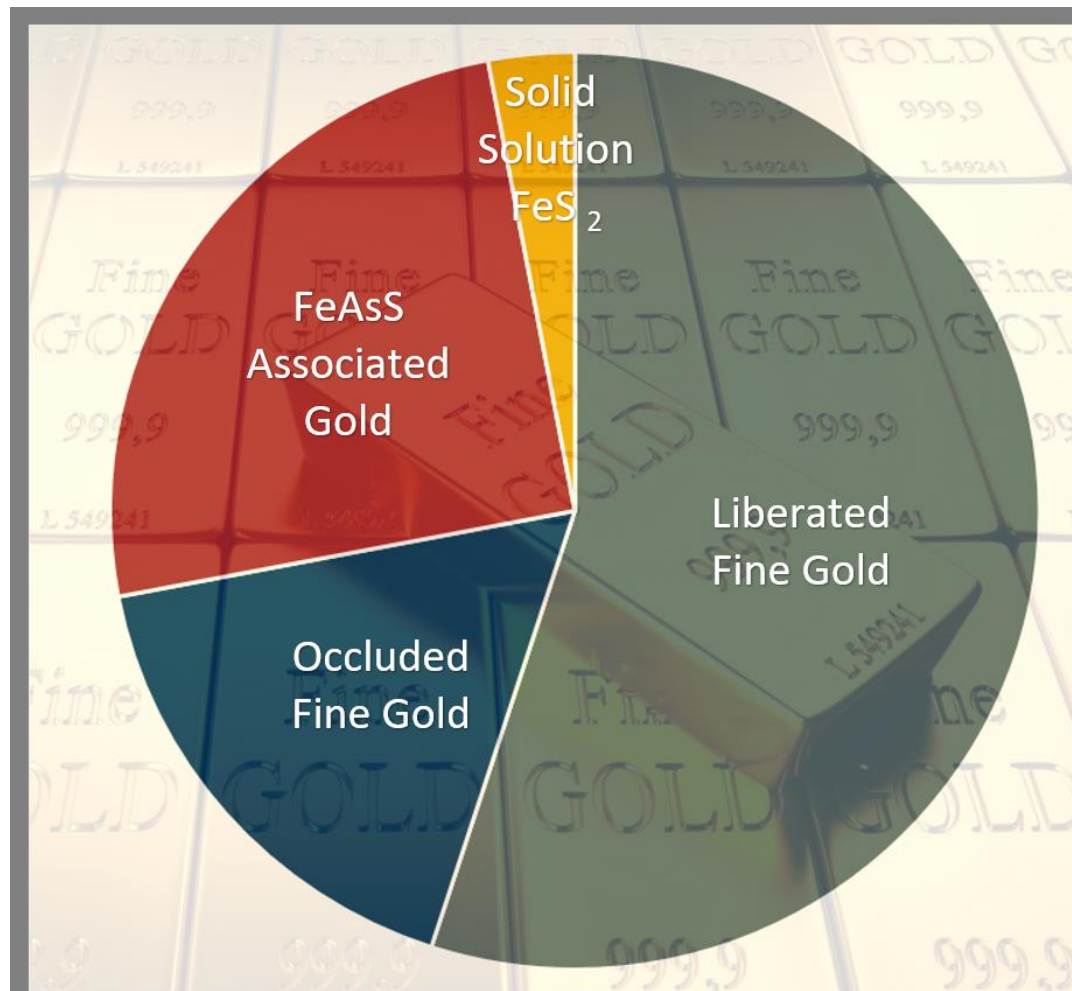
## Mineralogy

### Underground Resource

- The Youanmi Underground Resource has a small percentage of its content that requires more than just standard CIL to extract the gold.
  - Gold is associated with Pyrite (75%) and Arsenopyrite (25%) and is easily floatable in a simple proven process flow circuit.
  - Gold associated with Arsenopyrite makes up around one quarter of the sulphide material. Without special treatment the standard CIL process depending on the grind will achieve between 60 to 75% gold extraction.
  - The arsenopyrite associated gold can be easily extracted using the Albion Process which lifts the overall extraction to 94% - potential future application of Albion circuit

### Open Pit Resource

- Grace Stage 1 Open Pit mineralogy is simple with high Au metal recoveries of 95% through standard CIL circuit.



### Liberated Fine Gold

- Simple extraction by gravity and CIL
- Well known low risk processes
- Around 55% of gold here



### Occluded Fine Gold

- Requires a finer grind to liberate
- Or sulphide leach easily extracts



### FeAsS Associated Gold

- Extraction achievable using the Albion Process



### Solid Solution FeS<sub>2</sub>

- Au locked in pyrite - not recoverable
- Youanmi very low percentage of this





# Other Infrastructure



## Village

- Existing facilities include 51 rooms, and with planned expansion adds 28 x 4 room dongas for 112 additional rooms to take site capacity to 173 rooms. The expansion cost includes upgrade of septic system, 3 laundries, and refurbishment of existing messing, pool, and bar facilities.



## Power and Other Services

- Gas power generation provided on site by a power generation contractor, likely 8 x Caterpillar 3512H 1500kW gensets + 2 x Cummins 850kW dual fuel gensets as standby power.
- The contractor will provide all hardware on site and manage logistics of trucked gas delivery.



## Evaporation Ponds and Water Management

- There is allowance made to undertake some remediation works to existing evaporation ponds to meet the license conditions.
- Other evaporation infrastructure includes a spray network positioned around the Mine Pit crest.
- Water infrastructure items include the pumping system from Mine Pit to evaporation ponds and the UG mining planned infrastructure of pump stations located every 120m vertically.



## Airstrip

- The Youanmi airstrip was recently refurbished by Ramelius Resources and is capable of taking suitably sized aircraft for FIFO operations, and in the longer term if a sealed strip becomes available at the Penny site (30km to the south of Youanmi), then that would be considered for use also.



## Site Roads and Carparks

- The existing road network requires little work to bring into operational status, and there exists suitable material on site in the form of underground development waste rock from the 1990s operations which can be cheaply turned into various engineered products including road-base, cracker dust and rip-rap material.



## Site Offices and Communication

- New site office will be placed on site to accommodate site administration function, process plant function, mining technical services, and UG crews.
- Grace Stage 1 Pit contractors will run out of the existing fixed plant workshop.
- Two-way radio comms is planned to be a standard customized VHF system incorporating a leaky feeder network underground. Open Pits will run on over the counter UHF two-way systems.

# Experienced Consultants Team

## Geology

**Widenbar and Associates**  
Geological Consulting and Mineral Resource Estimation



**CSA Global**  
Mining Industry Consultants  
an ERM Group company



## Mining Technical



## Metallurgy and Processing



## Costing



## Heritage and Environment





# Scoping Study Summary



## Mining

- Detailed mining schedules and operating costs
  - Small open pits mining in the first 6 months
  - Underground mining commencing in month 2
- LOM average gold head grade of 5.0g/t Au



## ESG

- Flora Fauna and Lake Noondie Ecology surveys in progress
- Heritage survey in progress
- Native title discussions commence



## Processing

- Plant throughput 480ktpa
- Standard CIL circuit and sulphide flotation circuit
- Annual production target 71koz for 8.0 years → total production target 569koz



## Initial Financial Evaluation

- Accuracy within  $\pm 40\%$
- **Low LOM AISC of \$1,538/oz**
- **Attractive NPV of \$303m, IRR of 45% and payback period of 3.0 years at a conservative gold price of \$2,450/oz**
- **Low capital intensity (\$1,386/oz)**



## Infrastructure

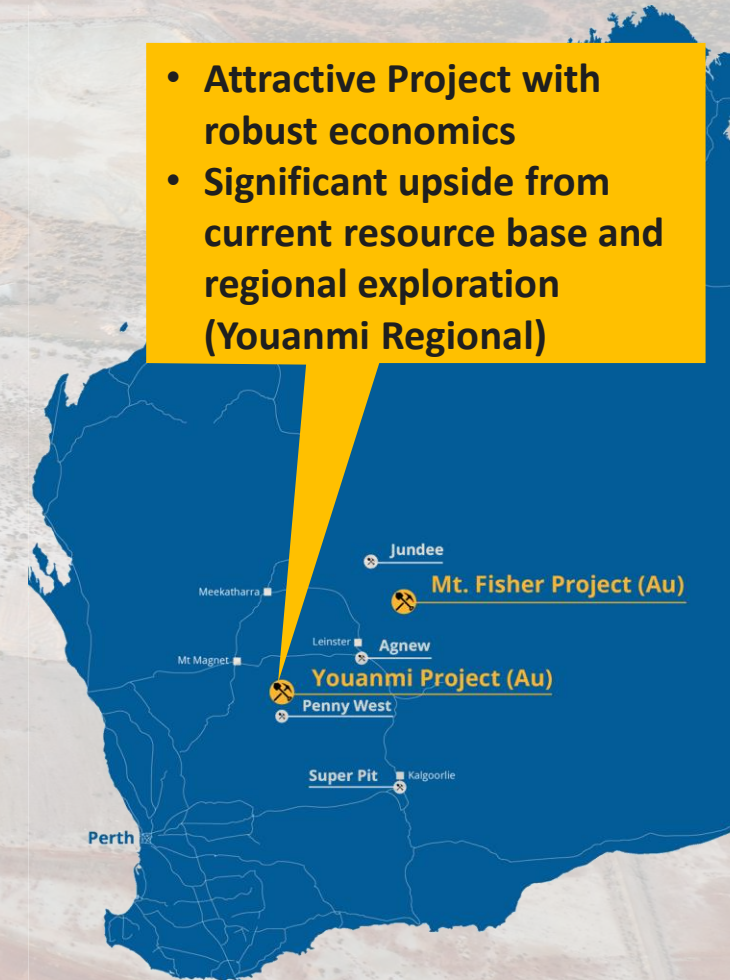
- Gas power provided on site
- Evaporation ponds and water management considered
- Existing facilities including airstrip and site roads
- Capital cost to expand existing village facilities and site office included



## Next Steps

- Complete more drilling at Youanmi to convert inferred to indicated resource and update resource
- Further Drilling and Studies (Resource, PFS) to quote reserves
- Exploration and drilling at Youanmi Regional and Mt Fisher

- **Attractive Project with robust economics**
- **Significant upside from current resource base and regional exploration (Youanmi Regional)**



# Appendix 1 - Comparable Gold Companies

Companies selected are considered comparable to Rox Resources as they are in exploration and/or study phase

Ticker	Name	Ownership	Development Stage	Measured Resources - 100%			Indicated Resources - 100%			Inferred Resources - 100%			Total Resources - 100%			M&I Resources - 100%			Attributable		Source
				Tonnage (Mt)	Grade (g/t Au)	Contained Gold (koz)	Tonnage (Mt)	Grade (g/t Au)	Contained Gold (koz)	Tonnage (Mt)	Grade (g/t Au)	Contained Gold (koz)	Tonnage (Mt)	Grade (g/t Au)	Contained Gold (koz)	Tonnage (Mt)	Grade (g/t Au)	Contained Gold (koz)	M&I (koz)	EV/M&I oz (\$/oz)	
MGV	Musgrave Minerals Ltd	100%	Pre-feasibility Study				5.1	2.6	435.0	7.2	2.1	492.0	12.3	2.3	927.0	5.1	2.6	435.0	435.0	249	Annual Report 2022 - ASX Announcement on 07/10/2022
GMD	Genesis Minerals Ltd	100%	Resource	0.8	5.3	135.0	19.7	1.6	1,025.0	18.8	1.4	857.0	39.3	1.6	2,017.0	20.5	1.8	1,160.0	1,160.0	354	Perfectly Positioned Corporate Presentation - ASX Announcement on 10/10/2022
AUC	Ausgold Ltd	100%	Definitive Feasibility Study	19.0	1.3	800.0	26.8	1.1	984.0	9.5	1.0	370.0	56.0	1.2	2,160.0	45.8	1.2	1,784.0	1,784.0	42	Sydney Mining Club Presentation - ASX Announcement on 06/10/2022
AME	Alto Metals Ltd	100%	Resource				3.0	1.7	159.0	9.4	1.6	476.0	12.4	1.6	635.0	3.0	1.7	159.0	159.0	225	Annual Report 2022 - ASX Announcement on 30/09/2022
KIN	Kin Mining NL	100%	Definitive Feasibility Study	0.8	1.3	31.0	17.8	1.4	803.4	15.9	1.1	572.5	34.5	1.3	1,406.9	18.6	1.4	834.4	834.4	90	Investor Update - ASX Announcement on 14/10/2022
HRZ	Horizon Minerals Ltd	100%	Pre-feasibility Study	1.5	1.3	62.9	13.9	1.8	791.2	7.5	1.7	386.2	22.6	1.7	1,240.3	15.4	1.7	854.1	854.1	38	Gold Resources Increase to 1.24Moz - ASX Announcement on 28/09/2022
BC8	Black Cat Syndicate Ltd	100%	Definitive Feasibility Study	0.4	5.6	66.0	11.1	2.5	881.0	13.0	2.5	1,055.0	24.5	2.5	2,000.0	11.5	2.6	947.0	947.0	52	New Coyote Geological Model Driving High-Grade Success - ASX Announcement on 10/10/2022
STN	Saturn Metals Ltd	100%	Pre-feasibility Study				41.0	0.6	760.0	35.0	0.6	710.0	76.0	0.6	1,469.0	41.0	0.6	760.0	760.0	32	Investor Presentation Gold Forum Americas - ASX Announcement on 21/09/2022
MEK	Meeka Gold Ltd	100%	Pre-feasibility Study	0.2	11.4	55.0	7.9	2.7	670.0	5.2	2.4	390.0	13.1	2.6	1,115.0	8.0	2.8	725.0	725.0	86	Drilling and Pre-Feasibility Study Update - ASX Announcement on 30/09/2022
HRN	Horizon Gold Ltd	100%	Resource				24.3	1.5	1,149.4	12.5	1.6	644.2	36.8	1.5	1,793.6	24.3	1.5	1,149.4	1,149.4	36	High Grades and Wide Gold Intercepts Returned from RC Drilling - ASX Announcement on 19/09/2022
RXL	Rox Resources Ltd	70%	Scoping Study				12.1	3.3	1,296.0	15.8	3.8	1,903.0	27.9	3.6	3,199.0	12.1	3.3	1,296.0	907.2	38	Annual Report 2022 - ASX Announcement on 28/09/2022

Other inputs	Input date	Source
Cash and cash equivalents balances	30 June 2022	Appendix 5B Cash Flow Report – Quarter Ended 30 June 2022
Market capitalisation	17 October 2022	Australian Stock Exchange

Notes:  
Attributable figures have been calculated by multiplying the total input with the project ownership percentage.  
M&I: Measured and Indicated

# Thank You

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