

ASX Announcement

24 July 2024

ROX RESOURCES LIMITED

ASX: RXL

Rox Resources is focused on developing the 100%-owned Youanmi Gold Mine in the Murchison region of WA, one of the highest grade new gold development projects of scale in Western Australia.

DIRECTORS

Mr Stephen Dennis Chairman

Mr Robert Ryan Managing Director

Dr John Mair Non-Executive Director

Mr Matthew Hogan Non-Executive Director

Shares on Issue	407.2m
Share Price	\$0.145
Market Cap.	\$59.0m

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Follow Rox:



Positive Pre-Feasibility Study outlines long-life, high-grade 100kozpa of gold doré at Youanmi

PFS outlines a compelling development case, with Board approval to progress to DFS

- Confirms potential to develop a financially attractive standalone high-grade, high-margin Australian gold project with an initial ~7.7-year life¹, at a low AISC of A\$1,676/oz
- Production target of 786koz of gold doré over the life-of-mine (LOM), averaging 103kozpa over an initial 7.7-year period¹
- Maiden high-grade Ore Reserve of <u>546koz at 4.4g/t Au</u> calculated at A\$2,600/oz
- Compelling financial metrics using a conservative gold price assumption of A\$3,100/oz (approx. 11% discount to spot²):
 - Free cash-flow (pre-tax) of \$855m and \$597m (post-tax)
 - \circ NPV₈ (pre-tax) of \$486m and \$322m (post-tax)
 - IRR (pre-tax) of 42% and 33% (post-tax)
 - AISC of \$1,676/oz
 - Payback period (pre-tax) of 2.9 years¹ and 3.3¹ years (post-tax)
 - Pre-Production Capital of \$245m
 - NPV₈ / Pre-Production Capital 2.0 times (pre-tax)
- Free LOM cash-flow (pre-tax) of \$1.2 billion and \$810m posttax at current spot gold prices of approx. A\$3,500/oz²
- Significant potential to aim to grow Resources and Reserves in order to increase Production Target and mine life in future studies
- Board approves progression of the Project to the Definitive Feasibility Study (DFS) stage

Cautionary Statement

The Production Target (and forecast financial information derived from the Production Target) referred to in this announcement is underpinned by Indicated Mineral Resources of approximately 71% and Inferred Mineral Resources of approximately 29% over the evaluation period. The first four years of the Production Target is underpinned by approximately 81% Indicated Mineral Resources with 19% classified as Inferred Mineral Resources. The total Life of Mine Production Target includes 29% Inferred Resources ounces, 7% Indicated Resource ounces outside of Reserve and the remaining 64% is underpinned by Probable Ore Reserves. 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 (or the forecast financial information) will be realised. Refer also to the other disclaimers throughout this announcement.

Notes:

1. Post Commissioning 2. Average for the month of July 2024 up until 22 July 2024



West Australian gold exploration and development company Rox Resources Limited ("Rox" or "the Company") (ASX: RXL) is pleased to report the results of the Pre-Feasibility Study ("PFS" or "the Study") completed on its 100%-owned Youanmi Gold Project ("Project"), located in the Murchison region of Western Australia.

The PFS (which is based on the updated Mineral Resource announced by the Company to the ASX on 30th January 2024) includes a maiden Ore Reserve, and outlines a technically and economically viable project with low operating costs, a significant high-margin production target profile and compelling forecasts of potential financial and economic returns.

Study Highlights

- Average annual gold production target of ~103koz per annum with an average gold head grade of 4.5g/t Au for total gold doré produced of approximately 786koz over the life-of-mine ("LOM"):
 - First four years of the Production Target underpinned by 81% / 19% Indicated to Inferred Resource Material in the Production Target plan; and
 - The mine plan rapidly opens up high-grade and high-confidence resource areas.
- Compelling financial forecasts at a conservative assumed gold price of A\$3,100/oz, reflecting the highgrade and high-margin nature of the Youanmi Gold Project:
 - Project life of approximately 7.7 years;
 - Cumulative EBITDA of approximately \$1,219m over the life of the Project;
 - Pre-tax undiscounted free cash flow of approximately \$855m and \$597m post-tax over the life of the Project;
 - Pre-tax and unleveraged Net Present Value (NPV₈) of approx. \$486m and \$322m post-tax;
 - Pre-tax and unleveraged Internal Rate of Return (IRR) of approximately 42% and 33% posttax; and
 - Pre-tax and unleveraged payback of approximately 2.9 years and 3.3 years post-tax (from completion of construction and commissioning).
- Financial forecasts at a spot gold price of approx. A\$3,500/oz highlight an outstanding investment opportunity and significant upside to the base case:
 - Project life of approximately 7.7 years;
 - Cumulative EBITDA of approximately \$1,523m over the life of the Project;
 - Pre-tax undiscounted free cash flow of approximately \$1,158m and \$810m over the life of the Project post-tax;
 - Pre-tax and unleveraged Net Present Value (NPV₈) of approx. \$694m and \$468m post-tax;
 - Pre-tax and unleveraged Internal Rate of Return (IRR) of approximately 55% and 44% posttax; and
 - Pre-tax and unleveraged payback of approximately 2.2 years and 2.7 years post-tax (from completion of construction and commissioning).
- LOM All-In Sustaining Cost ("AISC") average forecast of A\$1,676/oz as a result of the high-grade nature of the Project:
 - Mining \$770/oz : Processing \$534/oz : G&A: \$91/oz : Royalty : \$106/oz, Sust. Capital: \$175/oz

- Total pre-production capital expenditure of approximately \$245m:
 - Capital cost of 750ktpa processing plant and site infrastructure of ~\$191m;



- Underground development costs of ~\$39m; and
- Net commissioning costs (inclusive of commissioning revenue) of ~\$15m.
- Building on the quality outcomes forecast by the Youanmi Gold Project PFS, the Project offers outstanding growth potential during and beyond the Definitive Feasibility Study Phase (DFS) phase in the following areas:
 - Underground resource growth: the Mineral Resource remains open down-dip and along strike. The Link parallel zone has only been delineated to shallow depths whereas the Mine Lode extends to +1,000mbgl, providing additional opportunities to extend Project life and increase the production target rate;
 - Exploration Targets: significant potential upside remains with substantial near-mine Exploration Targets of approximately 6.9Mt to 8.4Mt at an approximate grade ranging from 4.7 g/t Au to 7.0 g/t Au for a total of between 1,093kz 1,836koz at 2.5 g/t Au cut-off (as Rox previously announced to ASX on 30 January 2024). The potential quantity and grade of the Exploration Targets is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource; and
 - Regional exploration: more than 50km strike of the Youanmi Shear Zone is largely untested by historic drilling, highlighting the potential for new regional discoveries to contribute to longer term plant feed.

Rox Resources Managing Director Robert Ryan commented:

"The Pre-Feasibility Study confirms the Youanmi Gold Project as one of the most exciting emerging high-grade gold development projects in Western Australia, a Tier-1 mining jurisdiction.

"The Project produces 786koz of gold doré over a 7.7-year period, averaging over 100koz per annum and with a low AISC cost of just A\$1,676/oz, which, at current spot prices, will deliver an operating margin of nearly A\$2,000/oz.

"The high-grade, high-margin nature of the Project results in very compelling financial metrics and a short payback of less than 3 years at a base case gold price of A\$3,100/oz. The Project financials really move up another gear when run at the current spot price of A\$3,500/oz, with a life-of-mine free cash-flow of \$1.2 billion, meaning on average that the project will deliver more than \$150 million in free cash-flow per annum.

"Following on from the substantial upgrade in the quality of the Youanmi Mineral Resource – in particular the underground Indicated Resource announced earlier this year – a high-grade maiden Ore Reserve has been declared as part of the PFS of 546koz at 4.4g/t Au. This is a great result which provides an exceptionally solid foundation for the Company's value proposition and represents one of the highest grade Ore Reserves for a new gold development project in Western Australia at the moment.

"There is also tremendous upside in the Project with the underground Resource remaining open down-dip and along strike and near-mine exploration targets of between 1.1Moz and 1.8Moz, which have the potential to increase the annual production rate and mine life of the Project if we are successful in converting these ounces into Resources and ultimately Ore Reserves. We are encouraged by the proximity of these targets to the existing deposits and our previous rate of success with drilling.

"Given the outstanding outcomes of this PFS, Rox is now firmly on the pathway to delivering one of Western Australia's next significant high-grade, mid-tier gold projects. We are targeting completion of a Definitive Feasibility Study in 2025.

"In parallel with this, we have a huge amount of potential upside to seek to unlock for our shareholders, starting with the goals of converting more Inferred Resources to Indicated, conversion of the substantial Exploration Targets to JORC Resources and near-mine and regional exploration. This work will unfold as part of our dualtrack growth strategy."



Mineral Resources, Maiden Ore Reserve and Life-of-Mine Production Target

A summary of the Mineral Resources, Ore Reserve and Life of Mine Plan used as the basis for the Pre-Feasibility Study is outlined below:

		Cut-off	Tonnes	Au Grade	Au Metal
Mineral Resources	Classification	(g/t Au)	(Mt)	(g/t)	(koz)
Underground	Indicated	2.5	5.6	6.1	1,103
Underground	Inferred	2.5	4.1	4.8	633
Total Underground Resource		2.5	9.7	5.5	1,735
		Cut-off	Tonnes	Au Grade	Au Metal
Ore Reserves	Classification	(g/t Au)	(Mt)	(g/t)	(koz)
Underground	Probable	3.0	3.83	4.4	546
Life of Mine Production	_	Cut-off	Tonnes	Au Grade	Au Metal
Target	Туре	(g/t Au)	(Mt)	(g/t)	(koz)
Life-of-Mine Production Target	Indicated	3.0	4.05	4.6	601
Life-of-Mine Production Target	Inferred	3.0	1.76	4.4	247
Total Life of Mine Production	Target	3.0	5.80	4.5	849

Table 1. Mineral Resou	urces, Ore Reserves and Life	-of-Mine Production Target
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Notes:

1. The Mineral Resource and Ore Reserve estimates underpinning the Production Targets in this announcement have been prepared by competent persons in accordance with the requirements of the 2012 JORC Code;

- 2. The total LOM Production Target includes 29% Inferred Resources ounces, 7% Indicated Resource ounces outside of Reserve and the remaining 64% is underpinned by Probable Ore Reserves;
- 3. Mineral Resources are reported at a 2.5g/t lower cut-off and inclusive of Ore Reserves;
- 4. Ore Reserves are reported using a A\$2,600 gold price basis for cut-off grade calculations;
- 5. The LOM Production Target excludes the Youanmi South (Paddy's), Midway underground Resource areas, which total 206kt at 6.1g/t for 40koz of Inferred Resources.

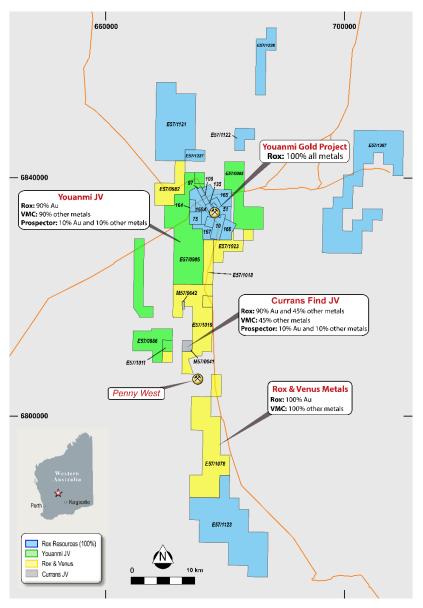


Introduction

The 100%-owned Youanmi Gold Project ("**Project**", "**Youanmi**" or "**Youanmi Gold Project**") is located 480km due north-east of Perth in Western Australia and covers 697km² and >60km of strike of the prospective and highly endowed Youanmi Shear Zone. The Rox group holds 100% of all mineral rights at the Youanmi Gold Project, including nearby extensions, and between 90% to 100% of gold rights in the regional tenure (See Figure 1).

The Youanmi Gold Project has produced an estimated 667,000oz of gold (at 5.47g/t Au) since its discovery in 1894 during three main periods: 1908 to 1921, 1937 to 1942 and 1987 to 1997. The last parcel of ore mined underground at Youanmi (in November 1997) was processed at a grade of 14.6g/t Au.

The structure of the Youanmi Gold Project is dominated by the north-trending Youanmi Fault Zone. Most of the gold mineralisation found at the Project is hosted within the north-northwest splays off the north-northeast trending Youanmi Fault.





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Key Study Outcomes and Assumptions

The material assumptions that underpin the Production Target and forecast financial information for the Project are detailed in the PFS Executive Summary, which is included in, and forms part of, this announcement and is also summarised below:

	Unit	Base Case	Spot Price⁴
Key Project Mining Physical Targets and Assumptions			
Life-Of-Mine ¹	years	7.7	7.7
Plant Throughput	ktpa	750	750
Material Mined	Kt	5,804	5,804
Au Grade – Mined	g/t	4.5	4.5
Au Ounces Contained	koz	849	849
Overall Plant Recovery	%	92.6	92.6
Gold Production Target	koz	786	786
Financial Forecasts and Assumptions			
Gold Price	A\$/oz	3,100	3,500
Revenue	\$m	2,437	2,751
EBITDA	\$m	1,219	1,523
Average annual EBITDA LOM	\$m	159	199
Free Cash Flow (undiscounted and pre-tax)	\$m	855	1,158
AISC	\$/oz	1,676	1,690
NPV₃ (unleveraged and pre-tax)	\$m	486	694
NPV₃ (unleveraged and post-tax)	\$m	322	468
IRR (unleveraged and pre-tax)	%	42	55
IRR (unleveraged and post-tax)	%	33	44
Payback Period (unleveraged and pre-tax) ²	years	2.9	2.2
Payback Period (unleveraged and post-tax) ²	years	3.3	2.7
Pre-Production Capital ³	\$m	245	240
Ratio NPV (unleveraged and pre-tax) / Pre-prod. capital	ratio	2.0	2.9

Table 2. Summary of Key Study Outcomes and Assumptions

Notes:

1. Post construction and commissioning;

2. Payback period is calculated from the first month post construction and commissioning;

3. Pre-production capital includes all costs and revenue up until completion of commissioning; and

4. Average for the month of July 2024 up until 22 July 2024.

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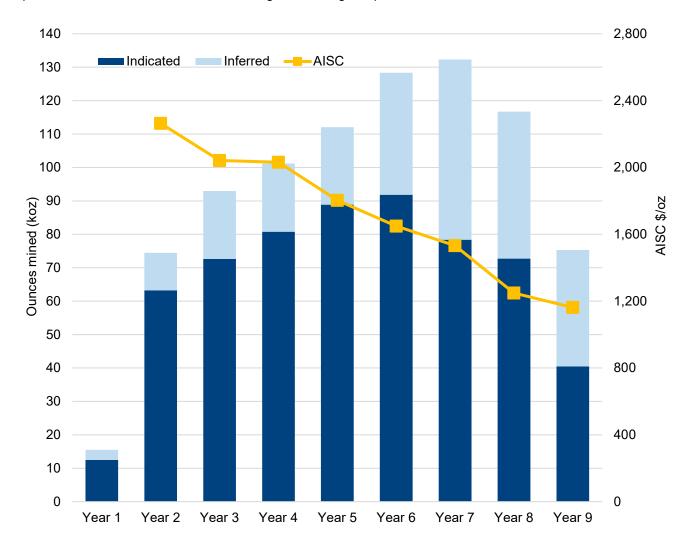
Level 2, 87 Colin Street, West Perth WA 6005 +61 8 9226 0044 ASX CODE: RXL admin@roxresources.com.au www.roxresources.com.au



Production Target

Total mined ounces of gold over the life of the Project are forecast to be approximately 849koz, with the breakdown of Indicated and Inferred Mineral Resources shown in the figure below. Of the Mineral Resources scheduled for extraction in this PFS Production Target, approximately 81% are classified as Indicated and 19% as Inferred in the first four years of the Production Target and 71% classified as Indicated and 29% as Inferred over the eight-year evaluation period (refer Table 1 for further details).

Mined ounces peak in Years 6, 7 and 8 due to mining of the higher-grade material in the deeper parts of the deposit and result in a lower All-In Sustaining Cost during this period.





Notes:

- Ounces mined includes the pre-production and commissioning period.
- AISC is calculated post pre-production and commissioning period.





Sensitivity Analysis

Metallurgical Recovery (+/-2%)

Capital Expenditure (+/-10%)

\$150



A sensitivity analysis of the Project's unleveraged and post-tax NPV is shown in the figure below.

Figure 3. Project NPV Analysis

\$250

\$200

\$300

\$298

\$300

NPV (unleveraged and post-tax) (A\$m)

\$345

\$347

\$400

\$450

\$350

Table 3. Scenario Analysis – Gold Price Assumptions						
			Base Case		Spot Price	
Gold Price (A\$/oz)	Unit	\$2,900	\$3,100	\$3,300	\$3,500	\$3,700
NPV₀ (pre-tax)	A\$m	382	486	590	694	797
IRR (pre-tax)	%	35	42	48	55	62
Payback (pre-tax)	years	3.3	2.9	2.6	2.2	1.8
LOM Free Cash Flow (pre-tax)	A\$m	703	855	1,006	1,158	1,310
NPV ₈ (post-tax)	A\$m	249	322	395	468	541
IRR (post-tax)	%	28	33	39	44	49
Payback (post-tax)	years	3.7	3.3	2.9	2.7	2.3
LOM Free Cash Flow (post-tax)	A\$m	491	597	704	810	916

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Project Configuration

The PFS evaluation encompasses underground mine production from the Youanmi Main Lode, Link and Pollard deposits. The Company assessed comminution circuit and oxidation circuit options for the process plant as part of the PFS. The preferred comminution circuit comprises primary, secondary and tertiary crushing, a Ball Mill followed by flotation, Albion Process[™] and cyanide leaching.

Youanmi ore has the advantage of a relatively low mass pull to sulphide concentrate (13%) as feed to the Albion Process[™] circuit. This reduces the Albion throughput to approximately 98ktpa compared with the overall plant throughput rate of 750ktpa. Youanmi mineralisation achieves a 96% recovery of Albion[™] residues, and an overall plant recovery at 92.6%.

The Albion Process[™] is a fine grinding and leach technology for the treatment of sulphide gold resources. It incorporates the IsaMill[™] fine grinding and conventional atmospheric oxidative leaching. The process is owned and patented globally by Glencore Technology, which provides performance guarantees (process and mechanical) for Albion Process[™] installations.

The Albion Process[™] has significant advantages for sulphide gold projects:

- Lower capital cost relative to other oxidation methods such as POx;
- Quick, simple testwork and design process, short equipment lead times, rapid commissioning and fast commercial ramp-up;
- Simple operation with no requirement for specialist operators or metallurgists, low risk processes and high plant availability;
- Robust and flexible process that is less sensitive to highly variable sulphur grades, throughputs, and impurities than BIOX[®]; and
- Core and Glencore Technology provide operator training and support services to enable rapid implementation.

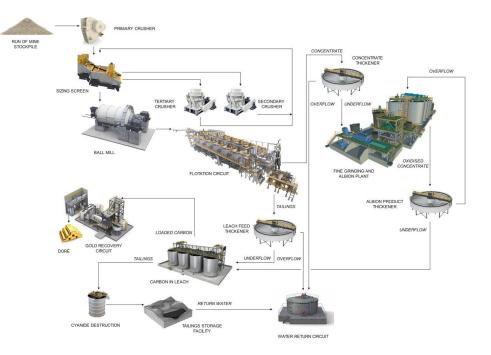


Figure 4. Albion Process[™] Flowsheet

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Capital Cost

Capital costs include all pre-production costs up until the completion of commissioning, which include: mining development related costs including dewatering, as well as sustaining capital, process plant, tailings dam, site administrative costs, commissioning costs and commissioning revenue.

Capital costs are derived from a number of sources including direct quotes, budget pricing from suppliers and a Class-3 estimate for the processing plant.

The capital cost for the processing plant, process plant infrastructure and other related infrastructure is based on an Engineering, Procurement, Construction and Management (EPCM) approach and covers all the costs associated with the construction and associated expenditure to develop the Project to a production capacity of 750ktpa to produce over 100,000 ounces of gold doré annually.

Capital costs are included for an expanded on-site camp for construction and operations. The camp will operate on a fly-in, fly-out basis

The capital cost estimate for the processing plant and process plant infrastructure is judged to have an accuracy of $\pm 15\%$ and is considered by MACA Interquip to be a Class-3 estimate according to AACE International. The capital cost estimate has been conducted at what is considered by the Company to be a high point in the development cycle. The Company will conduct a value engineering process immediately following the PFS and through the DFS.

Pre-Production Capital	Unit	A\$m
Site Infrastructure	\$m	22
Processing Facilities	\$m	150
Tailings Storage Facility	\$m	4
Underground Development	\$m	39
Commissioning Costs	\$m	57
Commissioning Revenue	\$m	(42)
Contingency ¹	\$m	15
Total Pre-Production Cost Estimates	\$m	245
Sustaining Capital – Life of Mine Estimates	Unit	A\$m
Underground	\$m	108
Other	\$m	27
Total	\$m	135

Table 4. Capital Cost Requirement Estimates

Notes:

1. Contingency has been applied to Site Infrastructure, Processing Facilities and Water Management. Underground development and commissioning costs are direct price quotations based on physicals.

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Operating Cost

Operating costs are derived from a number of sources, including direct quotations, budget pricing supplied by suppliers and Class-3 estimate pricing from the processing plant supplier.

The Project's operating costs have been developed based on a projected 750ktpa processing plant, treating 750ktpa tonnes of ore at a gold grade of 4.5g/t over the LOM, recovering approximately 786k ounces of gold.

The operating costs have been compiled and developed from a variety of sources including:

- First principal estimates based on a ground-up build approach based on key physical drivers, volumes and consumption rates;
- Metallurgical testwork;
- Contractor request for quotes (RFQ's or RFP's);
- General and administration costs determined by the Company; and
- Supplier requests for pricing and budget quotations.

Operating costs cover all on-site costs directly associated with mining, processing, and administration plus all other costs related to sustaining production of the operation over the life cycle of the Project including state royalties, sustaining capital and other land access and other non-production costs.

Operating Costs ¹	\$m	\$/t Milled	\$/oz
Mining	595	105	770
Processing	413	73	534
Site G&A	70	12	91
C1 Cash Cost ²	1,078	190	1,395
Royalty	82	15	106
Sustaining Capital	135	24	175
All-In Sustaining Cost (AISC) ^{3,4}	1,295	229	1,676

Table 5. Operating Costs Breakdown

Notes:

- 1. Operating costs presented in table above are calculated based on recovered gold;
- 2. C1 cash cost includes mining, processing, administration, and accounting adjustments for stockpile movements;
- 3. AISC per ounce payable includes C1 cash cost, royalties and sustaining capital. It does not include corporate cost, exploration cost and non-sustaining capital; and
- 4. AISC is calculated post construction and commissioning.

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Ore Reserve

A maiden probable Ore Reserve estimate of 3.83Mt @ 4.4g/t Au for 546koz of contained gold has been declared.

Ore Reserve	Cut-off Grade	Tonnes	Grade	Contained Ounces
Proved Underground Ore Reserve	(g/t Au) 0.0	(Mt) 0.0	(g/t Au) 0.0	(koz) 0.0
Probable Underground Ore Reserve	3.0	3.83	4.4	546
Total Underground Ore Reserve	3.0	3.83	4.4	546

Table 6. Youanmi 2024 Ore Reserve Estimate

Notes:

1. The reported Mineral Resources are inclusive of the Ore Reserves;

2. Tonnes are reported as million tonnes (Mt) and rounded to the nearest 10,000; grade reported in grams per tonne (g/t) to the nearest tenth; gold (Au) ounces are reported as thousands rounded to the nearest 100;

3. The Ore Reserve has been estimated using cut-off grades calculated on a gold price of A\$2,600/oz; and

4. Due to rounding, some numbers in this table may not add up.

A summary is provided below of information material to understanding the reported Ore Reserve estimate, with full details provided in the PFS Executive Summary which forms part of this announcement. This announcement has been compiled in compliance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code – 2012 Edition) ("**JORC Code**") and the ASX Listing Rules (including ASX Listing Rule 5.9).

Material Assumptions and Outcomes

A summary of the material assumptions used in the Study (and underpinning the Ore Reserve estimate in this announcement) is provided in Table 7 below.



Parameter	Units	Value
Gold Price	AUD	2,600
Exchange Rate	AUD:USD	0.65
Royalties	%	3.5
Processing cost – Fixed	\$m/year	28.9
Processing cost – Variable	\$/tonne ore	33.67
Processing Recovery – Concentrate	%	91.5
Processing Recovery – Flotation Tails	%	56.0
Albion Residue Recovery	%	96.0
Overall Plant Recovery	%	92.6
Pre-production Period	Months	13
Power Cost	\$/kWhr	0.283
Diesel Cost	\$/litre ¹	1.60
Site Air Travel	\$/return flight	600
Site Messing & Accommodation	\$/Accom. Day	76

Table 7. Key Material Assumptions

Processing plant recoveries were based on testwork conducted over multiple testwork campaigns.

A summary of the Study outcomes, including operating costs and resulting all-in sustaining cost (AISC) forecasts, is provided in Table 8 below.

Item	\$m	\$/t Processed	\$/oz Sold
Mining Costs	595	105	770
Processing Costs	413	73	534
General and Admin	70	12	91
C1 Cash Cost	1,078	190	1,395
Royalty Payments	82	15	106
Sustaining Capital	135	24	175
Total All-In Sustaining Cost	1,295	229	1,676

Further to the outcomes shown above, the Study delivers strong financial forecasts, delivering pre-tax cashflows of \$855m and a pre-tax NPV₈ of \$486m over an initial mine life of approximately 9 years (which includes pre-production and commissioning). Pre-production capital is estimated at \$245m and is paid back in 2.9 years post-commissioning and ramp-up.

Mining costs were based on a Request for Quotation (RFQ) process including four experienced underground mining contractors using the mining physicals generated from the mine design and scheduling process.

¹ Including government rebate



Processing capital and operating costs were estimated by MACA Interquip as part of the Study processing plant design which was completed to an accuracy of $\pm 15\%$.

General and administration costs were built up from first principles and were based on current industry benchmarks, current and vendor supplied costs.

Criteria Used for Classification

The Ore Reserve has been based on the Youanmi Mineral Resource Estimate, as the Company announced to ASX on 30th January 2024.

The Ore Reserve estimate represents that portion of the PFS mine plan based on Indicated Mineral Resources only and includes the application of modifying factors to account for dilution and ore loss.

Modern mining methods have not been conducted at Youanmi in the past, so there is a degree of uncertainty in the confidence level in these modifying factors, however this is reflected in the classification of the Ore Reserves as Probable.

All material classified as Inferred Mineral Resources was set to zero grade for the purposes of the Ore Reserve estimation.

The Youanmi Ore Reserve estimate is shown in Table 9 below.

Ore Reserve	Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)
Proved Underground Ore Reserve	0.0	0.0	0.0
Probable Underground Ore Reserve	3.83	4.4	546
Total Underground Ore Reserve	3.83	4.4	546

Table 9. Youanmi 2024 Ore Reserve Estimate

Explanatory Notes:

- 1. The reported Mineral Resources are inclusive of the Ore Reserves;
- 2. Tonnes are reported as million tonnes (Mt) and rounded to the nearest 10,000; grade reported in grams per tonne (g/t) to the nearest tenth; gold (Au) ounces are reported as thousands rounded to the nearest 100;
- 3. The Ore Reserve has been estimated using cut-off grades calculated on a gold price of A\$2,600/oz; and
- 4. Due to rounding, some numbers in this table may not add up.

Mining Method

The Study has focused on the high-grade underground component of the Resource.

Various underground mining methods have been employed at Youanmi over the years, however they have all been relatively small-scale hand-held methods.

The selected mining method for the Study was long-hole stoping as it is the most appropriate for the geometry of the deposit (width and dip) and it has a reduced capital intensity at the commencement of operations.

Two variations of the stoping method are used in the mine plan:

- 1. Long-hole open stoping using pillars for support in the top 600m; and
- 2. Long-hole stoping with back-fill (modified Avoca) below 600m.

Development will be undertaken using conventional twin-boom jumbos to a size appropriate to support haulage with 63t class underground haul trucks.

Stope generation was completed using the Deswik Stope Optimiser (DSO). The optimisations were run with gradient strings to enable the new stoping areas to match in with existing development and decline locations where possible. The general settings applied in DSO are shown Table 10 below.



Table 10. Stope Optimiser Settings

Parameter	Value
Optimisation field	AUc
Slice method	YZ
Pillar between parallel stopes	5
Framework Rotation (°) ²	-30°
Stope length (m)	10
Minimum Design Width (m)	2.0
Footwall Dilution (m)	0.2
Hangingwall Dilution (m)	0.3
Minimum Mining Width (m)	2.5

Dilution and recovery factors applied in the schedule are as follows:

- No further dilution factors were applied to stopes in the schedule;
- A dilution factor of 10% was applied to all development drives at a zero grade;
- A recovery factor of 95% was applied to stopes; and
- A recovery factor of 100% applied to development drives.

Level spacing was 20m vertical in Pollard and Main as the dip of the mineralisation was generally around 75°. The Link area which is to the north of the United North fault has a shallower dip, averaging around 55° requiring a reduced level spacing of 15m vertical to manage stope dip lengths.

It is important to note that the Study did not include any remnant mining areas. These remnants were defined as being within approximately 10m of existing mined out (stoping) areas. Additional stoping material may be available in the operating phase when there is a higher degree of confidence around the positioning of historical stoping areas.

Processing Method

Ore mined at Youanmi will be processed via a 750,000tpa processing plant. The proposed flowsheet for a processing facility to be constructed on site is as follows:

- Three-stage crushing followed by ball milling to P₈₀ of 75 μm;
- Rougher and two stage cleaner flotation;
- Thickening of the concentrate ahead of a neutral Albion Leach, with associated oxygen and limestone plant;
- Flotation tail ore-leach thickening before combined oxidised concentrate and flotation tail hybrid carbon-in-leach (24 hours residence, oxygen aeration);
- Pressure Zadra stripping circuit; and
- Cyanide destruction by air/SO₂ before tailings disposal.

Metallurgical testwork campaigns have been conducted at ALS Metallurgy under the direction of JT Metallurgy, and Albion Process[™] testwork completed at Core Resources.

² The framework rotation was selected to match the block model rotation



Metallurgical recoveries applied in the Ore Reserve are as follows:

- Gold recovered to flotation concentrate 91.5%;
- Gold recovered from flotation tailings by conventional CIL 56%;
- Gold recovered from Albion leach residues 96%; and
- Overall gold recovery 92.6%.

No deleterious elements are expected to impact gold recovery.

Cut-Off Grades

A cut-off grade analysis was done to determine the most appropriate cut-off grade for the Study. A margin optimised approach was taken to estimate the cut-off grade that would produce the highest cash margin for each of the deposits.

Stope optimisations were run using the Deswik Stope Optimiser on each of the mining areas at a range of cutoffs from 2.0 g/t to 4.0 g/t at 0.25 g/t increments. These stope optimiser results were reviewed to ensure that any mined, remnant or isolated shapes were excluded from the results.

The remaining stope optimiser results were analysed in a cost model where mining physicals were estimated based on the geometry and location of the deposits, in relation to existing mine workings. High-level mining factors, costs (mining and processing), metallurgical recoveries, royalties and revenues were applied to these physicals to generate cash margins for each cut-off scenario.

The analysis involved the estimation of lateral and vertical development based on the geographical extents and shape density of each of the outputs.

For each deposit, margins were calculated for the full range of cut-offs, allowing the scenario which produced the highest margin (margin optimised cut-off grade) to be identified.

Cut-off grades were estimated based on forecast project operating costs, metallurgical recoveries, royalties and revenue factors. The Project cut-off grades at a A\$2,600/oz gold price used to generate the mine plan are summarised in Table 11 below. The stope and development incremental cut-off grades were used in the schedule to define the ore and waste parameters.

Deposit	Margin Opt. Cut-off Grades	Stope Inc. Cut-off Grades	Dev. Inc. Cut-off Grades	Final Selected Cut-off Grades
Pollard	3.0	2.2	1.3	3.0
Main (Upper) ³	3.0	2.5	1.3	3.0
Main (Lower)	3.0	2.3	1.3	3.0
Link	3.0	2.4	1.3	3.0

Table 11. Selected Cut-off Grades (g/t Au)

Estimation Methodology

The methodology for the determination of Ore Reserves was as follows:

- Unschedule all stoping activities which did not have an Indicated portion of >70%;
- Set all gold grades (AUc) in the mine schedule to zero (waste) for Inferred Mineral Resources and unclassified portions of activities. This ensured that Inferred and unclassified material carried no economic value and was treated as dilution;



³ Main Upper and Lower were separated due to the different backfilling requirements



- Unschedule all development and rehabilitation activities which were no longer required to mine the Ore Reserve stope set;
- Export the schedule physicals out for analysis in the cost and revenue model; and
- Update mining cost model and revenue model for the Ore Reserves schedule case to determine project economics.

The Ore Reserve case design was a sub-set of the PFS design, noting a few key differences:

- Removal of stopes which did not meet the 70% Indicated Mineral Resource requirement;
- Removal of development which is no longer required as a result of the point above; and
- Removal of ventilation drive between the Deeps and Link mining areas, as this was not considered necessary for mining the Ore Reserve portion of the mine plan.

Material Modifying Factors

Given the project site was extensively from the early 1900's on and off until 1997, the project area has significant enduring environmental disturbance due to the existing open pit voids, waste rock dumps, tailings dams, processing plant (now decommissioned) and general infrastructure footprint.

Rox currently holds groundwater licence GWL208485(1), which provides for an annual water entitlement of 1,807,000 kL water, and Prescribed Premise Licence L8275/2008/2 for mine dewatering and inert landfill.

Documentation for mining and environmental approvals will commence as part of the next stage of study.

All tenements relevant to the Ore Reserve estimate are granted Mining Leases, of which Rox holds 100% ownership, and are held in good standing by Rox. The Company has reasonable grounds to expect that all necessary approvals and contracts will eventuate within the anticipated time frame required by the mine plan. There is sufficient tenure to establish all proposed facilities.

Youanmi is located approximately 470km north-east of Perth. From the Great Northern Highway, it is accessible from the south by the unsealed Paynes Find to Sandstone Road (150km) and from the north by the sealed Mount Magnet to Sandstone Road (50km) and thence by the unsealed Youanmi Road (85km).

Personnel will be sourced on a fly in-fly-out basis and is proposed they will utilise the Penny airstrip approximately 30km to the south.

The supporting infrastructure required for the operation of the Project includes the following:

- Processing plant and associated infrastructure;
- Underground infrastructure including primary ventilation, surface explosives storage etc;
- Mining, maintenance and administration facilities;
- Additional 130 rooms to the Youanmi village;
- Site dewatering facilities to dewater the main pit and existing underground workings;
- Tailings storage facilities; and
- Power station and high voltage reticulation.

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Environment

The Youanmi Gold Project is forecast to be a low greenhouse gas emitter, with a greenhouse gas intensity of $0.43 \text{ t } \text{CO}_2\text{e}$ / oz produced, well below the industry average of $0.70 \text{ t } \text{CO}_2\text{e}$ / oz produced, as per S&P Global Market Intelligence market report 2021 (refer to Figure 5).

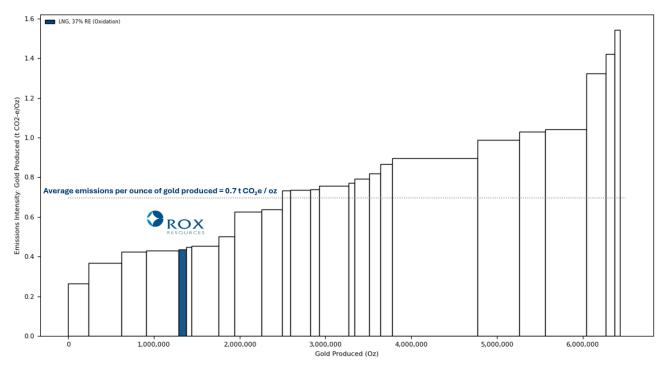


Figure 5. Greenhouse Gas Intensity

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Funding

Project financing for the development of the Project has not yet been secured, which is typical for a PFS-stage project. However, Rox will initiate discussions with a number of financiers, and will advance these discussions through the DFS stage over the coming months.

Potential funding instruments include the following:

- Equity;
- Senior-secured project debt finance;
- Secured corporate bond;
- Prepaid off-take agreements and other forms of off-taker financing; and/or
- Secondary secured (mezzanine) debt.

To achieve the range of outcomes forecast in the Pre-Feasibility Study, funding in the order of \$245m will likely be required, which includes all pre-production cost.

The Company has formed the view that there is a reasonable basis to believe that requisite future funding for development of the Project will be available when required.

The grounds on which this reasonable basis is established include:

- The Project has strong forecast technical and economic fundamentals which, if achieved, provides an attractive return on capital investment and generates robust cash-flows at conservative gold prices (A\$3,100/oz). This provides a strong platform to source debt and equity funding.
- The Project's economics support a decision to invest, given that the Project is forecast to generate \$597m of free cash (post-tax) over the LOM,
- The projected cash-flows can support sufficient debt funding from 50% to 65% (general maximum gearing) of the total construction CAPEX, while meeting typical project debt financing requirements.
- The Project has attractive financial forecast parameters including a post-tax NPV₈ \$322m, a strong post-tax IRR of 33% and a post-tax payback period of circa 3.3 years.
- The Project is 100% owned by the Company, which reduces financing complexity.
- The Company has received interest from various financial institutions, credit funds and private equity firms regarding financing for the Project, with preliminary discussions occurring.
- The Company has a strong track record of raising equity funds as and when required to further the exploration and evaluation of the Youanmi Gold Project; and
- A substantial near-mine exploration target has been estimated of between 1,093koz 1,836koz.

There is, however, no certainty that the Company will be able to source funding as and when required. Typical project development financing would involve a combination of debt and equity. It is possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of the Company's existing shares.

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Recommendation and Forward Work Plan

The PFS provides justification that there are reasonable grounds for considering that the Youanmi Gold Project may become a commercially viable stand-alone gold mining operation. Accordingly, the Board of Rox Resources Limited has approved progression of the Project to the DFS stage, with the forward work plan outlined below:

- Commence an in-fill and extensional drilling program aim to increase the size and confidence of the Mineral Resource Estimate;
- Continue metallurgical testwork programs to test for metallurgical variability, and to further refine the processing flowsheet;
- Commence permitting and seek/amend all necessary approvals from departments including:
 - Environmental Protection Agency (EPA);
 - Department of Energy, Mines, Industry Regulation & Safety (DEMIRS); and
 - Department of Water and Environmental Regulation (DWER).
- Investigate alternative water supply options for site water supply;
- Conduct Aboriginal heritage surveys of the Lake Noondie discharge pipeline;
- Seek approval for discharge licence for discharging water to Lake Noondie;
- Progress discussions for Project financing; and
- Delivery of a DFS in 2025.

Authorised for release to the ASX by the Board of Rox Resources Limited.

*** ENDS ***

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Production Target and Forecast Financial Information Cautionary Statement

Rox has concluded that it has a reasonable basis for providing the forward-looking statements (such as the Production Target and forecast financial information) included in this announcement. The detailed reasons for that conclusion are outlined throughout this announcement and all material risk factors, sensitivities and assumptions, including concerning the JORC modifying factors, upon which the Production Target and forecast financial information are based are disclosed in this announcement. This announcement has been prepared in accordance with the JORC Code (2012) and the ASX Listing Rules.

The actual results could differ materially from a conclusion, forecast or projection in the forward-looking information.

The Production Target and forecast financial information derived from the Production Target referred to in this announcement are underpinned by Indicated Mineral Resources (approximately 71%) and Inferred Mineral Resources (approximately 29%). The total Life of Mine Production Target includes 29% Inferred Resources ounces, 7% Indicated Resource ounces outside of Reserve and the remaining 64% is underpinned by Probable Ore Reserves. 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 or forecast financial information reported will be realised. Accordingly, the Company has scheduled the Production Target such that Inferred Mineral Resources do not feature as a significant proportion of the first 4 years of the 9-year mine plan (which includes pre-production and commissioning). Approximately 19% of the Production Target material mined over the first 4 years is underpinned by Inferred Mineral Resources. The Company is satisfied that the Inferred Mineral Resources partially underpinning the Production Target is not the determining factor of the viability of the Project.

The Ore Reserve and Mineral Resource estimates (which underpin the Production Target and the financial forecast information in this announcement) were prepared by Competent Persons in accordance with the requirements of the JORC Code (2012).

Competent Person Statement

Exploration Targets

The information that relates to Exploration Targets was reported by Rox in accordance with the JORC Code (2012 edition) in the announcement "MRE Update confirms Youanmi as Significant High-Grade Gold Project and Paves Way for PFS" released to the ASX on 30 January 2024, and for which the consent of the Competent Person Mr Steve Le Brun was obtained. A copy of that announcement is available at www.asx.com.au. Rox confirms that it is not aware of any new information or data that materially affects the Exploration Targets information included in that market announcement. Rox confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from that market announcement.

Mineral Resource Statement

The statement of estimates of Mineral Resources for the Youanmi Gold Project in this announcement was reported by Rox in accordance with ASX Listing Rule 5.8 and the JORC Code (2012 edition) in the announcement "MRE Update confirms Youanmi as Significant High-Grade Gold Project and Paves Way for PFS" released to the ASX on 30 January 2024, and for which the consent of the Competent Person Mr Steve Le Brun was obtained. A copy of that announcement is available at www.asx.com.au. Rox confirms it is not aware of any new information or data that materially affects the Mineral Resources estimates information included in that market announcement and that all material assumptions and technical parameters underpinning the Mineral Resources estimates in that announcement continue to apply and have not materially changed. Rox confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from that market announcement.

Ore Reserve Estimate

The information that relates to Ore Reserves in this announcement is based on, and fairly represents, information compiled by Mr Daniel Marchesi of Rox Resources Limited, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AUSIMM). Mr Marchesi 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'. Mr Marchesi is employed on a full-time basis by Rox Resources Limited. Mr Marchesi consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Mr Marchesi has declared that he holds Performance Rights in the Company.

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Forward-Looking Statements

Certain statements in this announcement relate to the future, including forward-looking statements relating to the Company and its business (including its projects). Forward-looking statements include, but are not limited to, statements concerning Rox's planned exploration and development program(s), the Production Target and financial forecast information in this announcement, other results and assumptions of the PFS in this announcement, the Exploration Targets, Mineral Resources and Ore Reserve estimates in this announcement and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward looking statements.

These forward-looking statements involve known and unknown risks, uncertainties, assumptions, and other important factors that could cause the actual results, performance or achievements of the Company to be materially different from future results, performance or achievements expressed or implied by such statements. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement and deviations are both normal and to be expected. Neither the Company, its officers nor any other person gives any warranty, representation, assurance or guarantee that the events or other matters expressed or implied in this announcement (including the forward-looking statements) will actually occur. You are cautioned not to place undue reliance on those statements.

Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices and demand of gold and other metals; possible variations of mineral grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining (or failure to obtain) governmental approvals or financing or in the completion of development or construction activities. This list and the further risk factors detailed in the remainder of this announcement are not exhaustive of the factors that may affect or impact forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information. Rox disclaims any intent or obligations to revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

There is no certainty that the Project will be able to be funded when needed (nor any certainty as to the form such funding may take, such as disclosed in this announcement). It is also possible that such funding may only be available on terms that dilute or otherwise affect the value of the Company's shares.

The Company makes no forecast of whether, and gives no guarantee of whether, the Youanmi Gold Project will actually be funded, developed or mined nor whether future production of gold will occur from the Project.

Non-IFRS Financial Measures

The Company uses certain financial measures to assess how the Project is projected to perform. These financial measures, such as net present value (NPV) and internal rate of return (IRR) (collectively referred to as **Non-IFRS Financial Measures**) are not recognised under International Financial Reporting Standards (**IFRS**).

The Company considers the Non-IFRS Financial Measures provide useful information about the estimated financial forecasts derived from the PFS, however, they should not be considered in isolation or as a substitute for measures of performance or cash flow prepared in accordance with IFRS.

Since the financial forecasts and economic discussion in this announcement are not based on IFRS, they do not have standardised definitions and the way these measures have been derived may not be comparable to similarly titled measures used by other companies. Investors should therefore not place undue reliance on these Non-IFRS Financial Measures.



July 2024 Executive Summary

PRE-FEASIBILITY STUDY YOUANNI GOLD PROJECT



Study Partners

The Study has been compiled internally and in collaboration with external consultants. A list of companies and the provided work packages is provided in Table 1.

Work Stream	Company/Consultant				
Study Compilation and Documentation	Rox				
Geology and Resource Estimation	Rox				
Geotechnical	Turner Mining & Geotechnical				
Hydrology and Hydrogeology	Rockwater				
Mine Dewatering	Greenlands Equipment				
Mining Engineering	Rox				
Mine Ventilation	OzVent Consulting				
Underground Infrastructure	Stalteri Engineering Consultants (Power distribution, Dewatering, Compressed Air and Communications)				
Underground Mining Costs	Barminco				
Metallurgical Consulting Orway Mineral Consultants (Comminution & Albion Pu JT Metallurgy (Flotation & Tailings Characterisation)					
Metallurgical Testwork	ALS Metallurgy (Flotation and CIL) Core Resources (Albion Process™)				
Process Engineering	MACA Interquip Mintrex				
Tailings Storage	Knight Piesold				
Site Power	Zenith Energy (Power Generation) SGC Australia (Surface Distribution)				
Non-Process Infrastructure	McNally Group (Village Expansion) SirromCorp (Village Management Services)				
Aboriginal Heritage	AJ Raynor (Youanmi Heritage Survey) Terra Rosa Consulting (Lake Noondie Heritage Survey)				
Environmental Studies	Native Vegetation Solutions (Flora and Vegetation) Western Ecological (Fauna) Greenbase (Greenhouse Gas Emissions) Clark Lindbeck (Waste Characterisation) Ecospine (Environmental Compliance and Reporting)				
Financial	Rox (Cost Estimate and Financial Modelling)				

Table 1. Youanmi Study Team



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Introduction

Rox Resources Limited ("**Rox"** or the "**Company**") is a Western Australian focused gold exploration and development company listed on the Australian Securities Exchange (ASX: **RXL**). It is the 100 per cent owner of the historic Youanmi Gold Project ("**Project**") located near Mt Magnet, approximately 480 kilometres north-east of Perth. Rox also owns the Mt Fisher - Mt Eureka Gold and Nickel Project approximately 140 kilometres south-east of Wiluna, with 100% ownership of certain tenure with the remaining tenure held via a joint venture (Rox 51%, earning into 75%).

Youanmi was a high-grade gold mine which produced ~667,000oz of gold (at an average grade of 5.47 g/t Au) before it closed in 1997. It is classified as a disturbed site and is located on existing Mining Leases which have significant existing infrastructure to support a return to mining operations.

Rox completed a Scoping Study into the redevelopment of the Project in October 2022. The recommendation of that study was to complete a Pre-Feasibility Study ("**PFS**" or "**Study**") on the Project.

In January 2024, Rox announced an updated Mineral Resource Estimate of 16.2 Mt at 4.4 g/t Au for 2.3 Moz of contained gold, including an underground component of 9.7 Mt at 5.5 g/t Au for 1.7 Moz.

The Study has assessed the technical, financial and environmental viability of the Project, and supports a Maiden JORC 2012 compliant Ore Reserve of 3.83 Mt at 4.4 g/t for 546,000 ounces which has been declared based on the January 2024 Mineral Resource Estimate.

The PFS determined that the resumption of underground mining and processing at Youanmi, at a 750,000 tpa processing rate with supporting infrastructure, is viable based on a technical, economic, environmental and social basis.

The recommendations of the Study are:

- Commence further technical studies to complete a Definitive Feasibility Study (**DFS**) on the Project; and
- Commence approvals documentation for submission to the appropriate regulatory authorities.

Project Location and Ownership

The Youanmi Gold Project is located in the Shire of Sandstone in the Midwest region of Western Australia, approximately 470km north-east of Perth (Figure 1 below). From the Great Northern Highway, it is accessible from the south by the unsealed Paynes Find to Sandstone Road (150km) and from the north by the sealed Mount Magnet to Sandstone Road (50km) and thence by the unsealed Youanmi Road (85km). The unsealed roads are well maintained may be closed from time to time due to rainfall.

The nearest major population centre is the town of Mount Magnet (2021 census population 583), which is a gold mining centre with some basic services and scheduled commercial flights to Perth. Sandstone (2021 census population 109) is a former gold mining centre located 95km to the northeast via the unsealed Paynes Find to Sandstone Road.



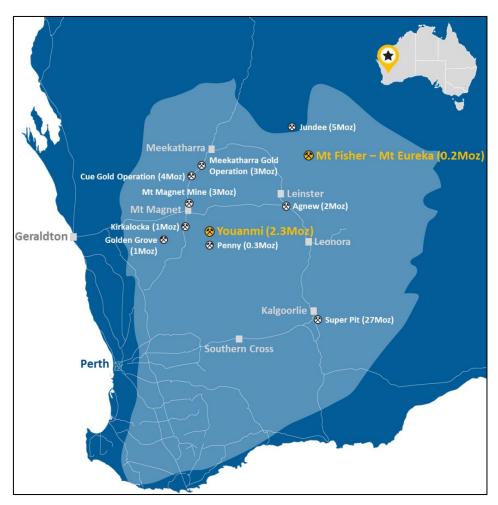


Figure 1. Youanmi Site Location

The Company has 100% of all mineral rights at the Youanmi Gold Mine including nearby extensions, and between 90% to 100% of gold rights in the regional tenure. Current tenure held by Rox at the Youanmi Gold Project is shown in Figure 2 below.

Several gold royalties exist over the mining leases as summarised below:

- WA State Royalty of 2.5%;
- Venus Metals Corporation Limited ("Venus" or "VMC") holds a 1.0% net smelter royalty on all gold produced from all OYG tenements – excluding M57/10; and
- St Barbara Limited and Venus Metals Corporation Limited have royalty agreements affecting M57/10, however no gold is produced from M57/10 as part of this Study



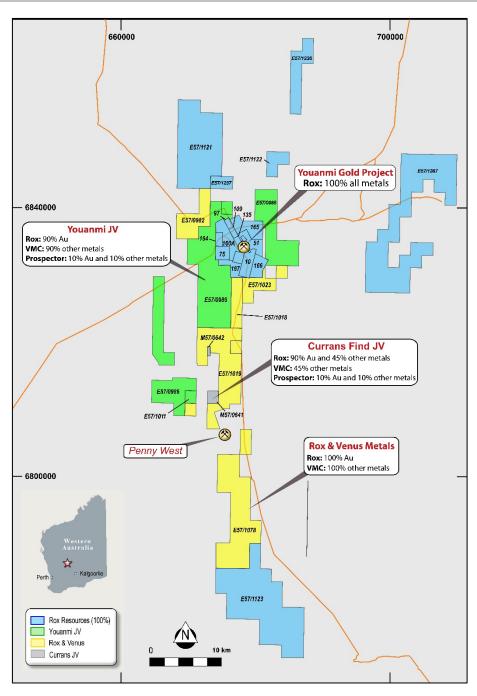


Figure 2. Current Land Tenure of Youanmi Gold Project

Project History

Small-scale underground production commenced in 1908 with Youanmi Gold Mines Limited and continued until 1921, with a second period of production from 1937 to 1942. Multiple open-pit operations proceeded from 1987 to 1993 with Eastmet Limited.

In November 1993, a decline (4.8m by 4.8m) was commenced down to a planned depth of 1,000m RL (about 460m below surface). The portal for the decline was established from the floor of the Main Pit and development proceeded successfully for over a year. The first ore blocks were mined via shrinkage stoping in June 1994, and both decline and stope development generally proceeded on schedule.



In the latter months of 1994, the mining contractor began to fall behind in the development and stope preparation schedule. Mining equipment downtime and failures began to mount, and in February 1995 the mining contractor was taken over and the operation continued under the new owner.

During the underground mining phase, a feasibility study on the Hill End orebody was completed in December 1994 and a decision made to commence mining in early 1995, thereby supplementing the underground mill feed with new operators Gold Mines of Australia Limited ("GMA"). Ultimately, the failure to meet production targets and a declining gold price resulted in closure of the underground and surface operations in November 1997. While the underground operation only continued for a little over three years of its planned minimum eight-year mine life, owners' reporting indicates that, inclusive of hedging gains, the project operated at an average cash margin of +A\$93/oz during this period.

Table 2. Youanmi Production History

Company	Period	Tonnes Milled	Head Grade (g/t)	Recovered Grade (g/t)	Recovery (%)	Reported Gold Produced (oz)
	1908-1921	339,000	-	15.2		166,000
Youanmi Gold Mines Ltd	1937-1942	365,000	-	8.1		95,000
	Other	46,000	-	10.2		15,000
	Total	750,000	-	11.4		276,000
Open-pit Operations						
Eastmet Ltd	1987-1993	2,665,535	3.4	3.1	89.4	262,717
Underground Operations						
Gold Mines of Australia Ltd (GMA)	1995-1997	411,858	11.4	9.7	85.3	128,278
Historical	Total	3,827,393	-	5.4	-	666,995

A summary of the gold production over various periods is shown in Table 2 below.

Geology

The Youanmi Gold Deposit is a deformed sulphide replacement lode-style dominated by abundant pyrite stringer and replacement of disseminated magnetite in the host sequence.

Mineralisation is hosted in both the Mine Lode Shear Zone (MLSZ), a 1-25m wide shear zone that has been traced along strike for over 2,300m and 900m down-dip, and a series of footwall and hanging wall shear zones.

The principal source of gold produced from Youanmi has been from the Mine Lode Shear Zone. The Mine Shear is sub-parallel to the greenstone-granite contact and has variable dips of between 50°-70°W striking 330°.

The Mine Lode is a complex, northwest-striking, left-lateral, strike-slip shear zone and is marked by extensive quartz veining and brecciation.

The Main Lode system crosscuts the folded stratigraphy and dips steeply in the south and more moderately in the north, closer to the granite contact. A number of east-west faults cross-cut and displace the greenstone sequence.

Figure 3 below shows the mine geology, principal deposit locations and major cross-cutting faults.



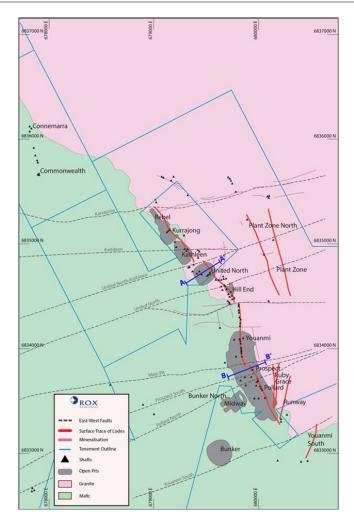


Figure 3. Youanmi Mine Geology & Principal Deposit Locations

Figure 4 below shows a cross-section (through B-B' on Figure 3) of the Youanmi deposit showing the granite and mafic contact and locations of the mineralised lodes.

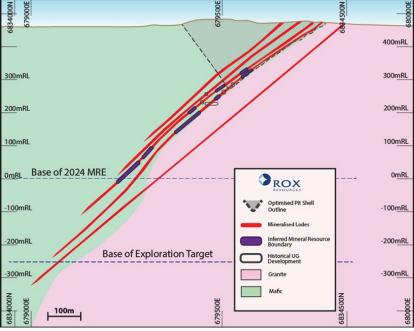


Figure 4. Cross-section Through Youanmi Deposit



The gold mineralisation forms a series of altered and mineralised shear lodes, consisting of a major central shear lode system (Mine Lode) and subsidiary hanging-wall and footwall shear lodes. Most of the gold mineralisation is contained within the Mine Lode, which has been traced underground, from Pollard to Prospect, for at least approximately 1.1km along strike and up to 900m down-dip. The mineralisation has been further traced for an additional 1,150m along strike to the north through the Hill End, United North, Kathleen and Rebel-Kurrajong open-pits for a total extent of ~2,200m.

The shear zones are characterised by pyrite, arsenopyrite, sericite and carbonate, and can often be described as a schist or mylonite lithology. Gold is associated mainly with the pyrite and arsenopyrite, most as free in the gangue, and on grain boundaries and in fractures. A small proportion is thought to be contained within the sulphide mineral lattice in solid solution.

Mineral Resource

The current estimated Mineral Resources, depleted against the existing mining infrastructure, open pit and underground, and differentiated by OP/UG category for The Youanmi Gold Project, using information available up to 30th September 2023 reported at a cut-off grade of 2.5 g/t Au for underground mining methods and 0.5 g/t Au for open-pit mining methods are shown in Table 3 below.

Category	Cut-off	Tonnes (Mt)	Au Grade (g/t)	Au Metal (koz)	% of Resource		
Open Pit							
Indicated	0.5	5.09	2.8	458	81%		
Inferred	0.5	1.39	2.4	108	19%		
Sub-Total	0.5	6.48	2.7	565	100%		
Underground							
Indicated	2.5	5.62	6.1	1,103	64%		
Inferred	2.5	4.13	4.8	633	36%		
Sub-Total	2.5	9.76	5.5	1,736	100%		
Total Resources							
Indicated	-	10.71	4.5	1,560	68%		
Inferred	-	5.53	4.2	740	32%		
Total	-	16.24	4.4	2,301	100%		

Table 3. January 2024 Mineral Resource Estimate

Explanatory Notes:

1. The Mineral Resource is classified in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC code);

2. Tonnes are reported as million tonnes (Mt) and rounded to the nearest 10,000; grade reported in grams per tonne (g/t) to the nearest tenth; gold (Au) ounces are reported as thousands rounded to the nearest 100;

3. The Open Pit resource is the portion of the Mineral Resource which is constrained within a A\$2,700/oz pit shell, and above 0.5 g/t Au cut-off grade;

4. The Underground Resource is the portion of the Mineral Resource outside of the Open Pit Resource described above, and above a 2.5 g/t Au cut-off grade; and

5. Due to rounding, some numbers in this table may not add up.



Ore Reserve

The Maiden Youanmi Ore Reserve as of 30 June 2024 is 3.83 Mt @ 4.4 g/t for 546 koz of contained gold as shown in Table 4 below, reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code) 2012 edition. The Ore Reserve has been based on the Indicated component of the Mineral Resource announced in January 2024.

Ore Reserve	Cut-off	Tonnes (Mt)	Grade (g/t Au)	Contained Ounces (koz)
Proved Underground Ore Reserve	0.0	0.0	0.0	0.0
Probable Underground Ore Reserve	3.0	3.8	4.4	546
Total Underground Ore Reserve	3.0	3.8	4.4	546

Table 4. Youanmi 2024 Ore Reserve Estimate

Explanatory Notes:

1. The reported Mineral Resources are inclusive of the Ore Reserves;

2. Tonnes are reported as million tonnes (Mt) and rounded to the nearest 10,000; grade reported in grams per tonne (g/t) to the nearest tenth; gold (Au) ounces are reported as thousands rounded to the nearest 100;

3. The Ore Reserve has been estimated using cut-off grades calculated on a gold price of A\$2,600/oz; and

4. Due to rounding, some numbers in this table may not add up.

Figure 5 below shows the Ore Reserves design (coloured), overlaid on the LOM Production Target (grey). For clarity of the image, the existing underground workings have been removed from the image.

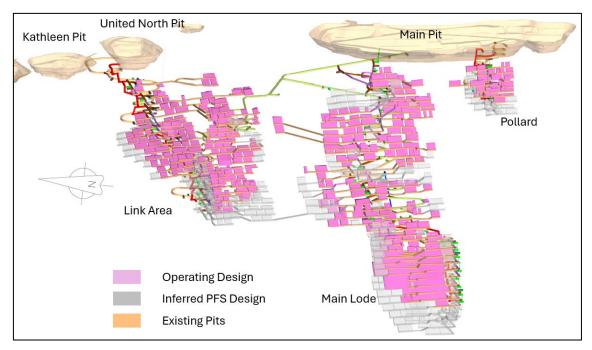


Figure 5. Comparison of Production Target and Ore Reserves Design

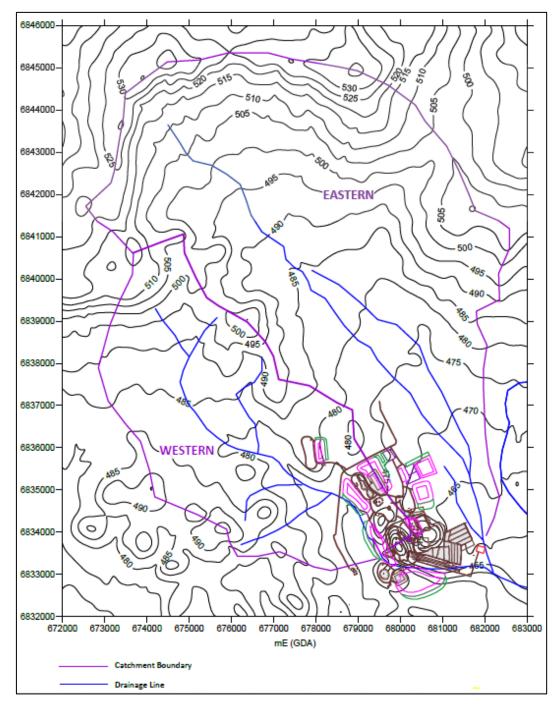
For the purposes of estimating Ore Reserves, all stopes with less than 70% Indicated material were removed from the design and schedule. All remaining Inferred material was treated as dilution and assigned a zero grade.



Modifying factors were applied based on geotechnical inputs, selected mining methods and equipment selection.

Hydrology

The Youanmi Mine lies on a low divide between two alluvial drainages that drain to the south and then to the east towards Lake Noondie, a saline playa. The drainages, named Western and Eastern for this report, and their catchments are shown in Figure 6 below. The eastern drainage includes several creek lines and a flood plain covering a width of about 1.5 km east of the mine.







Details of the two catchments, Western and Eastern, are provided in Table 5 below.

CatchmentArea (km²)Length (km)DescriptionWestern33.612.8Drains to western side of mining area, and through the areaEastern64.914.6Drains to eastern side of mining area

Table 5. Details of Youanmi Catchments

Peak flows in each catchment were analysed to assess whether they could adversely impact the proposed and existing pits and associated infrastructure, and also to provide data for the conceptual design of flood protection structures, should they be required.

The locations of the flow paths that could impact the pits and mine infrastructure were identified from aerial photography and the 1 m LIDAR or SRTM contours. Hydraulic analyses were conducted at cross-sections ("Sections") at critical locations along the flow paths to assess the flood risk to the mining area.

Planned waste rock dumps and topsoil stockpiles would partially cover the western drainage and would restrict flood flows. A diversion drain may be required along the flood plain of this drainage to contain and control flows in the drainage. It should have a base width of 20 m and a depth of 1 m.

Flood flows in the eastern drainage will not impact the planned pits and mine infrastructure, except for the eastern wall of the existing evaporation ponds. That wall will be assessed by an engineer to ensure it would be stable with short-term flows with a depth of up to 1 m and a flow velocity of 0.5 to 0.6 m/s.

Hydrogeology and Dewatering

The original water-table level was approximately 30 m below ground level, but there are no pre-mining water level records in the area. A water level of 23.2 m below ground level (444.8 m AHD) is recorded for Town Well, west of the mining area, and water levels were probably similar in the mining area. The original water-table would have sloped gently downwards to the south.

Groundwater salinity in shallow pastoral wells within 10 km of Youanmi ranged from 820 to 9,300 mg/L TDS and salinities of less than 2,000 mg/L TDS were measured in the Rebel pit bore, United North Pit (to early 1995) and in Bunker pit in 1994. Groundwater salinity increases with depth, and so the salinity of water produced from United North and Bunker pits increased as water levels were lowered. Groundwater salinity also increased with depth in the underground workings; in 1996, salinities were lower in the Hillend workings (about 9,000 mg/L TDS) than in the Youanmi Deeps (about 120,000 mg/L TDS).

The main zones of permeability are probably within the mineralised shears, the BIF and chert, and to a lesser degree, the transition-zone rocks. The palaeochannel that intersects Bunker pit may also be a conduit for groundwater flow, unless it has high clay content. Permeability (hydraulic conductivity) may decrease with depth, as very deep fractures tend to be closed. Some of the faults are considered to be hydraulic barriers, resulting in different groundwater levels and salinities in each fault block.

Dewatering rates (or water supply capacity) of the existing pits, and for the underground workings, have been estimated using historical data, and analytical or numerical modelling. They represent groundwater inflows, but there is also water stored in the pits and workings that will need to be removed and will increase the pumping rates required: pumping rates will be directly dependent on the speed at which the pits and/or underground voids are emptied. The estimates of groundwater inflows and volumes in storage are summarised in Table 6.



Pit/Workings	Est. GW Inflows (m³/day)	Water Volume (m³)
Main Pit	1,000 to 3,000	2,128,000
Bunker	200	125,000
United North	150 to 280	185,000
Kathleen	100	58,000
Rebel Bore	180	17,300
Hill End UG	400 to 500	
Youanmi Deeps	4,000	616,000
Pollard UG	500	

Table 6.	Estimates of	Groundwater	Inflows and	Water	Volumes in Storage
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The Youanmi Main pit and underground mine contains approximately 2,700,000 m³ water which needs to be removed over the first few years of operation. Of this volume, approximately 2,100,000 m³ is contained within the Main pit, and the remaining 600,000 m³ is in the underground workings.

The United North pit also contains a small volume of water (170,000 m³) which is required to be pumped out prior to accessing the proposed portal locations and commence development towards the Link area.

Dewatering of the Main pit will provide access to the existing portal and ventilation shafts so decline rehabilitation can commence.

Dewatering of the pit will be undertaken with two pontoon-mounted submersible 75 kW pumps, which pump to a transfer station located on the pit crest at the southern end of the pit. This pump station will pump the water to a discharge point at Lake Noondie via a 355 mm pipeline at a rate of 80 l/s.

The proposed pipeline route is located in an approved Miscellaneous Licence. The duration to dewater to the base of the pit will be achieved in 15 months, while the portal will be exposed for rehabilitation to commence within 12 months. Groundwater inflows of 1,500 m³/day (17.5 l/s) are expected towards the bottom of the pit. With a pumping rate of 80 l/s, this gives a net dewatering rate of 62.5 l/s.

Initial dewatering of the underground mine will be conducted with submersible pumps located in one of the ventilation shafts. This will allow faster dewatering of the underground mine, however if the shafts are not accessible or are obstructed, dewatering will be undertaken via the mine pumping system.

Geotechnical

Turner Mining and Geotechnical was engaged to conduct a PFS-level geotechnical assessment to provide design parameters for the underground mine design, including appropriate mining methods, stand-off distances, stope stability parameters and ground support guidelines.

A total of 143 diamond drill holes which were geotechnically logged were used for the assessment, including 2,300 structural measurements across multiple mineralised domains as well as planned infrastructure locations.

The assessment indicated good ground conditions for development and stoping. There is likely to be stress damage and seismicity at depth, which could impact on production rates and production



continuity. As a result, Long Hole Open Stoping (LHOS) with support pillars was selected as the most appropriate method above 600m from surface. Below 600m surface, backfill is required to support the stope hangingwall and reduce pillar instability.

The non-supported stope stability and hydraulic radii (HR) results are shown in Table 7. The final stope spans were based on the calculated HR and selected level spacing.

Domain	Q'	А	В	С	N′	HR
United North	44.8	0.54	0.7	2	33.9	8.6
Hill End	47.3	0.45	0.7	2	29.8	8.3
Main Lode	18.5	0.15	0.7	2	3.9	3.8
Pollard	46.3	0.45	0.7	2	29.2	8.3

Table 7. Mean Orebody Q', N' and HR

The final stope spans were based on expected stress, calculated HR and selected level spacing, and not exceeding 70m.

Sill pillars will be required in uphole retreat stopes when the total internal stope void heights are greater than 100m. Sill pillars have a minimum height 3 x stoping width.

The decline and access/infrastructure drives must be at least 25m away from the footwall stope wall down to 600m depth and 30m below 600m depth. Due to the design of the level infrastructure, declines are not located within 60m of the stoping areas.

Industry standard galvanised split set and mesh ground support patterns are sufficient for development to 600m below surface. Additional support in the form of rock bolts (e.g. threadbars) and greater coverage of mesh will be required in areas deeper than this.

Mining

The Youanmi underground mine plan consists of three distinct mining areas, being the Main Lode, Pollard and Link (United North and Hill End). The locations of these areas relative to the historical workings and open pits are shown in Figure 7.



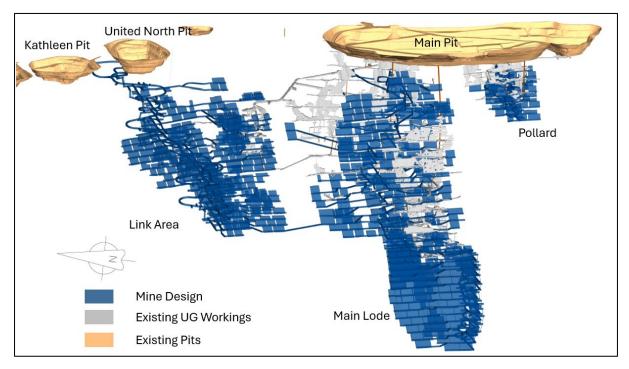


Figure 7. Youanmi Underground Mine Layout

Various underground mining methods have been employed at Youanmi over the years, however they have all been relatively small-scale hand-held methods.

The selected mining method for the Study was longhole stoping as it is the most appropriate for the geometry of the deposit (width and dip), and it has a reduced capital intensity at the commencement of operations.

Two variations of the stoping method are used in the mine plan:

- Long hole open stoping using pillars for support in the top 600m; and
- Longhole stoping with backfill (modified Avoca) below 600m.

These methods are in line with geotechnical recommendations, and are methods commonly used in the Western Australian underground mining industry.

Cut-off Grades

A cut-off grade analysis was undertaken to determine the most appropriate cut-off grade for the Study. A margin optimised approach was taken to estimate the cut-off grade that would produce the highest cash margin for each of the deposits.

Stope optimisations were run using the Deswik Stope Optimiser on each of the mining areas at a range of cut-offs from 2.0 g/t to 4.0 g/t at 0.25 g/t increments. These stope optimiser results were reviewed to ensure that any mined, remnant or isolated shapes were excluded from the results.

The remaining stope optimiser results were analysed in a cost model where mining physicals were estimated based on the geometry and location of the deposits, in relation to existing mine workings. High-level mining factors, costs (mining and processing), metallurgical recoveries, royalties and revenues were applied to these physicals to generate cash margins for each cut-off scenario. The analysis involved the estimation of lateral and vertical development based on the geographical extents and shape density of each of the outputs.



For each deposit, margins were calculated for the full range of cut-offs, allowing the scenario which produced the highest margin (margin optimised cut-off grade) to be identified.

The selected cut-off grades used in the Study are shown in Table 8 below. The stope and development incremental cut-off grades were used in the schedule to define the ore and waste parameters.

Deposit	Margin Opt. CoG ¹	Stope Inc. CoG ²	Dev. Inc. CoG ³	Selected CoG
Pollard	3.0	2.2	1.3	3.0
Main (Upper) ⁴	3.0	2.5	1.3	3.0
Main (Lower)	3.0	2.3	1.3	3.0
Link	3.0	2.4	1.3	3.0

Table 8. Selected Cut-off Grades (g/t Au)

Explanatory Notes:

1. Cut-off grades were calculated on a gold price of A\$2,600/oz

Stope Shape Generation

Stope generation was conducted using the Deswik Stope Optimiser (DSO). The optimisations were run with gradient strings to enable the new stoping areas to match in with existing development and decline locations where possible.

Level spacing was 20 m vertical in Pollard and Main as the dip of the mineralisation was generally around 75°. The Link area which is to the north of the United North fault has a shallower dip, averaging around 55° requiring a reduced level spacing of 15 m vertical to manage stope dip lengths.

General settings applied in DSO are shown in Table 9 below.

Parameter	Value
Optimisation field	AUc
Slice method	YZ
Pillar between parallel stopes	5
Framework Rotation (°) ⁵	-30°
Stope length (m)	10
Minimum Design Width (m)	2.0
Footwall Dilution (m)	0.2
Hangingwall Dilution (m)	0.3
Minimum Mining Width (m)	2.5

Table 9. Stope Optimiser Settings

¹ Fully costed break-even cut-off grade

² Includes all stoping, haulage and processing costs

³ Only includes rehandle to mill and processing costs as it assumes that all mining costs are sunk

⁴ Main Upper and Lower were separated due to the different backfilling requirements

⁵ The framework rotation was selected to match the block model rotation



It is important to note that the Study did not include any remnant mining areas. These remnants were defined as being within approximately 10m of existing mined out (stoping) areas. Additional stoping material may be available in the operating phase when there is a higher degree of confidence around the positioning of historical stoping areas.

Development Design Parameters

All development dimensions were designed to suit the equipment selected for the Project. A list of the typical development types (both horizontal and vertical) and their profiles are shown in Table 10 below.

Excavation Type	Dimensions	Profile
Incline / Decline	5.3mW x 5.5mH	Arched
Capital / Other	5.3mW x 5.5mH	Arched
Capital Accesses	5.0mW x 5.0mH	Arched
Ore Drives / Sumps	4.5mW x 4.5mH	Arched
Infrastructure Drives	5.3mW x 5.5mH	Arched
Ventilation Raise (internal) - Pollard	4.0mW x 4.0mL	Square
Ventilation Raise (internal) – Main / Link	5.0mW x 5.0mL	Square
Ventilation Raise (Raisebored)	3.5m Diameter	Round
Escapeway Raises	1.2mW x 1.2mL	Square

Table 10. Youanmi Development Profiles

Capital Development

A single portal exists in the Main pit which services the Main Lode and has an access across to Link. This portal will be rehabilitated and used as an access portal for the Main Lode.

Two new portals will be developed in the United North pit, one for access and haulage, and the other for exhaust ventilation.

Similarly for the Pollard deposit, a new access portal and a new exhaust ventilation portal will be established in the south end of the Main Pit.

The new and existing portal locations are shown in Figure 8 below.



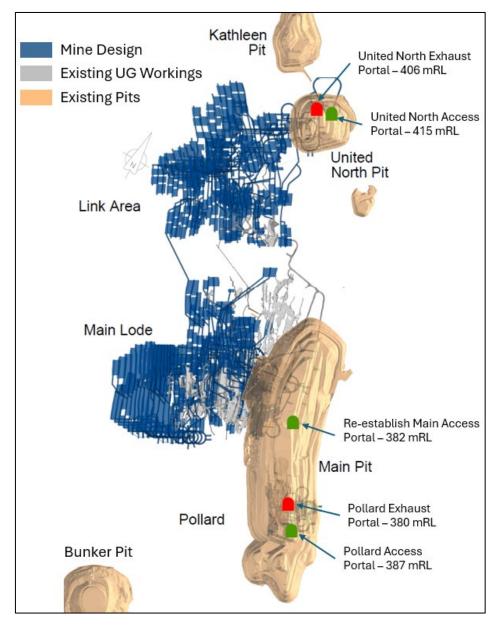


Figure 8. Youanmi Portal Locations

Access to each mining area is by a decline which connects to the surface via one of the portals listed in Figure 8 above. Where possible, existing decline development has been utilised (once rehabilitation has been completed) to reduce overall development. New declines have been designed with a maximum gradient of 1:7 and have a minimum turning radius of 20m.

As well as mine access, materials and personnel transport, the declines provide fresh air to the working areas. Return air is facilitated by a dedicated airway which has connections to each mining level and is connected to the surface via a series of interconnected airways. Primary ventilation fans will be installed near the surface portals and collars of the exhaust system to create a negative pressure ventilation circuit, drawing fresh air into the portals as required.

The mineralisation is accessed on each level with a drive perpendicular to the orebody, from which stockpiles, vent drives, sumps and escapeways are developed. Where possible, the escapeway has been designed on the mineralised side of the stockpile to prevent entrapment of personnel within a level if a loader and truck are operating between the decline and stockpile.



Operating Development

Each level has an access/crosscut designed from the decline perpendicularly through to the extent of the mineralisation. This crosscut provides access for the ore drives to be developed along strike of the mineralisation. The ore drives have been designed to follow the mineralisation, even where no economic stopes have been identified.

The stope widths are reasonably narrow and suited to a longitudinal style of extraction. Some isolated areas have stope widths >15m, and have a parallel ore drive designed to ensure maximum extraction.

A typical level layout showing the capital and operating level development is shown in Figure 9 below.

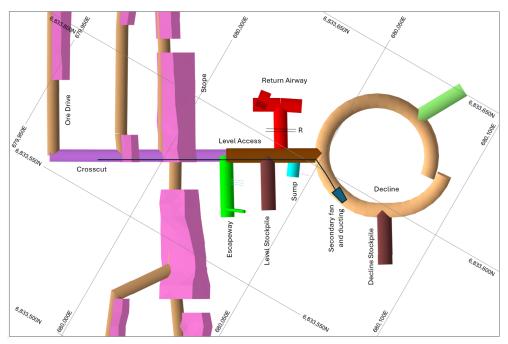


Figure 9. Youanmi Typical Level Layout

Ore drives have been designed to access all stoping areas, however given the extraction sequence is an uphole retreat sequence, there is no requirement for development to access the top of the stopes.

Backfill

The only section of the mine requiring backfill is the Youanmi Deeps, which is >600m below surface, where stress levels are expected to increase, resulting in much larger pillars. The backfill will provide sufficient wall support to negate the need for pillars.

The Deeps area has been segregated into multiple 3-level panels. In each of these panels, the bottom level will be stopped first and filled with Cemented Rock Fill (CRF). The next level up is mined with a Modified Avoca method with loose rock backfill, and the third level, which undercuts the CRF on the panel above is left unfilled, which will result in a reduced recovery. Each of the 3-level panels is mined in a top-down sequence, reducing the amount of decline development required ahead of the stoping level.

Longhole stoping with cemented rockfill is a widely used method in the Australian underground mining industry.

The general backfill sequence is shown in Figure 10 below.



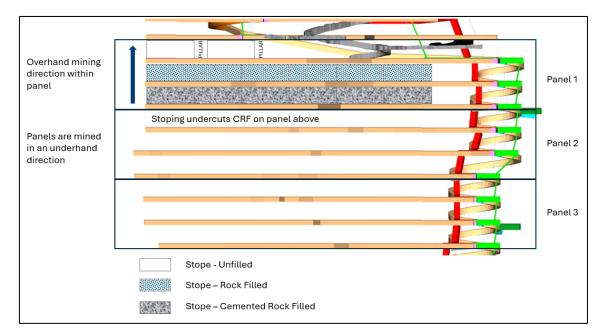


Figure 10. Youanmi Deeps Backfill Methodology and Sequence

Mine Sequence

The development priority is initially focused on establishing the decline, ventilation exhaust drive and access to the first production panel. Level capital development is completed as the decline descends (i.e. access drives, footwall drives, escapeways, stockpiles); operating development is completed in time for stoping, or sooner if Jumbo availability permits.

Most of the stoping inventory is mined in a top-down sequence, so the declines are generally not required to be developed too aggressively. Typically, the decline is developed two to three levels below the lowest production level to allow for infrastructure establishment and dewatering/rehabilitation as required.

The stoping sequence in the Main Lode Upper, Link and Pollard areas is top-down, retreating from the end of the drive towards the access.

Successive levels then commence and progress in a chevron pattern, ensuring that the upper-level stope is always leading the stoping front on the levels below.

Mine Schedule

The nameplate throughput rate for the Study was 750,000 tpa, or 62,500 t/month. This is based on what the underground mine can reasonable and sustainable produce, taking into account constraints such as equipment numbers, productivities and number of available working areas.

During the scheduling process, each activity (which required a physical piece of equipment was required) had a resource assigned to it. Each resource had a rate assigned to enable its productivity. Additionally, rates were applied to each task to ensure that reasonable rates were applied to each activity. Resources were applied for lateral development, stope bogging, production drilling, paste filling and vertical development to apply realistic limits to these activities.

The maximum rates applied were consistent with the current rates applied in the site planning process and are summarised in Table 11 below.



Table 11. Schedule Resource and Task Rates

Activity	Rate
Jumbo Development (multi heading)	300 m/month/Jumbo
Rehab Advance Rate (multi heading)	400 m/month/Jumbo
Rehab Advance Rate (single heading)	200 m/month/heading
Decline Advance Rate	80-100 m/month
Other Development Advance Rate	60-80 m/month
Ore Drive Advance Rate (geology controlled)	60 m/month
Stope Bogging	1,000 t/day
Production Drilling	230 m/day
Backfilling – Waste Rock Fill	1,000 t/day
Backfilling – Cemented Rock Fill	1,000 t/day

The mining assumptions and factors applied to the schedule are shown in Table 12 below.

Table 12. Schedule Assumptions and Parameters

Parameter	Value	Comments / Source
Development Over Break	10%	Applied at zero grade
Stoping Cut-off Grade	3.0 g/t	See Table 8 above
Development Cut-off Grade	1.3 g/t	Non-mining costs, assumes all material is hauled to surface
Stope Recovery	95%	Estimated based on stope size and dip
Stope Dilution (ELOS)	0.5 m	0.3m HW and 0.2m FW added in MSO
Tonnes per production drill metre	3-10 t/drm	Calculated based on stope width
Production charge metres as a percentage of drill metres	80%	90% for ventilation rises

The schedule has been resource levelled by scheduling software using nominated targets for stope tonnes and development metres, and by fixing resource numbers and productivities. The schedule quantities are summarised in Table 13 below.



КРІ	Unit	Value
Total Production Target	Mt	5.8
Mined Grade	g/t	4.5
Total Mined Ounces	koz	849
Stoping Tonnes	Mt	4.2
Stoping Grade	g/t	5.1
Stoping Ounces	koz	687
Development Tonnes	Mt	1.6
Development Grade	g/t	3.1
Development Ounces	koz	162
Waste Tonnes	Mt	2.9
Total Lateral Development	m	61,159
Capital Development	m	23,819
Operating Development	m	37,340
Rehab Development	m	4,272
Vertical Development	m	2,403

Table 13. Production Target Quantities

The total Production Target includes 29% Inferred Resources, 7% Indicated ounces outside of Ore Reserves, and the remaining 64% is underpinned by Probable Ore Reserves.

The Production Target excludes the Youanmi South (Paddy's), Midway underground resource areas which total 206 kt at 6.1 g/t for 40 koz of inferred resources.

The total tonnes from Table 13 have been summarised by material classification in Table 14. Note, only classified material was included in the stope optimisations. Any material included in the Production Target, which is outside of the mineralised wireframe, and does not have a resource classification is considered dilution.

Note this is a summary of the mining inventory and does not mean that Indicated material will necessarily convert to an Ore Reserve.



КРІ	Unit	Value
Tonnes – Measured	Mt	-
Grade – Measured	g/t	-
Mine Recovered Ounces – Measured	koz	-
Tonnes – Indicated	Mt	4.0
Grade – Indicated	g/t	4.6
Mine Recovered Ounces – Indicated	koz	601
Tonnes – Inferred	Mt	1.8
Grade – Inferred	g/t	4.4
Mine Recovered Ounces – Inferred	koz	247
Tonnes – Unclassified	Mt	-
Grade – Unclassified	g/t	-
Mine Recovered Ounces – Unclassified	koz	-

Table 14. Production Target by Material Classification

Ore tonnes, development metres, production drilling and fill volumes for each scenario are shown month by month in the following graphs.

Steady-state production of 62,500 t/month commences in October 2028 and is maintained until December 2033. Over this period, months of up to 70,000 t/month are achieved where equipment productivities allow. This ensures a suitably sized stockpile is maintained on the ROM.

It would be expected that additional material through further drilling would extend the production profile beyond what is shown in this Study. The tonnage profile is shown in Figure 11 below, and the resultant ounce profile is shown in Figure 12 below.

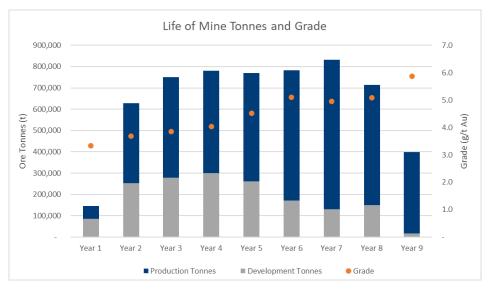


Figure 11. Annual Production Target Tonnes & Grade by Year and Type



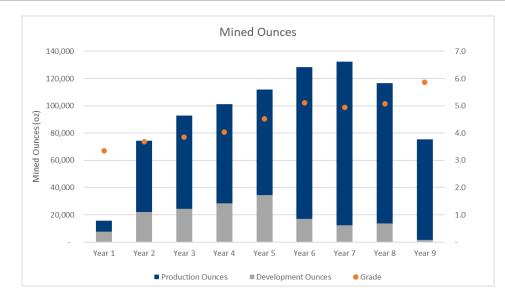


Figure 12. Annual Production Target Ounces & Grade by Year and Type

These yearly tonnes are also shown by resource classification in Figure 13, and ounces by resource classification in Figure 14 below.

The first five years of the mine plan averages over 80% Indicated material, ensuring a higher level of confidence in the initial part of the plan. Planned grade control drilling is expected to increase the confidence in this inferred material prior to it being mined.

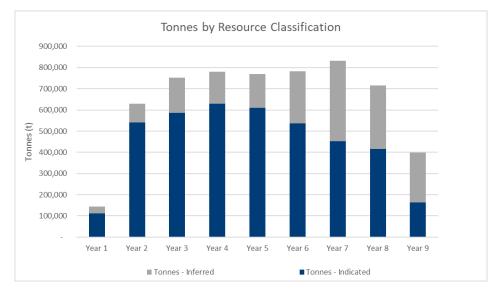


Figure 13. Annual Production Target Tonnes by Resource Classification



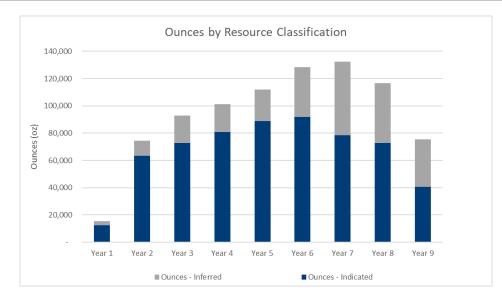


Figure 14. Annual Production Target Ounces by Resource Classification

Mobile Equipment

Mine equipment estimates have been built up based on schedule quantities and equipment productivities. The equipment requirements per year are shown in Table 15 below.

Equipment Type	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9
Development Jumbo	2	3	3	3	3	2	2	1	1
Production Drill	0	2	2	2	2	3	3	2	2
Loader	1	2	3	3	3	3	4	3	2
Truck	1	2	3	4	5	5	6	5	4
Charge-up	1	2	2	2	2	2	2	1	1
Integrated Tool Carrier	2	3	3	3	3	3	3	3	3
Grader	1	1	1	1	1	1	1	1	1
Flatbed/Service Truck	1	1	1	1	1	1	1	1	0

Table 15. Underground Equipment Build-up

Ventilation

The ventilation design has utilised the existing intake and exhaust system where possible. These systems will be re-established as mine dewatering and decline rehabilitation is progressed. Each of the mining areas have a dedicated intake and exhaust system, fitted with a primary ventilation fan located on the surface of each exhaust system. Fresh air is delivered to the mine via the decline and existing intake raise in Main.

The airflow requirements are based on a minimum diesel exhaust dilution factor of 0.05 m³/s/kW as stipulated in the 2022 Western Australian Work Health and Safety (Mines) Regulations (WAWHSRs).

A summary of the minimum primary airflows and required primary fan sizes is shown in Table 16 below.



Table 16. Primary Ventilation Summary

Area	Minimum Airflow (m³/sec)	Primary Fan size (kW)
Main	245	600
Link	150	350
Pollard	110	150

Secondary ventilation is provided by fans installed in the decline force ventilating working areas via ventilation duct. Each level has an exhaust access so contaminated air can be quickly exhausted rather than recirculated to other work areas. A typical level layout showing the exhaust ventilation access can be seen in Figure 9 above.

Metallurgy

The historical Youanmi CIL plant treated 600 ktpa of oxide ore. The processing plant was upgraded to treat sulphide ore with a 200ktpa flotation plant and bacterial oxidation of Youanmi underground ore. Historical reports suggest that the float and bacterial leach plant did not require significant oxidation (~30%) to see gold recovery uplift. This provides an opportunity for on-site oxidation to be conducted at a lower capital and operating cost while still achieving high gold recoveries.

The Study has focused on the fresh sulphide portion of the Resource. Approximately 50% to 80% of the gold is recoverable via ultra-fine grinding and conventional CIL processing. The remaining gold is contained within the atomic lattice (or in solid solution) of the sulphide minerals, predominantly arsenopyrite. The sulphide minerals, which are mostly pyrite and to a lesser extent arsenopyrite, are readily recovered via flotation. Oxidation of these sulphide minerals recovered in the flotation concentrate renders them leachable via conventional CIL processing, achieving gold recoveries of >89% and typically above 95%.

Testwork Programs

Several metallurgical testwork campaigns have been undertaken by Rox since acquiring the Project in 2019. The testwork programs that form the basis of this Study are:

- Testwork conducted by Orway Mineral Consultants (OMC) in 2021 which assessed comminution characteristics, bulk flotation and Neutral Albion Process[™] Leach oxidation (testwork conducted by Core Resources);
- Testwork conducted by MACA Interquip in 2022 that focused on UFG comminution testwork and variability flotation tests; and
- Testwork conducted by JT Metallurgy which assessed flotation and cleaning circuits, and flotation tails leaching and characterisation.

Sample Provenance and Compositing

The metallurgical testwork has been conducted on composite samples, being:

- 2021 OMC Program:
 - Upper Hangingwall ~130kg sample from 14 drill holes drilled into the upper hanging wall domain;
 - Upper Main ~130kg sample from 16 drill holes drilled into the upper hanging wall domain;



- ROM Stockpile A 235 kg composite sample taken from surface ROM stockpiles. 26 sample specimens were hand selected by geologists for use in the metallurgical program. The exact location is unknown;
- 2022 MACA Interquip Program:
 - ~470kg of sample from 53 drill holes to create blended composites for UFG testwork across the Youanmi mine plan;
- 2024 JT Metallurgy Program:
 - Link Composite A 67kg composite taken from 17 diamond cores from the 2023 drilling campaign at Link was used for the flotation testwork carried out by JT Metallurgy.

The Upper Hanging Wall, Upper Main and ROM Composites were used by OMC for the comminution and Albion Process[™] testwork programs.

The location of the drillholes used to form the composite samples is shown in Figure 15 below.

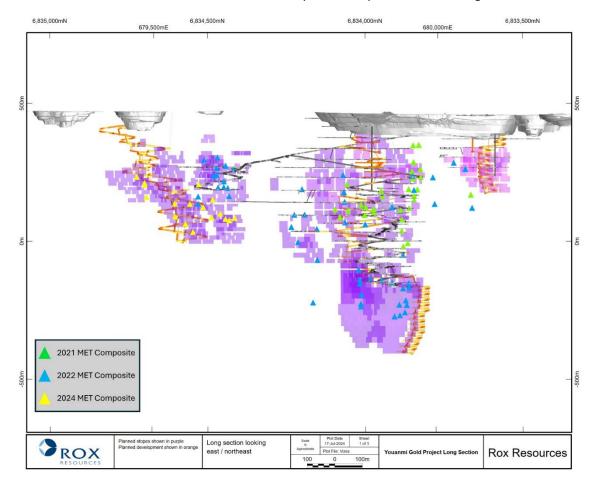


Figure 15. Long Section of Drillholes used to Make up the Youanmi Composite Samples

Comminution Testwork

Each sample was subjected to coarse rock high energy breakage (SMC), grinding (BWi) and abrasion testwork. The results are summarised in Table 17 below.



Test	Units	ROM Stockpile	Upper Hangingwall	Upper Main
Abrasion Index	g	0.0780	0.0151	0.0597
Ball Work Indices	kWh/t	16.3	16.2	17.0
Product Size in Feed	%	15.2	14.0	11.7
Feed Size, F ₈₀	μm	2586	2685	2634
Product Size, P ₈₀	μm	77	76	76
Closing Screen	μm	106	106	106
Breakage Testwork				
DWi	kWh/m³	7.8	7.0	7.7
А		65.4	55.3	57.5
В		0.58	0.76	0.64
Axb		37.9	42.0	37.9
Ts		0.33	0.37	0.34
SG		2.94	2.94	2.83

Table 17. Comminution Testwork

The samples are not abrasive, and display average to high ore properties in terms of competency and fine grinding energy requirements. The ore will be amenable to multi-stage crushing and ball milling as well as SAG milling.

Flotation Testwork

Building upon prior testwork, two additional locked flotation flowsheets were assessed as part of the PFS focused on cleaning testwork with the aim of improving the final concentrate grade and assessing the impact of regrinding the rougher concentrate.

The flotation testwork completed included locked cycle tests (LCT), which involve multiple stages of rougher, scavenger and cleaner, and re-cleaner flotation, with the selected product streams from each stage recycled back into the feed of the subsequent stage. The term "locked cycle" refers to the fact that the overall mass balance of the circuit is closed or "locked" at the end of the test.

Locked cycle testwork aims to simulate the continual nature of the flotation circuits, providing a more accurate representation of how the circuit would perform at full scale compared to batch testwork.

Two flowsheets were assessed as part of the PFS testwork, the first (LCT1) including flotation feed to rougher/scavenger, rougher/scavenger concentrate cleaned, with the cleaner tail returned to the flotation feed. Cleaner concentrate reports to the re-cleaner with the re-cleaner tail reporting to the cleaner feed. Re-cleaner concentrate reports to final concentrate. The second flowsheet (LC2T) was identical to the first, however the cleaner concentrate was ground to P_{100} 53µm prior to reporting to the re-cleaner.

The LCT1 test achieved a 91.5% gold recovery to concentrate with a mass pull of 13.5%. 98.7% of sulphides reported to the concentrate, suggesting near full concentration of available sulphides.

The generated LCT2 concentrate achieved a higher overall gold, sulphide and arsenic grade as shown below in Table 18.



The generated concentrate had a measured P_{80} of 45μ m. The LCT2 achieved a lower overall mass pull compared to LCT1 (11.6% to 13.5%) suggesting the regrind resulting in less overall non-sulphide gangue entrainment to the final concentrate.

It is noted that the results of the locked cycle testwork represent a marked improvement from the rougher/cleaner circuit employed in the historical plant. The reviewed plant records indicate an average flotation recovery of 90.86% to concentrate. The plant achieved an average flotation concentrate grade of 44.6g/t from a 10.7g/t feed grade. Both locked cycle tests achieved a higher concentrate grades and recoveries from a lower grade feed material.

	F	eed	Cycle 4-6 Concentrates									
	Au Assay Head	Sulphide Assay Head	Mass Pull	Float Con Size	Д	u	Þ	ls		Fe	Sulph	nides
	g/t	%	%	Ρ ₈₀ μm	g/t	% Rec	%	% Rec	%	% Rec	%	% Rec
LCT1			13.5	85	56.5	91.5	2.34	91.6	38.9	68.2	39.9	98.7
LCT2	8.5	6.1	11.6	45	63.8	91.0	2.74	88.8	44.3	66.4	46.7	98.6

Table 18. Locked Cycle (Cycle 4-6) Summary Results

Flotation Tailings Leach

Rougher tails from both locked cycle tests were representatively sampled and subjected to a cyanidation leach, reflecting a flowsheet consisting of flotation followed by a CIL on the flotation tail. The leach conditions used in the test are outlined in Table 19. These were chosen to generally reflect the typical conditions of a standard CIL plant in the WA goldfields.

No carbon was added to these tests so that leach kinetics could be observed.

Table 19. Flotation Tail Leach Parameters

Parameters					
	Initial	10			
рН	Maintained	9.8			
	Initial	300			
NaCN (ppm)	Maintained	>250 for 8hrs, 150ppm			
Pulp Der	sity (%solids)	40%			
Oxyg	gen or Air	Oxygen			
Dissolved	Oxygen (ppm)	10-15ppm			
Grind	Size (µm)	As received			
Water		Kathleen Pit			
Lea	ch Time	48hrs			



The testwork results and extraction curves are shown in Table 20 below.

Composite ID	Grind Size	Feed Grade (g/t) Fire Assay Recalc.		Solid Tails Grade	Au Leach Extraction	Calc. Extraction to Concentrate & CIL
	P ₈₀			g/t	%	%
LC1 Cycle 6 Rougher Tail	75µm	0.875	0.82	0.36	55.96	96.27
LC2 Cycle 6 Rougher Tail	75µm	0.86	0.87	0.32	54.42	95.70

Table 20. Flotation Tail Leach Results

The flotation tail leach achieved an average leach extraction of 55.19% at 48 hours. Factoring in the flotation concentrate, the sample achieved a total extraction (either leached or collected as a flotation concentrate) of 96.27% and 95.70% for LC1 and LC2 respectively. Leach kinetics from the tests suggest moderate leach kinetics as shown below in Figure 16 and therefore would benefit from more aggressive leach conditions.

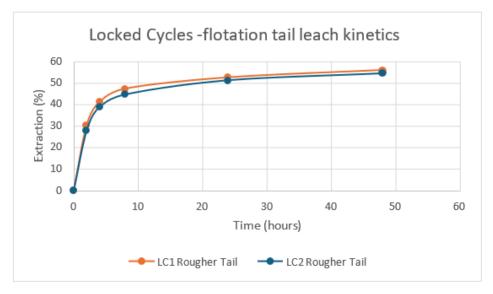


Figure 16. LC Flotation Tail Leach Kinetics

Reagent consumptions for each test are provided in Table 21 below. Lime consumptions are considered average by industry standards, averaging 0.83kg/t. Cyanide consumption is considered low averaging 0.16kg/t.

Oxygen uptake testwork was not completed in this program, although no issues maintaining dissolved oxygen content in the leach testwork were noted by the laboratory.

Table 21.	Float 1	Tail leach	Reagent	Consumptions
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	Cyanide Consumption (kg/t)	Lime Consumption (kg/t)
LC1 Flotation tail leach	0.14	0.92
LC2 Flotation tail leach	0.18	0.73
Average	0.16	0.83

Representative sub-samples were taken from each of the two locked cycle tails streams submitted for tails characterisation. The testwork indicates that the two tested samples are classified as non-acid forming and acceptable for disposal on the tailings facility.



Neutral Albion Process[™] Leach

The Albion Process[™] leach tests were performed under the Neutral Albion Process[™] Leach (NAL) chemistry using 10 L reactor vessels. With the limited material available, this first phase of testing was performed to evaluate the amenability of the Albion Process[™] technology (no kinetic samples collected) for the treatment of the Youanmi concentrates.

As noted above, the Youanmi material historically does not require full oxidation to achieve a notable gold uplift. As such, the tests were operated to achieve a target SOx value in the order of 60-75% rather than residence time specifically. The SOx summary is presented in Table 22, with the theoretical SOx trends illustrated by Figure 17 below.

Test ID	Grind Size P ₈₀	Assayed SOx (%)	Theoretical SOx (%)	Limestone Addition (t/t SOx)	Test Duration (hrs)
ROM	10.3	78.1	71.4	2.9	49
Upper HW	10.2	76.9	66.0	2.6	30
Upper Main	10.0	74.9	60.7	2.5	21

Table 22. SOx Outputs From Albion Process[™] Leach Test

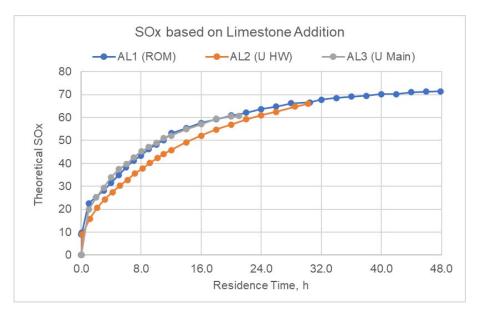


Figure 17. Theoretical SOx profile based on alkali (limestone) addition

The SOx trends indicate that an overall bench test residence time of 32 hours appears sufficient to achieve 60-70% SOx for the samples tested. One note to highlight is the residence time from the bench scale tests bear little relation to commercial plants, as the laboratory system suffers from lower dissolved oxygen concentrations due to the size and geometry constraints of the smaller equipment, and hence oxidation kinetics will be oxygen mass transfer limited. The upside to this is that oxygen mass transfer rates achieved in an industrial scale Albion Process[™] leach reactor are significantly higher than can be achieved at bench scale.

LeachWELL[®] extractions were performed on the Albion Process[™] products (UFG feed, and final residue) to provide a baseline indicative gold recovery value, with cyanide bottle rolls performed on the Albion Process[™] residues to confirm the LeachWELL[®] values as well as provide the gold recovery profile. Cyanide bottle roll tests were performed at the following conditions:

• Slurry density of 40% w/w solids;



- pH target of 10.5;
- No carbon addition;
- Cyanide added in excess with initial NaCN at 5000 ppm, with 1000 ppm as maintenance; and
- 48 h duration under ambient conditions, with solution sampling at 2, 4, 8, 24, and 48 h.

The Albion Process[™] leach results are shown in Table 23 below. Note that only the 8, 24 and 48 hour extraction results shown here for relevance.

Test	Units	ROM Stockpile	Upper Hangingwall	Upper Main
Feed Grade	g/t	35.66	17.25	39.42
Oxidation Time – 8 Hours				
Au Extraction	%	99.5	94.5	95.8
NaCN Addition	kg/t	6.2	6.1	5.4
Lime Addition	kg/t	8.1	7.2	7.0
Oxidation Time – 24 Hours				
Au Extraction	%	99.5	96.3	95.9
NaCN Addition	kg/t	5.7	5.6	5.6
Lime Addition	kg/t	8.5	7.5	7.5
Oxidation Time – 48 Hours				
Au Extraction	%	99.3	97.3	92.0
NaCN Addition	kg/t	5.3	5.1	4.9
Lime Addition	kg/t	9.1	7.9	7.8

Table 23. Cyanide Leach Extraction Profile

The extraction kinetics on the Albion Process[™] residues were fast, with the solution assays indicating that most of the gold had leached within 8 hours.

Overall Gold Recovery

Overall gold extraction is calculated by combining the recovery of the Albion Process[™] leach residues with the recovery of the flotation tailings. Table 24 below shows the combined gold recovery for each of the composite samples.

	S ²⁻	S2- Consumption		Gold Recovery					
Sample	Oxdn. (%)	Mass Pull (%)	NaCN (kg/t Conc.)	Lime (kg/t Conc.)	Feed ⁶ (g/t)	Tails (g/t)	Conc. Leach (%)	Tails Leach (%)	Overall Extn.
ROM	78	13.5	6.99	8.96	8.68	0.57	99.3	55.1	93.4
Upper HW	77	13.9	7.85	9.15	4.72	0.26	97.3	71.3	94.4
Upper Main	75	12.7	5.83	6.94	8.09	0.90	92.0	59.4	88.8

Table 24. Overall Albion Process[™] Gold Extraction Results

⁶ Calculated feed grade



Based on the testwork results, the recommended flowsheet for the Study comprises grinding to P_{80} 75µm, flotation, Albion ProcessTM oxidation of the concentrate, cyanide leaching of the Albion ProcessTM residues and flotation tail, with carbon adsorption to recover the gold from solution and produce gold doré.

Processing

MACA Interquip Mintrex (MIM) were engaged to undertake a PFS level process plant design and cost estimate. The design included comminution and sulphide flotation facilities, with oxidation and leaching/smelting of the residues to produce gold doré.

Process Design Criteria

The sulphide oxidation circuit throughput for Youanmi is proposed to be 97,500 tpa, or 13% of the proposed comminution circuit throughput of 750,000 tpa. The sulphide oxidation circuit will treat the gold-bearing sulphide concentrate generated by the flotation circuit. The oxidation circuit will consist of flotation concentrate thickening and ultrafine grinding and atmospheric oxidation utilising the Albion Process[™] and thickening prior to co-leaching the flotation tailings in a CIL circuit.

A summary of the process design criteria is shown in Table 25 below.

Description	Units	Value
Annual Throughput	tpa	750,000
Average Feed Grade	g/t	4.5
Crushing Circuit		
Туре	Thr	ee Stage Crush
Plant Utilisation	%	70
Crushing Rate	t/h	122.3
Grinding Circuit		
Туре	Singl	e Stage Ball Mill
Plant Utilisation	%	91.3
Treatment Rate	t/hr	93.8
Product Size (P ₈₀)	μm	75
Flotation Circuit		
Configuration	Rougher	, Cleaner, Recleaner
Design Recovery – Au	%	91.5
Design Recovery – S ²⁻	%	98.6
Design Recovery – Mass	%	13.5
Oxidising Circuit		
Ultrafine Grind (P ₈₀)	μm	10
Specific Energy	kWh/t	60
Albion Leach Residence Time	hrs	8
O ₂ Requirement	t/t	0.43
Limestone Requirement	t/t	0.36

Table 25. Processing Plant Design Criteria



Description	Units	Value
NaOH requirement	kg/t	0.83
Leaching and Gold Recovery		
Leach Feed Thickener Diameter	m	14
Underflow Density	% Solids	50
Leach Tanks	No.	2
Adsorption Tanks	No.	6
Leach & Adsorption Residence Time	hrs	24
Elution Circuit Size	t	3
Elution Schedule	Strips/week	6

Process Flowsheet

The flowsheet selection for the processing plant incorporates the following:

- Three-stage crushing with a single toggle jaw crusher and two cone crushers to produce a crushed product size of 80% passing (P_{80}) of 7 mm;
- Crushed ore surge bin with a nominal 400 tonne capacity. Surge bin overflow is conveyed to a dead stockpile. Ore from the dead stockpile is reclaimed by front end loader (FEL) to feed the mill during periods when the crushing circuit is offline;
- Closed circuit single stage ball mill to produce a P₈₀ grind size of 75 μm;
- Flotation of a gold-bearing sulphide concentrate through a rougher-cleaner-recleaner circuit;
- Concentrate dewatering via a thickener ahead of ultrafine grinding to a P_{80} grind size of 10 $\mu\text{m};$
- Concentrate oxidation through a neutral Albion circuit with oxygen, limestone and caustic addition;
- Pre-leach thickener to increase flotation tails slurry density to the carbon in leach (CIL) circuit, minimise CIL tankage, improve slurry mixing characteristics, reduce overall reagent consumption, and provide cyanide free water to the milling and flotation circuits;
- Combined CIL circuit incorporating eight stages, six of which contain carbon for gold adsorption;
- Zadra elution circuit with gold recovery to doré;
- Cyanide destruction using an air/SO₂ destruction circuit; and
- Tailings pumping to the tailings disposal facility.

The Process Plant general arrangement and process flowsheet is shown in Figure 18 and Figure 19 below.



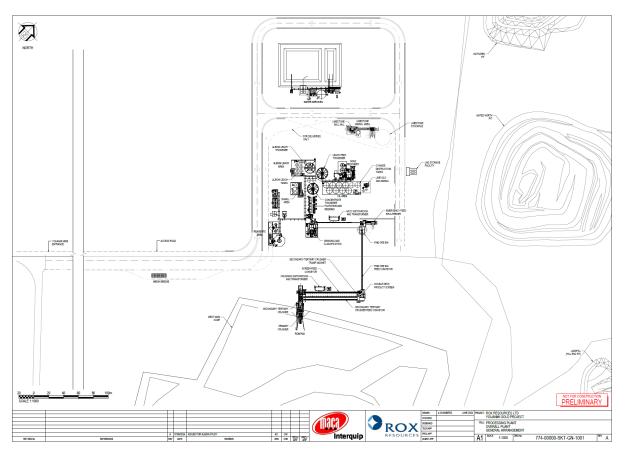


Figure 18. Process Plant General Arrangement

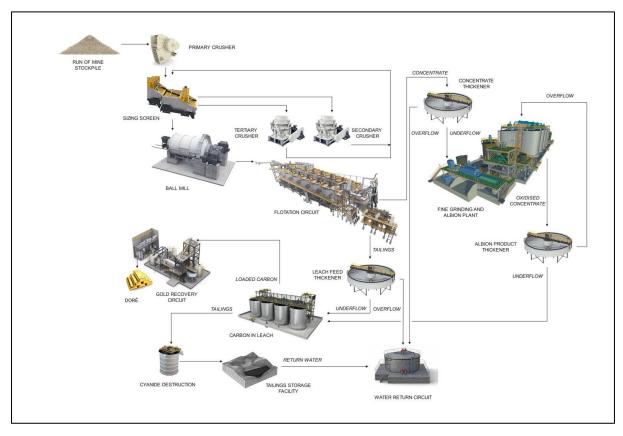


Figure 19. Proposed Processing Flowsheet



Concentrate Treatment Trade-off Study

A trade-off study for the treatment of the gold concentrate was conducted to assist in selecting the most appropriate process flowsheet. The three options evaluated were:

- Concentrate sale to traders/smelters;
- Biological Oxidation using the BIOX[®] Process; and
- Atmospheric oxidation using the Albion Process[™].

Rox conducted a ranking exercise which included criteria such as economic performance (capital costs, operating costs and revenue generation), technical risk, environmental risk, future growth, execution risk and marketing risk.

The ranking exercise concluded that the Youanmi Project was most suited to processing using the Albion Process[™] for the following reasons:

- Operating costs were similar to BIOX[®], but significantly less than the transport and TC/RC costs of concentrate;
- The Albion Process[™] is less sensitive to variability in water quality and arsenic & sulphur concentrations in the feed;
- The Albion Process[™] generates higher free cash-flows than concentrate sales (very similar to BIOX[®]); and
- The risk of selling concentrate to overseas markets is removed, with gold doré sold to an Australian gold refinery (Perth Mint or ABC Refinery) with near immediate payment.

Tailings Storage

Rox engaged Knight Piésold to undertake the PFS design for the new Tailings Storage Facility (TSF). The TSF (TSF 3) design is for a production rate of 750,000 tpa over approximately 8 years, and aligns with Department of Mines, Industry Regulation and Safety (DMIRS), Australian National Committee on Large Dams (ANCOLD) and Global Industry Standard on Tailings Management (GISTM) guidelines.

There are two existing TSFs at Youanmi. TSF 1 has no remaining capacity, and TSF 2 has approximately 1.5m, or 110,000 m³ capacity. This equates to approximately 3 months of capacity. Due to this short duration, this remaining capacity has not been accounted for in the design of TSF 3.

TSF 3 will be located to the north-east of the Project site and will abut the existing TSF 2 and East Main Dump. This location has the following advantages:

- Low likelihood of sterilising mineralisation;
- Ease of construction given the clear access and gently sloping terrain;
- Its location abutting TSF 2 and the East Main Dump will reduce construction material requirements;
- Close proximity to multiple mine waste dumps reducing construction cost;
- In the event of a dam failure, the flow path is away from work areas and critical infrastructure; and
- Ease of expansion with future Project growth.

The location of TSF 3 within the Youanmi Project site is shown in Figure 20 below.



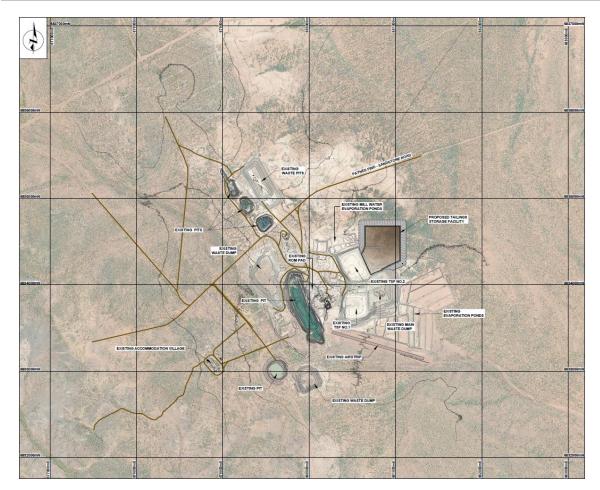


Figure 20. Location of TSF 3

TSF 3 will comprise a single paddock storage formed by multi-zoned earth-fill embankments. The facility is designed to store 5.8 Mt of tailings at an average rate of 0.65 Mtpa, with capacity to contain all supernatant and runoff from rainfall and storm events.

The TSF will be constructed in yearly stages from existing mine waste stockpiles.

The facility is designed to store the 20-year wet season plus the 100-year ARI 72-hour storm. During operations, the emergency spillway is designed for a 100,000-year ARI flood event. Therefore, provided that the facility is operated in accordance with the design intent, discharge is unlikely.

Facility embankments will have a minimum 8 m crest width and an upstream slope of 2H:1V, with a downstream slope of 3H:1V for operation. Each upstream raise will include a 4m bench on the previous crest.

A typical cross-section of the external embankment showing the various zones and stages is shown in Figure 21 below.



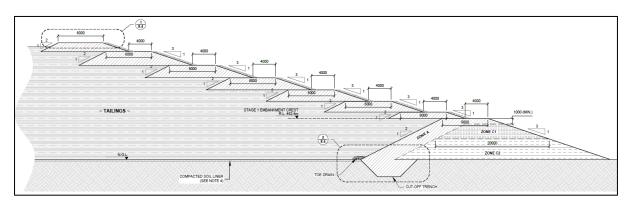


Figure 21. Typical External Embankment Cross Section

The final layout of TSF 3 at completion of mining is shown in Figure 22 below.

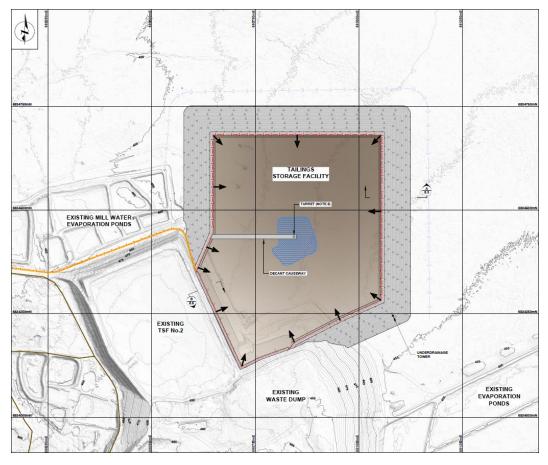


Figure 22. General Arrangement – TSF Final Stage

Infrastructure

All necessary infrastructure for the Project has been located in 100% Rox owned tenure, and in positions which are optimal for the current mine plan, and with some consideration for potential extensions to this plan. Infrastructure has also been located to avoid Crown Leases in the vicinity of the Youanmi township. Where possible, existing infrastructure (such as roads, camp location etc.) has been leveraged to reduce ground disturbance.

The proposed site layout is shown in Figure 23 below.



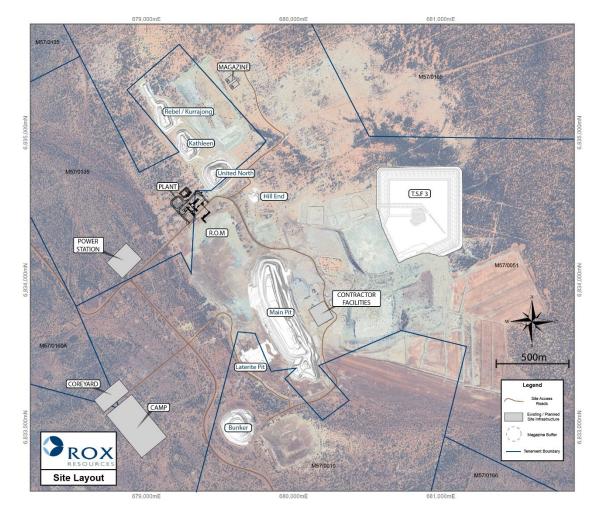


Figure 23. Youanmi Project Site Layout

Power Supply

Rox engaged Zenith Energy to provide options for a site power station, evaluating costs for gas thermal with hybrid options under a Build Own Operate (BOO) model, where Zenith would provide operations staff, and conduct minor and major power station maintenance.

Zenith were provided with the site power model including average continuous draws and peak loads to generate the total site load for the power station.

Based on techno-economic modelling and sensitivity analysis of multiple power supply options, a hybrid option which provides ~37% RE penetration was selected as the most optimal solution. This consists of Solar Photovoltaic (PV), Battery Energy Storage System (BESS) fully integrated into a gas thermal generation system.

A summary of the power generation details is shown in Table 26 below.



Table 26. Power Generation Details

Power Station Component	Hybrid Power Station
Renewable Energy Percentage	37%
Thermal Installed Capacity (MW)	20.04
Solar PV Installed Capacity (MWp)	20.84
BESS Installed Capacity (MW/MWhr)	8 / 8.94
Total Installed Capacity (MW)	48.88

A gas fuel price of \$23/GJ (HHV) has been used for the costs analysis. Liquified Natural Gas (LNG) will be trucked to site from the Mid-West LNG Hub in Mount Magnet. Based on this price, and the expected PV generation, a Levelised Cost of Electricity (LCoE) is 28.3 c/kWhr.

This power generation system provided the best outcome based on the lower LCoE and reduced overall Greenhouse Gas Emissions. A detailed description of the proposed power station components is shown in Table 27 below.

Component	Description			
Power Cost	28.3 c/kWhr			
	20 MW Thermal;			
Installed Capacity	• 21 MW Solar; and			
	• 8 MW BESS.			
Generation System	3.4 MWe gas generators; and			
	 1 MWe diesel generators (standby). 			
	• 20.8 MW fixed tile 5B PV farm;			
PV System	• 8 MW (8.9 MWhr) containerised BESS; and			
	• 37% RE penetration.			

Table 27. Power Station Summary

The operation philosophy of the hybrid power station is that all renewable energy generated will be the principal, first choice, generated power to supply the Project load demands. The basic operating philosophy is as follows:

- PV is dispatched to meet the load as much as possible;
- Excess PV is used to charge the BESS;
- Once the BESS is fully charged, excess RE is curtailed ("spilled");
- Any scenarios where the site load exceeds the RE output, the BESS is discharged to meet the load. This is especially notable towards the end of daylight hours; and
- If the available charge in the BESS is insufficient to meet the Project load, the thermal gensets are started and dispatched to meet the load.

The power station is proposed be located adjacent to the processing plant, enabling clear access for delivery trucks. The final location on the PV array will be confirmed at a later date to ensure as small an area as possible is disturbed for the installation.

Power Station will supply power to five main areas/points of distribution via an 11kV distribution network to the following locations:

• Mine Village;



- Process Plant;
- Underground Feeder Link;
- Underground Feeder Main; and
- Underground Feeder Pollard.

Power reticulation is planned to be completed via direct buried cables, utilizing armoured, multicore 11kV cabling with nylon coating for termite protection and aluminium conductors.

It is envisaged that a fibre network between the various working areas and the village would be installed and utilised as part of a mine-site communications network. It is proposed that a single mode fibre cabling network between each of the main areas is installed at the same time as the 11kV distribution network. This will consist of two off 24 core cables, one of which is dedicated to switchgear communications with the second for plant communications systems.

Utilising the fibre in this format follows a typical design for AS61580 alignment to provide a robust communication protocol for protection and distribution network data exchange on MV systems. The dual cable run additionally provides redundancy for each communications requirement, as the cable cores can be shared to provide a redundant ring configuration.

Water Supply

Raw water for the process plant will be primarily from groundwater from the Link mining area. Water in the Main mining area has historically been hypersaline so will be used for dust suppression on roads or discharged to the evaporation ponds or Lake Noondie via the dewatering pipeline.

Supernatant water from the tailings dam will also be reticulated back to the process plant for re-use.

Rox is currently evaluating additional sources of suitable quality water should additional make-up water be required.

The site water requirement for the Project during steady state operations is approximately $3,250 m^3/day$, and is made up of:

- Processing plant: 2,300 m³/day (accounts for return from TSF);
- Underground mine: 800 m³/day (assumes 50% water is recycled); and
- Village/administration: 150 m³/day (caters for approximately 150 personnel).

Potable water to the processing plant and other office facilities will be provided by a potable water treatment plant situated at the processing plant and reticulated as required.

Accommodation Village

The existing Youanmi village was built in the 1980's for the commencement of open pit mining and has a capacity for 51 residents. Renovations have been made to these facilities in the last two years to modernise them for exploration personnel. As the Youanmi Project commences, these facilities may be used for construction workers initially, then either converted to offices or remain as overflow/visitor accommodation.

A new 130-bed accommodation village will be built adjacent to the existing Youanmi camp to cater for the increased personnel. This facility includes 34 four-bed rooms, wet and dry mess facilities, recreation facilities and wastewater treatment plant.

Aerodrome

An operational airstrip exists at Youanmi and is capable of handling small aircraft. Once expanded operations get underway, it is envisaged that Youanmi personnel will be flown to site utilising the



nearby airstrip at the Penny operation, 30 km to the south which can handle larger aircraft. Flight costs and associated landing taxes have been included in the Study costs, and further discussions with airstrip owners will continue as studies progress.

Capital Costs

The total capital expenditure for the Study is estimated at \$379.9m. This is made up of \$245.2m preproduction capital, and a further \$134.6m of sustaining capital. The pre-production period is defined as the period up until the processing plant has completed a 3-month commissioning and ramp-up phase. All costs and associated revenue during this time are classified as pre-production capital.

A breakdown of the pre-production and sustaining capital estimate is shown in Table 28 below.

Item	Pre-Prod (\$m)	Sustaining (\$m)	Total (\$m)
Processing Plant	150	0.0	150
Site Infrastructure	22	18	40
Underground Mining	39	108	147
Capitalised Operating Costs	57	0	57
Tailings Storage Facility	4	9	13
Capitalised Revenue	(42)	0	(42)
Sub-Total	230	135	365
Contingency ⁷	15	0	15
Total Project Capital	245	135	380

Table 28. Capital Cost Estimate

The pre-production capital cost estimate break-down for each area is as follows:

- Processing plant Processing plant & equipment on an EPCM basis, including commissioning and first fills;
- Site infrastructure Expansion of the village adding 130 rooms and necessary messing facilities, laundries, potable and wastewater treatment plants and recreational facilities, upgrading site roads, communications and all necessary surface dewatering infrastructure;
- Underground mining Underground start-up capital costs including contractor mobilisation & site establishment, capital development including decline rehabilitation and surface magazines;
- Capitalised operating costs All costs incurred while during the preproduction period including operating underground mining costs, site G&A costs and commissioning and rampup processing costs;
- Tailings storage facility All costs associated with the clearing, preparation and earthworks for the first lift of the tailings storage facility; and
- Capitalised revenue Revenue generated from gold sales during the processing plant commissioning and ramp-up period.

⁷ Note: Contingency has not been applied to underground mining costs as these have come from direct pricing schedules based on a detailed mine design.



Sustaining capital is defined as all capital requirements after the pre-production period. This includes:

- Site Infrastructure upgrades to surface dewatering system as dewatering transitions to dewatering of the underground mine and mine site rehabilitation at the end of the Project;
- Underground mining All capital development and equipment such as electrical substations, pump stations, refuge chambers and primary ventilation expenditure; and
- Tailings storage facility subsequent lifts on the facility and rehabilitation at the end of the Project.

Operating Costs

Operating costs have been estimated based first principals build ups of underground mining, processing operating costs and general administration costs. Operating costs during the preproduction and commissioning phase have been capitalised.

A summary of the operating costs and resulting All-In Sustaining Cost ("AISC") forecasts, is provided in Table 29 below.

Item	\$m	\$m \$/t Processed		% of AISC	
Mining Costs	595	105	770	46	
Processing Costs	413	73	534	32	
General and Admin	70	12	91	5	
C1 Cash Cost	1,078	190	1,395	83	
Royalty Payments	82	15	106	6	
Sustaining Capital	135	24	175	11	
Total All In Sustaining Cost	1,295	229	1,676	100	

Table 29. All-In Sustaining Costs

Mining

Project mining physicals were provided to experienced Australian mining contractors where cost estimates were built up from first principals. These costs were then provided to Rox in a fixed and variable format for use in the Rox cost model.

The operating mining costs include the contractor mining costs, Rox labour costs and power and diesel costs allocated to underground mining.

The total operating mining costs are \$595m, or 46% of the total Project operating costs.

A breakdown of the underground mining costs on an allocated basis is provided in Table 30 below.



Item	Unit	Cost
Capital Development	\$/m	4,917
Operating Development	\$/m	3,585
Rehabilitation	\$/m	3,305
Production Stoping	\$/t	48
Overheads & Indirects	\$/t	46
Contractor Fixed Costs (staff)	\$/month	530,900
Mobile Equipment	\$/month	632,200
Fixed Equipment	\$/month	41,500
Total UG Mining Cost	\$/t	136

Table 30. Underground Mining Operating Cost Estimates

Notes:

1. All haulage costs are allocated to Production Stoping; and

2. Overheads and Indirects includes costs such as diesel and power, Rox salaries, Messing, accommodation and FIFO costs.

Processing

Operating costs have been determined for a plant with an annual throughput of 750,000 tonnes of ore at a P_{80} grind size of 75 μ m, based on a 24 hour per day operation, 365 days per year.

A summary of the estimated operating costs is provided in Table 31 below.

Cost Area	Total Cost			Fixed Cost	Variable	
	A\$/year	A\$/t ore	% Fixed	A\$/year	A\$/year	A\$/t ore
Labour	11,483,656	15.31	100	11,483,656	-	-
Operating Cons.	18,276,022	24.37	6	1,120,067	17,155,955	22.87
Power	20,812,549	27.75	63	13,063,356	7,749,193	10.33
Maint. Materials	1,305,754	1.74	73	956,290	349,465	0.47
General & Admin	2,235,554	2.98	100	2,235,554	-	-
TOTAL	54,113,534	72.15		28,858,922	25,254,612	33.67

Table 31. Processing Operating Costs

The operating costs have been compiled from a variety of sources, including the following:

- Reagent consumption based on laboratory testwork;
- Modelling by MIM for crushing and grinding energy and consumables, using ore characteristics measured during the testwork;
- Quoted prices or MIMs database of prices for consumables;
- Wages and salaries from local operations;
- Shift rosters based on industry standard for this style of operation in Western Australia; and
- MIM's database of costs for similar sized operations.

The total processing costs are \$413m, or 32% of the total Project operating costs.



General & Administration

G&A costs represent \$70m, or 5% of the total Project operating costs. These costs are built up from first principals and include Rox administrative labour, messing, flights and accommodation.

Messing and accommodation costs have been provided by budget pricing submission, and flight costs are the current Perth to Penny flight costs.

Royalties

Royalties represent \$82m, or 6% of total operating costs.

Royalties applicable to the Youanmi Gold Project include:

- State Royalty 2.5%; and
- Venus Royalty 1% NSR

St Barbara Limited and Venus Metals Corporation Limited have royalty agreements affecting M57/10, however no gold is produced from M57/10 as part of this Study.

Financial Analysis

The financial analysis was based on an internal cost model to calculate all mining, processing and G&A costs based on the PFS Project physicals. These costs were then applied to the Study financial model to calculate financial metrics such as pre and post-tax revenues, Net Present Values and Internal Rates of Return.

The analysis has been conducted using a selected gold price of A\$3,100/oz, which is a discount of approximately 11% to the July 2024 average Australian dollar spot gold price⁸. Further, this is a 23% discount to the June 2028 CME Group gold futures forecast, which represents when the Youanmi Project is targeting steady-state production.

The Project delivers a pre-tax free cash flow of \$855m, pre-tax NPV₈ of \$486m and a post-tax NPV₈ of \$322m.

Key financial outputs from the Study at the base case price of \$3,100/oz, and current spot gold price of \$3,500/oz are shown in Table 32 below.

⁸ July average up until 22 July 2024



Item	Unit	A\$3,100	A\$3,500
Life Of Mine ⁹	years	7.7	7.7
Gold Produced	oz	786	786
Revenue From Gold Sales	\$m	2,437	2,751
Free Cash Flow – Pre-Tax	\$m	855	1,158
Free Cash Flow – Pre-Tax	\$m	597	810
NPV ₈ – Pre-Tax	\$m	486	694
NPV ₈ – Post-Tax	\$m	322	468
IRR – Pre-Tax	%	42	55
IRR – Post-Tax	%	33	44
Payback Period (pre-tax) ¹⁰	years	2.9	2.2
Payback Period (post-tax) ⁹	years	3.3	2.7
Pre-production Capital ¹¹	\$m	245	240
All-In Sustaining Cost	\$/oz	1,676	1,690
Ratio NPV / Pre-prod. capital	ratio	2.0	2.9

Table 32. Financial Model Outputs

Figure 24 below shows the undiscounted cashflows on an annual basis.

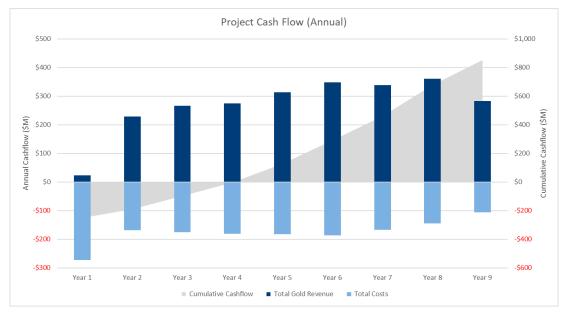


Figure 24. Annual Project Cashflows (Undiscounted)

Sensitivities for gold price, capital and operating costs, discount rate and metallurgical recoveries at relevant ranges are shown in Figure 25 below.

⁹ Post construction and commissioning.

¹⁰ Payback period is calculated from the first month post construction and commissioning.

¹¹ Pre-production capital includes all costs and revenue up until completion of commissioning.



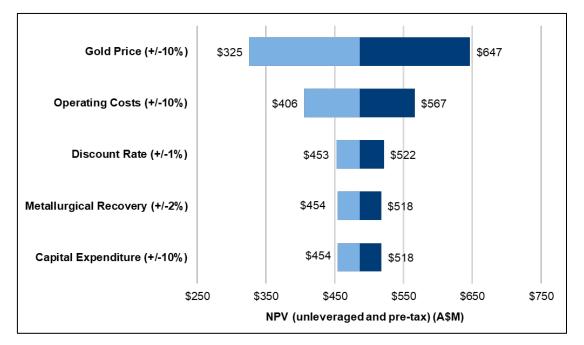


Figure 25. Sensitivity Analysis

Further, additional sensitivities were run on various gold prices. The results of these gold price sensitivities on the various financial metrics are shown in Table 33 below.

Table 33.	Project Sensitivities by Gold Price	
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Gold Price A\$/oz)	Unit	A\$2,900	A\$3,100	A\$3,300	A\$3,500	A\$3,700
NPV ₈ (pre-tax)	A\$m	382	486	590	694	797
IRR (pre-tax)	%	35	42	48	55	62
Payback (pre-tax)	years	3.3	2.9	2.6	2.2	1.8
LOM Free Cash Flow (pre-tax)	A\$m	703	855	1,006	1,158	1,310
NPV ₈ (post-tax)	A\$m	249	322	395	468	541
IRR (post-tax)	%	28	33	39	44	49
Payback (post-tax)	years	3.7	3.3	2.9	2.7	2.3
LOM Free Cash Flow (post-tax)	A\$m	491	597	704	810	916

Environment and Social

Environmental baseline studies have been conducted to identify any environmental, heritage or social issues for the Project, as well as to support applications for project development.

Flora and Vegetation

A flora and vegetation survey of the Youanmi Project area and dewatering pipeline route to Lake Noondie was completed by Native Vegetation Solutions. The field assessment established that the condition of the vegetation in the proposed disturbance area ranged from "Completely Degraded" to "Very Good" with most of the area falling into the "Good" Category. Areas which were affected by historic exploration were deemed in "Degraded" or "Good" condition. No areas of vegetation were assessed to be in "Pristine" condition, and no threatened flora were recorded in the survey area.



Fauna

The detailed field survey was undertaken over 12 days by two qualified Zoologists from Western Ecological. The field survey included undertaking a trapping programme that included six dedicated trap sites with pitfall traps and funnel traps, Elliott and cage traps, and camera traps. Acoustic recording units (Song Meter 4 units) were also placed to record the calls of micro bat species.

A total of 11 conservation significant species retrieved from database searches are considered as either Likely, Possible or Unlikely to occur in the survey area, with this based on location of the database record, habitats present in the survey area and survey results, and importantly the species ecology.

Of these 11 conservation significant species, none have been recorded in the survey area, one species is considered Likely to occur in the survey area, three are considered as Possible and seven species are considered Unlikely to occur.

Several species were recorded during the field assessment in the survey area and this includes species captured in trap sites, microbat species recorded on the SM4 units, while spotlighting and species captured opportunistically while traversing tracks. None of these species were Conservation Significant Fauna.

Native Title and Aboriginal Heritage

There is currently no native title claim over any of the Youanmi Gold Project area. The Marlinyu Ghoorlie native title claim (WC 2017/007) is the nearest claim and is located some 25km south-west of the Project area. A Native Title claim by Wutha (WC1999/010) was dismissed in 2017.

The Department of Planning, Lands and Heritage (DPLH) maintains a state register of heritage places called the Aboriginal Cultural Heritage Inquiry System (ACHIS). There are no listed Aboriginal Cultural Heritage or Listed places within the Project area.

Several Aboriginal heritage surveys have been conducted over the Youanmi mining area and the potential Lake Noondie discharge site. A field survey of the Youanmi Project area (contained within the leases M57/166, M57/165, M57/160A, M57/135, M57/109, M57/51 and M57/10) by A J Raynor Consulting.

Two artefacts were identified during the survey, an isolated chalcedony artefact on M57/165, and flaked piece of banded iron formation on M57/51. These artefacts are believed to have washed into these areas and not manufactured for a purpose in these two areas. Accordingly, they are not places to which the AH Act applies. Regardless, these artefacts are away from any disturbance areas proposed by the Project.

No other cultural material was identified during the survey. Approximately 29km of pedestrian field inspection was undertaken over the three days. It is concluded that there are no Aboriginal heritage sites present in the survey area.

Waste Rock Characterisation

Five drill core samples representative of where the waste development was designed were collected for laboratory analysis to assess the existing geochemical conditions within the deposit and allow representative sampling for initial Acid Rock Drainage (ARD) and Metalliferous Drainage (MD) testing.

The pH of all samples was alkaline (pH 8.9-9.6). This result is an initial indicator that the waste materials may have a buffering capacity to ameliorate any potential generation of acidic runoff.

All samples tested are classified as NAF (Non-Acid Forming) as they have both a negative NAPP (Net Acid Producing Potential) and have NAG pH values higher than 4.5.



Additionally, all development waste is planned to be stored in-pit rather than on surface dumps which further reduces the likelihood of any acid leaching into the environment, therefore no management measures are required.

Greenhouse Gas Emissions

Rox is committed to integrating ESG into the way the business is operated. This includes measurement and benchmarking of Greenhouse Gas Emissions (GHG) and energy consumption (GJ) per ounce of gold produced.

Rox engaged Greenbase to estimate Scope 1 GHG emissions based on diesel consumption estimates for equipment, and electricity generated from the Youanmi power station.

Emissions generated from electricity produced for the Project are shown by year in Table 34 below.

Area	T - 4 - 1	Greenhouse Gas Emissions (t CO2e/year)								
	Total	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6	Yr. 7	Yr. 8	Yr. 9
Processing Plant	183,963	-	21,758	23,447	23,447	23,447	23,512	23,447	23,447	21,456
Underground Mine	71,088	4,044	7,903	8,258	8,930	10,104	10,079	8,946	8,500	4,325
Village/Offices etc.	29,707	3,128	3,365	3,356	3,356	3,356	3,365	3,356	3,356	3,071
Total	284,758	7,172	33,025	35,062	35,733	36,907	36,955	35,749	35,303	28,852

Table 34. Greenhouse Gas Emissions from Gas Power Station

Diesel consumption has been modelled based on equipment productivity and burn rates for mobile and fixed (pumps, gensets etc.) equipment. Emissions generated from diesel equipment are shown by year in Table 35 below.

Description		Greenhouse Gas Emissions (t CO₂e/year)								
	Total	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6	Yr. 7	Yr. 8	Yr. 9
Underground Equip.	40,618	1,451	3,375	4,777	5,922	5,648	6,031	6,153	4,671	2,590
Light Vehicles	3,923	410	458	459	459	459	460	456	443	320
Gensets & Pumps	11,020	1,840	1,279	1,276	564	1,276	1,279	1,276	1,276	954
Total	55,560	3,700	5,112	6,512	6,944	7,383	7,770	7,886	6,390	3,863

Table 35. Greenhouse Gas Emissions from Diesel Equipment

The total estimated Scope 1 emissions over the life of the Project are shown in Table 36 below.



Description	Source	t CO ₂
Processing	LNG	183,963
UG Mining	LNG	71,088
Village/Offices etc.	LNG	29,707
UG Mining	Diesel	40,618
Light Vehicles	Diesel	3,923
Gensets & Pumps	Diesel	11,020
Sub-Total	-	340,318
Ounces Produced		786,011
TOTAL t CO ₂ e	OZ	0.43

Table 36. Life of Mine Greenhouse Gas Emissions

These results show that the Project produces gold at a low carbon intensity of 0.43 t CO_2e/oz produced, as well as an energy intensity of 7.1 GJ/oz produced.

In comparison to other major Australian gold mines, the greenhouse gas intensity of the Project sits well below the industry average, primarily caused by the high level of renewable energy generated in the power station, as well as the high grade of the Project. A comparison of the GHG intensity (t co_2e/oz) compared to other Australian gold mines is shown in Figure 26 below.

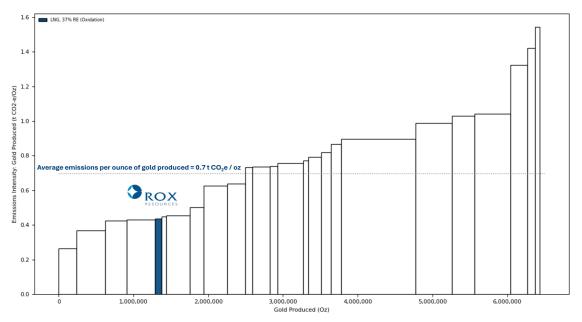


Figure 26. Greenhouse Gas Intensity for Major Australian Gold Mines

Notes:

- All data has been sourced from publicly available information reported since 2022

- The dashed line is the industry average of 0.697 tCO2e/oz for Scope 1 and 2 emissions per ounce of gold produced, as per S&P Global Market Intelligence 2021.



Permitting and Approvals

Rox holds groundwater licence GWL208485(1), which provides for an annual water entitlement of 1,807,000 kL water for the following purposes:

- Dewatering for mining purposes;
- Dust suppression for mining purposes;
- Earthwork and construction purposes;
- Mineral ore processing and other mining purposes; and
- Mining Camp purposes

This licence was granted by the Minister under section 5C of the Rights in Water and Irrigation Act 1914, on the 15th March 2023.

All water taken is measured in flow meters and reported on an annual basis in the Annual Environmental Report.

Rox holds Prescribed Premise Licence L8275/2008/2 for the Youanmi Project, for the following categories:

- Category 6; Mine Dewatering. The licence authorises dewatering at a rate of 1,480,000 tonnes per annual period and discharge to the site evaporation ponds; and
- Category 63; Class 1 Inert Landfill. This allows for 5,000 tonnes per annual period of inert Waste Type 1 and 2 (including tyres). Putrescible waste (<20 tonnes per year) generated by the Project will be kept separate from the inert waste. All waste is stored in the United North waste dump landfill facility.

This licence has been issued in accordance with Part V of the Environmental Protection Act 1986 and Schedule 1 (Part 1) of the Environmental Protection Regulations 1987. This licence was granted on 20th July 2022.

This licence will be maintained by Rox, or amended if necessary prior to commencement of mine dewatering.

To progress the option to dewater the existing standing water in the mine, the water needs to be transferred to Lake Noondie via a pipeline. Rox has worked with neighbouring pastoral stations and exploration tenement holders to allow the grant of Miscellaneous Licence L57/59, which was received in March 2024.

Project Development and Next Steps

The PFS provides justification that there are reasonable grounds for considering that the Youanmi Gold Project may become a commercially viable stand-alone gold mining operation. Accordingly, the Board of Rox Resources Limited has approved progression of the Project to the DFS stage, with the forward work plan outlined below:

- Commence an in-fill and extensional drilling program aim to increase the size and confidence of the Mineral Resource Estimate;
- Continue metallurgical testwork programs to test for metallurgical variability, and to further refine the processing flowsheet;
- Commence permitting and seek/amend all necessary approvals from departments including:
- Environmental Protection Agency (EPA);



- Department of Energy, Mines, Industry Regulation & Safety (DEMIRS); and
- Department of Water and Environmental Regulation (DWER).
- Investigate alternative water supply options for site water supply;
- Conduct Aboriginal heritage surveys of the Lake Noondie discharge pipeline;
- Seek approval for discharge licence for discharging water to Lake Noondie;
- Progress discussions for Project financing; and
- Delivery of a DFS in 2025.

Project Funding

Project financing for the development of the Project has not yet been secured, which is typical for a PFS-stage project. However, Rox will initiate discussions with a number of financiers, and will advance these discussions through the DFS stage over the coming months.

Potential funding instruments include the following:

- Equity;
- Senior-secured project debt finance;
- Secured corporate bond;
- Prepaid off-take agreements and other forms of off-taker financing; and/or
- Secondary secured (mezzanine) debt.

To achieve the range of outcomes forecast in the PFS, funding in the order of \$245m will likely be required, which includes all pre-production cost. The Company has formed the view that there is a reasonable basis to believe that requisite future funding for development of the Project will be available when required.

The grounds on which this reasonable basis is established include:

- The Project has strong forecast technical and economic fundamentals which, if achieved, provides an attractive return on capital investment and generates robust cash-flows at conservative gold prices (A\$3,100/oz). This provides a strong platform to source debt and equity funding;
- The Project's economics support a decision to invest, given that the Project is forecast to generate \$597m of free cash (post-tax) over the LOM;
- The projected cash-flows can support sufficient debt funding from 50% to 65% (general maximum gearing) of the total construction CAPEX, while meeting typical project debt financing requirements;
- The Project has attractive financial forecast parameters including a post-tax NPV₈ \$322m, a strong post-tax IRR of 33% and a post-tax payback period of circa 3.3 years;
- The Project is 100% owned by the Company, which reduces financing complexity;
- The Company has received interest from various financial institutions, credit funds and private equity firms regarding financing for the Project, with preliminary discussions occurring;



- The Company has a strong track record of raising equity funds as and when required to further the exploration and evaluation of the Youanmi Gold Project; and
- A substantial near-mine exploration target has been estimated of between 1,093koz 1,836koz.

There is, however, no certainty that the Company will be able to source funding as and when required. Typical project development financing would involve a combination of debt and equity.

It is possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of the Company's existing shares.

Opportunities

A summary of opportunities to further strengthen the Youanmi Project is provided below.

Mineral Resources and Ore Reserves

This Study has primarily focused on the Indicated portion of the January 2024 Mineral Resource Estimate. Further drilling and more detailed interpretation of the mineralised structures may increase the resource confidence (convert Inferred Resources to Indicated Resources) or add to the existing resources. In-fill drilling programs are being planned to upgrade the Mineral Resource for future stages of study.

Existing resources such as Paddy's and Midway have not formed part of the Study as they only contain Inferred Resources at this stage (totalling 40 koz). Further in-fill and extensional drilling on these deposits may result in an increase in the current life of mine without the requirement for any significant start-up capital or could add significant value by increasing the scale of the existing Project beyond 750,000 tpa.

The Maiden Youanmi Ore Reserve Estimate represents a 50% conversion of Indicated Mineral Resources to Ore Reserves. Additionally, the LOM Production Target represents a 49% conversion of underground Mineral Resources to mine plan.

Rox is currently planning a drill program to convert Inferred Mineral Resources to Indicated Mineral Resources which should both increase the confidence of the mine plan and increase the total underground resource.

Exploration (near-mine and regional)

Several near-mine exploration opportunities exist to add to the current LOM Production Target and/or increase the production rate to beyond 750,000 tpa. Some of these opportunities include:

- Near-surface drilling around the Link area. The resource is limited in this area due to lack of drilling and, should drilling in this area add material into the mine plan, it would assist in shortening the underground ramp-up period and reduce overall Project payback;
- Extensional drilling at Pollard. This would potentially add a significant new working area in close proximity to the Main working area which could add a new working area concurrent to the Main and Link areas. There is limited drilling below and to the south the existing resource, and any addition to resource in this area would directly benefit the mine plan; and
- Follow up drilling at Youanmi South. Following the discovery of Paddy's Lode in 2023, it has shown mineralisation continues south of the main pit. Further drilling is warranted to better understand the orientation and continuation of the mineralised structure along strike.



Several regional exploration targets exist along Rox's tenure, which includes 643 km² and > 60 km of strike along the Youanmi Shear Zone. This belt is known to hold high-grade gold occurrences such as the Youanmi mine and Ramelius Resources' Penny deposit.

A summary of Rox's gold projects include:

- Currans Find;
- Pincher Well;
- Sovereign;
- Specking Patch;
- Youanmi Far South; and
- Target Area 1.

Capital and operating Costs

Capital and operating cost estimates were obtained from various vendors for the purposes of PFS cost estimation (±25% accuracy¹²) in what is considered to be a high point in the current pricing cycle.

Cost reduction may be possible as the Project progresses by engaging in a competitive tendering process particularly in the mining and processing areas.

Risks

The risks described in this section are not an exhaustive list of the risks faced by the Company or by investors in the Company. It should be considered in conjunction with other information in this Study.

Gold price volatility and exchange rate

The Company is exposed to the risks of commodity price volatility and exchange rate fluctuations increasing the Company's costs.

The analysis has been conducted using a gold price of A\$3,100/oz, which Rox considers to be a conservative gold price forecast, however the Project is sensitive to fluctuations in the gold price or AUD: USD exchange rate. Each movement in the AUD gold price if \$100/oz results in a change to the free cash flow of approximately \$75m.

Financial analysis shows the Project has very strong economics, as a change in gold price of -10% (from \$3,100 to \$2,790) still delivers a positive free cash-flow of \$619m (down from \$855m).

Future capital requirements

The Company's capital requirements depend on numerous factors. Following completion of the Study, the Company may require further financing to fund the Project.

On 30 January 2024, the Company reported an updated Mineral Resource estimate (MRE) and substantial near-mine exploration targets for the Project. The updated MRE has been used as the foundation for this Study. Refer to the ASX announcement on 30 January 2024 for further details.

Additional funding will be required and may be raised by the Company through the issue of equity, debt or a combination of debt and equity or asset sales. Any additional equity financing will dilute shareholdings and debt financing, if available, may involve restrictions on financing and operating activities.

¹² Note: Processing costs were estimated to a Class 3 estimate accuracy of ±15%



If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its proposed operations and scale back its exploration, studies and development programmes as the case may be. There is no guarantee that the Company will be able to secure any additional funding or be able to secure funding on terms favourable to the Company.

If the Company is unable to obtain additional financing as needed, it may be required to reduce, delay or suspend its operations and this could have a material adverse effect on the Company's activities and could affect the Company's ability to continue as a going concern or remain solvent.

Capital and operating costs

The capital and operating costs have been conducted at what is considered to be a high point in the pricing cycle. As the Project progresses towards Feasibility studies, value engineering works will be conducted on all major capital and operating cost areas. The economic analysis of the Project shows that even with a +10% increase in operating and capital costs the Project NPV₈ is a healthy \$406m and \$454m respectively.

Results of Studies

The Company released an updated MRE and substantial near-mine exploration targets for the Project to the ASX on 30 January 2024. The updated MRE delivered an increased Indicated Resource of 1.56Moz, or 68% of the updated total MRE, as a result of highly successful in-fill drilling completed during the first half of calendar year 2023. Underground Indicated Resources increased by 359Koz, an increase of 48% from the previously reported resource.

The updated MRE has been used as the foundation for the Youanmi PFS (this Study) with the increased Indicated Resources and open pit resources being reported within constrained pit shells to align with future JORC reporting requirements.

Refer to the Company's ASX announcement dated 30 January 2024 for further information.

The Company released the Youanmi Gold Project PFS (this Study) in July 2024 with the following highlights:

- Average annual gold production target of ~103koz per annum with an average gold head grade of 4.5g/t Au for total gold doré produced of approximately 786koz over the life-ofmine ("LOM"):
 - First four years of the Production Target underpinned by 81% / 19% Indicated to Inferred Resource Material in the Production Target plan; and
 - The mine plan rapidly opens up high-grade and high-confidence resource areas.
- Compelling financial forecasts at a conservative assumed gold price of A\$3,100/oz, reflecting the high-grade and high-margin nature of the Youanmi Gold Project:
 - Project life of approximately 7.7 years;
 - Cumulative EBITDA of approximately \$1,219m over the life of the Project;
 - Pre-tax undiscounted free cash flow of approximately \$855m and \$597m post-tax over the life of the Project;
 - Pre-tax and unleveraged Net Present Value (NPV₈) of approx. \$486m and \$322m posttax;
 - Pre-tax and unleveraged Internal Rate of Return (IRR) of approximately 42% and 33% post-tax; and
 - Pre-tax and unleveraged payback of approximately 2.9 years and 3.3 years post-tax (from completion of construction and commissioning).



- Financial forecasts at a spot gold price of approx. A\$3,500/oz highlight an outstanding investment opportunity and significant upside to the base case:
 - Project life of approximately 7.7 years;
 - Cumulative EBITDA of approximately \$1,523m over the life of the Project;
 - Pre-tax undiscounted free cash flow of approximately \$1,158m and \$810m over the life of the Project post-tax;
 - Pre-tax and unleveraged Net Present Value (NPV₈) of approx.. \$694m and \$468m post-tax;
 - Pre-tax and unleveraged Internal Rate of Return (IRR) of approximately 55% and 44% post-tax; and
 - Pre-tax and unleveraged payback of approximately 2.2 years and 2.7 years post-tax (from completion of construction and commissioning).
- LOM All-In Sustaining Cost ("AISC") average forecast of A\$1,676/oz as a result of the highgrade nature of the Project:
 - Mining: \$770/oz;
 - Processing: \$534/oz;
 - G&A: \$91/oz;
 - Royalty: \$106/oz; and
 - Sustaining Capital: \$175/oz.

The low AISC results in the Project delivering high-margins, approximately 4\$1,424/oz at the base case gold price of 4\$3,100/oz. Importantly, this makes the Project significantly more resilient to gold price decreases with an NPV₈ (post-tax and leveraged) of \$249m at a 4\$2,900/oz gold price.

- Total pre-production capital expenditure of approximately \$245m:
 - Capital cost of 750ktpa processing plant and site infrastructure of ~\$191m;
 - Underground development costs of ~\$39m; and
 - Net commissioning costs (inclusive of commissioning revenue) of ~\$15m.
- Building on the quality outcomes forecast by the Youanmi Gold Project PFS, the Project offers outstanding growth potential during and beyond the Definitive Feasibility Study Phase (DFS) phase in the following areas:
 - Underground resource growth: the Mineral Resource remains open down-dip and along strike. The Link parallel zone has only been delineated to shallow depths whereas the Mine Lode extends to +1,000mbgl, providing additional opportunities to extend Project life and increase the production target rate;
 - Exploration Targets: significant potential upside remains with substantial near-mine Exploration Targets of approximately 6.9Mt to 8.4Mt at an approximate grade ranging from 4.7 g/t Au to 7.0 g/t Au for a total of between 1,093kz 1,836koz at 2.5 g/t Au cut-off (as Rox previously announced to ASX on 30 January 2024). The potential quantity and grade of the Exploration Targets is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource; and
 - Regional exploration: more than 50km strike of the Youanmi Shear Zone is largely untested by historic drilling, highlighting the potential for new regional discoveries to contribute to longer term plant feed.



The Company intends to continue its drilling programs, and subject to the results of any future exploration and testing programs, the Company may progressively undertake a number of studies in respect to the Company's current projects or any new projects. In addition to this Study, these studies may include scoping studies, pre-feasibility studies and bankable feasibility studies.

These studies may not occur, but if they are completed, they would be prepared within certain parameters designed to determine the economic feasibility of the relevant project within certain limits. There can be no guarantee that any of the studies will confirm the economic viability of the Company's projects or the results of other studies undertaken by the Company (e.g. the results of a feasibility study may materially differ to the results of a scoping study).

Further, even if a study determines the economics of the Company's projects, there can be no guarantee that the projects will be successfully brought into production as assumed or within the estimated parameters in the feasibility study, once production commences including but not limited to operating costs, mineral recoveries and commodity prices.

In addition, the ability of the Company to complete a study would be dependent on the Company's ability to raise further funds to complete the study as required.

Mineral Resource and Ore Reserve Estimates

Ore Reserve and Mineral Resource estimates are expressions of judgment based on drilling results, past experience with mining properties, knowledge, experience, industry practice and many other factors.

Estimates which are valid when made may change substantially when new information becomes available. Mineral Resource and Ore Reserve estimation is an interpretive process based on available data and interpretations and thus estimations may prove to be inaccurate.

Notwithstanding the updated MRE for the Project announced on 30 January 2024, the potential tonnage, grade and quantity of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource for the target area reported. It is uncertain if future exploration will result in an estimation of a Mineral Resource.

The actual quality and characteristics of mineral deposits cannot be known until mining takes place and will almost always differ from the assumptions used to develop resources. Further, Ore Reserves are valued based on future costs and future prices and, consequently, the actual Ore Reserves and Mineral Resources may differ from those estimated, which may result in either a positive or negative effect on operations.

Should the Company encounter mineralisation or formations different from those predicted by past drilling, sampling and similar examinations, resource estimates may have to be adjusted and mining plans may have to be altered in a way which could adversely affect the Company's operations.

Operational risks

The operations of the Company may be affected by various factors which are beyond the control of the Company, such as failure to locate or identify mineral deposits, failure to achieve predicted grades in exploration or mining, operational and technical difficulties encountered in exploration and mining, difficulties in commissioning and operating plant and equipment, mechanical failure or plant breakdown, unanticipated metallurgical problems which may affect extraction costs, adverse weather conditions, industrial and environmental accidents, industrial disputes and unexpected shortages, delays in procuring, or increases in the costs of consumables, spare parts, plant and equipment, fire, explosions and other incidents beyond the control of the Company. The operations of the Company may also be affected by various other factors, including failures in internal controls and financial fraud.



These risks and hazards could also result in damage to, or destruction of, production facilities, personal injury, environmental damage, business interruption, monetary losses and possible legal liability. While the Company currently intends to maintain insurance within ranges of coverage consistent with industry practice, no assurance can be given that the Company will be able to obtain such insurance coverage at reasonable rates (or at all), or that any coverage it obtains will be adequate and available to cover any such claims.

Mine development

No mines have been developed by the Company. Possible future development of mining operations at the Company's projects or other tenements applied for or acquired by the Company may not occur and is dependent on a number of factors including, but not limited to, the acquisition and/or delineation of economically recoverable mineralisation, favourable geological conditions, the grant of tenure, availability of funding on reasonable terms for such development and favourable mining, processing, metallurgical, infrastructure, economic, heritage, environmental, engineering, social, government, native title and other legal matters and receiving the necessary approvals from all relevant authorities and parties.

If the Company commences production on any existing or future projects, its operations may be disrupted by a variety of risks and hazards which are beyond the control of the Company, such as weather patterns, unanticipated technical and operational difficulties encountered in exploration, development, extraction and production activities, mechanical failure of operating plant and equipment, shortages or increases in the price of consumables, spare parts and plant and equipment, cost overruns, access to the required level of funding and contracting risk from third parties providing essential services.

No assurance can be given that the Company will achieve commercial viability through the development of existing or future projects.

Metallurgical risks

The economic viability of the development depends on the metallurgical recovery of the Albion $Process^{TM}$ as per the PFS. Further test work is required to estimate the effect changes in mineralogy may have in the economic recovery of the resource.

Tenure, access and grant of applications

Interests in tenements in Australia are governed by state legislation and are evidenced by the granting of licences or leases. Each licence or lease is for a specific term and has annual expenditure and reporting commitments, together with other conditions requiring compliance. The Company could lose its title to or its interest in one or more of the tenements in which it has an interest, or the size of any tenement holding could be reduced if licence conditions are not met or if insufficient funds are available to meet the minimum expenditure commitments. The Company's tenements, and other tenements in which the Company may acquire an interest, will be subject to renewal, which is usually at the discretion of the relevant authority. If a tenement is not renewed the Company may lose the opportunity to discover mineralisation and develop that tenement. The Company cannot guarantee that tenements in which it presently has an interest will be renewed beyond their current expiry date.

Native title, cultural heritage and sacred sites

Mining tenements in Australia are subject to native title laws and may be subject to future native title applications. Native title may preclude or delay granting of exploration and mining tenements or the ability of the Company to explore, develop and/or commercialise the mining tenements. Considerable expenses may be incurred negotiating and resolving issues, including any compensation agreements



reached in settling native title claims lodged over any of the mining tenements held or acquired by the Company.

The presence of Aboriginal sacred sites and cultural heritage artefacts on mining tenements is protected by Western Australian and Commonwealth laws. Any destruction or harming of such sites and artefacts may result in the Company incurring significant fines and court injunctions. The existence of such sites may limit or preclude exploration or mining activities on those sites, which may cause delays and additional expenses for the Company in obtaining clearances.

Abbreviations

Abbreviations	Description
\$	Australian Dollars
AAS	Australian Accounting Standards
AASB	Australian Accounting Standards Board
AC	Air Core
ACHIS	Aboriginal Cultural Heritage Inquiry System
AIG	Australian Institute of Geoscientists
AISC	All-In Sustaining Cost
ANC	Acid Neutralising Capacity
ARD	Acid Rock Drainage
ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
ANCOLD	Australian Committee on Large Dams
ARI	Average Recurrence Interval
Au	Gold
AusIMM	Australasian Institute of Mining and Metallurgy
As	Arsenic
BESS	Battery Energy Storage System
BBMWi	Bond Ball Mill Work index
BIF	Banded Iron Formation
BOO	Build, Own, Operate
Сарех	Capital expenditure estimate
CIL	Carbon In Leach
CRM	Certified Reference Material
DD	Diamond Drilling
DFS	Definitive Feasibility Study
DEMIRS	Department of Energy, Mines, Industry Regulation and Safety
DPLH	Department of Planning, Lands and Heritage
DSO	Deswik Stope Optimiser
DWER	Department of Water and Environmental Regulation
EPA	Environmental Protection Agency
FW	Footwall
GDA	Geodetic Datum of Australia



Abbreviations	Description
GISTM	Global Industry Standard on Tailings Management
GMA	Gold Mines of Australia Pty Ltd
GWL	Groundwater License
HR	Hydraulic Radius
HW	Hangingwall
ICP-MS	Inductively-Coupled Plasma – Mass Spectrometry
IDW2	Inverse Distance Weighted Squared
IRR	Internal Rate of Return
JORC	Joint Ore Reserves Committee
JV	Joint Venture
LCoE	Levelised Cost of Energy
LHOS	Long Hole Open Stoping
LIDAR	Light Detection and Ranging
LOM	Life of Mine
LNG	Liquified Natural Gas
MGA	Map Grid of Australia
MIM	MACA Interquip Mintrex
MLSZ	Mine Lode Shear Zone
NaCN	Sodium Cyanide
NAF	Non Acid Forming
NAG	Net Acid Generation
NAL	Neutral Albion Leach
NAPP	Net Acid Production Potential
NE	Northeast
NN	Nearest Neighbor
NNW	North-northwest
NPV	Net Present Value
NPV ₈	Net Present Value at a discount rate of 8% per annum
NSR	Net Smelter Return
N-S	North to South
NVCP	Native Vegetation Clearing Permit
NW	Northwest
ОК	Ordinary Kriging
ОМС	Orway Mineral Consultants Pty Ltd
Opex	Operating expenditure estimate
OYG	Oz Youanmi Gold Pty Ltd
PAF	Potentially Acid Forming
PFS	Pre-Feasibility Study
РОХ	Pressure Oxidation
Project	The Youanmi Gold Project
PV	Photovoltaic
QAQC	Quality Assurance / Quality Control
QEMSCAN	Quantitative Evaluation of Minerals by Scanning Electron Microscop
RAB	Rotary Air Blast
RC	Reverse Circulation



Abbreviations	Description
RFQ	Request for Quotation
RL	Reduced Level (height relative to datum)
RO	Reverse Osmosis
ROM	Run of Mine
Rox	Rox Resources Limited
S	Sulphur
SE	Southeast
SEM	Scanning Electron Microscopy
SOx	Sulphur Oxidation
SQL	Structured Query Language
SRTM	Shuttle Radar Topography Mission
SW	Southwest
TDS	Total Dissolved Solids
TSF	Tailings Storage Facility
US\$	US Dollars
VMC	Venus Metals Corporation Limited
XRD	X-ray Diffraction

Units of Measure

Units of Measurement	
\$/oz	Australian Dollars per troy ounce
BWi	Bond Work Index
DWi	Drop-Weight Index
g	Grams
g/t	Grams per Tonne
GJ	Gigajoule
hrs	Hours
kg	Kilogram
kg/m ³	Kilogram per cubic metre
kg/t	Kilogram per tonne
km	Kilometre
koz	Kilo-ounce
Кtра	Thousands of Tonnes per Year
kV	Kilovolt
kW	Kilowatt
kWh/t	Kilowatt Hour per Tonne
I/s	Litres per Second
m	Metres
\$m	Millions
mH	Metres High
mL	Metres Long
mW	Metres Wide



mg/L	Milligrams per Litre	
m ³	Cubic Metre	
m³/s	Cubic Metre per Second	
mbs	Metres Below Surface	
Mt	Million Tonnes	
Mtpa	Million Tonnes per Annum	
MW	Megawatt	
MWhr	Megawatt Hour	
MWp	Megawatt (Peak)	
oz	Troy Ounce	
ph	Potential of Hydrogen (acidity/basicity)	
ppb	Parts per Billion	
ppm	Parts per Billion	
%	Percent	
t	Tonne	
t/m³	Tonnes per Cubic Metre (for in situ dry bulk density)	
tkm	Tonne Kilometre	
tpa	Tonnes per Annum	
μm	Micron	
V	Volt	



Annexure A – Table 1 JORC Code 2012 Edition, Sections 1-4

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.	Sampling consisted of reverse circulation (RC) and half-core NQ2 sized diamond samples.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	The entire RC and diamond (DD) drilling sample was extracted prior to subsampling at surface next to the rig. Diamond and RC field duplicates were taken on selected samples to measure representativity of sample splits.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	Industry sampling, preparation and assaying techniques have been used to acquire the current dataset.
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).	The Youanmi drilling database has been built up over several decades by several different operators. Only RC and DD holes have been used in the resource estimate. The collar table including all holes is tabulated below.



Criteria	JORC Code explanation	Comment	ary			
		Hole Type	Total # Holes	# Holes Used		
		AC	2,314	164		
		AG	86	86		
		DD	442	276		
		RAB	10,231	2,623		
		RC	5,449	2,825		
		RCD	48	48		
		RCGC	5,849	5,849		
		TR	5,415	5,413		
		UDD	382	381		
		UGC	3,378	3,378		
		VAC	34	0		
		TOTAL	33,677	21,042		
recovery			sured length		ailable were calculated based on nominal run lengths d core. 96% of the recorded intervals have core	
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Limited records relating to historical RC or diamond core sample recoveries have been identified, however, where described, sampling and recovery procedures are consistent with standard Australian industry standards.				
	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.	No relation	ship betwee	n sample rec	overy and grade has been analysed.	
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.	The Compe metallurgic		considers tha	at the level of detail is sufficient for the reporting of	
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Lithological logging is qualitative in nature. Logged intervals were compared to the quantitative geochemical analyses and geophysical logging to validate the logging.				
	The total length and percentage of the relevant intersections logged.				d drillcore were cut using a diamond saw into half-core over geological intervals from 0.3m to a maximum of	



Criteria	JORC Code explanation	Commentary		
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	RC samples were collected every metre on the drill rig using a cone splitter. A 1.5-3kg sample split was collected into a calico bag for laboratory submission. In some cases, composite samples of up to 5m were collected via spear sampling. Anomalous composite samples were usually re-assayed at 1m intervals where composite assays were greater than 50ppb, 80ppb or 250ppb depending on the program.		
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Sample preparation consisted of drying, riffle splitting samples >3 kg, coarse crushing, pulverising to >85% passing 75 μ m and homogenising the pulp. The Competent Person considers these methods appropriate for this style of mineralisation.		
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Rox have used 14 different Certified Reference Materials (CRMs), covering a range of Au values, as well as blanks.		
		Campaign-based analysis and reporting of quality control data was undertaken of blanks, field duplicates, and CRMs.		
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Limited field duplicate data is available, for post-mining drilling. The precision of the field duplicates is moderate, with 10% of sample pairs having an Average mean difference of >30%; no bias between the paired samples was noted. The precision is accounted for in the variography.		
	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.	Rox took field duplicates at a frequency of 1 in 25 samples since the start of drilling in 2019. Generally, results were reasonably precise and accurate indicating the sampling was representative of the in-situ material collected		
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered to be appropriate to the grain size of the material being sampled.		
	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	All samples were assayed by Fire Assay or Aqua Regia digest. Both of these are total methods. The range of methods is tabulated below.		



Criteria	JORC Code explanation	Commentary					
Quality of assay		Exploration Company	Analytical Laboratory	Assay Technique			
data and		Austwhim	Genalysis, Perth	Fire Assay, AAS finish			
aboratory tests		Aquila	Genalysis, Perth	Fire Assay, AAS finish			
,		CRA	SGS, Perth	Fire Assay			
		Goldcrest	Genalysis, Perth	Composite RC samples using Aqua Regia digest and single metre RC and core samples using Fire Assay, AAS finish			
		GMA	GMA Lab, Perth	Aqua Regia AAS with re-assay via Fire Assay on samples returning preliminary results > 1g/t.			
		Apex	Genalysis, Perth	Fire Assay, AAS finish			
			Minanalytical, Perth	Photon Assay			
		ROX	Genalysis, Perth Aurum, Perth ALS, Perth	Fire Assay, AAS finish			
	parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks,						
	duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.						
		Goldcrest took field duplicates, standards and blanks on an approximate 1 in 20 basis (59 and all Goldcrest drill samples were submitted for assay. Goldcrest twin drilling in shallow areas has verified the drill results of previous explorers.					
		Historical quality assurance and quality control data relating to the remaining resources is either no longer available or is inconsistently reported. Given the long time period over which the data was generated it was not possible to independently verify the quality of the data.					
		and blanks at a frequ included coarse reject	of 1 in 26 samples and inserted external stand ples. Laboratory introduced QAQC samples and internal standards. Generally, results were possistencies identified in a small number of ba	e			
	The verification of significant intersections by either independent or alternative company personnel.	Intersections selected by Rox were reviewed by the Competent person and considered appropriate for the mineral resource estimate.					



Criteria	JORC Code explanation	Commentary
Verification of sampling and	The use of twinned holes.	There are no twinned holes in the resource area.
assaying	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	The data entry, storage and documentation of primary data was completed on Microsoft Excel spreadsheets and local hard drives, then imported into a central database.
	Discuss any adjustment to assay data.	Recent drillholes (Goldcrest, Rox) have been surveyed using differential GPS tools. Older holes (largely Eastmet or GMA) do not have records of the survey methods, although typically these are expected to be by total station tools.
		No adjustments or calibrations have been made to any assay data.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Approximately 90% of drillholes longer than 100m have been down-hole surveyed, mainly with gyroscopic tools; a minority of older holes were surveyed with multi-shot or single-shot tools. Drillholes less than 100 m long typically do not show any material downhole deviation
	Specification of the grid system used.	Topographic data were captured in GDA94 MGA Zone 50 grid system
	Quality and adequacy of topographic control.	A topographic surface was built from end of month pickups of pits, dumps, infrastructure and surfaces by the mine survey team. The Competent Person considers that the surface is suitable for this MRE.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Average drill hole density is highly variable, ranging from 10m x 10m to 160m x 160m, and generally decreasing with depth.
	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.	The Competent Person considers the mineralised lodes have sufficient geological and grade continuity to support the classification applied to the Mineral Resources given the current drill pattern
	Whether sample compositing has been applied.	Assay samples were composited to 1m lengths within the mineralised intersection with a minimum of 0.5m samples at the boundaries of the intersection
Orientation of data in relation	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	No grade effect of the relationship between sample direction and mineralised structures has been identified.



Criteria	JORC Code explanation	Commentary					
to geological structure	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.						
Sample security	The measures taken to ensure sample security.	No details are available on the historic sample security measures, however sufficient security measures were taken by Rox prior to delivery of the samples to the laboratory. Samples were kept in a locked core storage area until transport by truck to the laboratory.					
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	A low-level review of sampling techniques and data has been undertaken by an independent third-party consultant					

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Youanmi mining centre which comprises the leases: M57/51, M57/75, M57/97, M57/109, M57/135, M57/160A, M57/164, M57/165, M57/166 and M57/167 is 100% owned by Rox Resources.
	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.	There are no impediments preventing the operation of the lease.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Gold was first discovered at Golden Crown, just to the south of Youanmi in 1894. Some ore from the area was carted to the government battery at Mount Magnet for treatment.
		Further prospecting led to the discovery of further deposits in 1905, and production commenced from the United and Hill End mines. The Main Lode was discovered in 1908, and the townsite of Youanmi was gazetted in 1910.
		Youanmi Gold Mine Limited was floated in 1911 and commenced operations based on the Main Lode. Further discoveries led to the development of the Pollard Lodes and Currans to the south, where a small treatment battery was established.
		The mine struggled during World War One with a shortage of labour and high costs, and finally closed in 1922. It employed around 100 men.
		In 1934, the Youanmi Gold Mining Limited was floated in London with the intention of restarting underground mining. Production started in August 1936 and continued until 1942, when a shortage of skilled labour due to World War II, resulted in a second closure.



Criteria	JORC Code explanation	Commentary
		About 200 men were employed in this phase. The maximum vertical depth reached by the workings was about 300m below the natural surface; the average stope width was 1.5m. After 1942 the townsite was abandoned; the only remaining infrastructure is the town cemetery.
		Eastmet Limited, an 80% owned subsidiary of Metana Minerals NL, entered into a JV agreement with Tantalex Ltd and Franmere Holdings Pty Ltd to earn 50% of a group of tenements at Youanmi. Open mining began in October 1986 and the 600,000 tpa conventional Carbon-In-Pulp plant was commissioned on 31 December 1986, by which time Eastmet had acquired the remaining 50% of the Project. The original tenements covered the Main, Hill End, and Western Laterite open-pits; additional tenements acquired covered the United North, Kathleen, Rebel-Kurrajong and Bunker open-pits and the unmined Commonwealth and Connemara resources.
		Ore and waste were mined on 2.5m flitches by backhoe excavators and hauled by 50t offroad dump trucks. Exploration and development drilling was completed on a 320m by 10m grid, with the holes inclined -60 to the east and sampled at 1m intervals. Grade control during mining used Ditchwitch trenches cut from west to east spaced 5m apart and sampled at 1m intervals along the trench. Additional RC drilling was used in new areas and at the transition from oxide to fresh ore.
		After completion of the Main Lode pit in 1989, satellite pits were mined including the high- grade Penny West pit, 28 km to the south. The maximum production rate was 187,000 tonnes per quarter. The peak quarterly gold production was 37,900 oz in September 1991. The plant ceased treatment in October 1992 and mill cleanup continued into January 1993.
		Between 1990 and 1993 Eastmet completed a programme of deep diamond drilling to test the extensions of Main Lode to a maximum of 750m vertical depth. Gold Mines of Australia Limited (GMA) was created in 1993 when Eastmet, Metana and Paragon Resources NL were merged. In October 1993, the GMA board approved development of the Youanmi underground mine. The ore was processed through a new 220 ktpa flotation and bacterial oxidation circuit, however the operation ultimately failed to achieve production targets, and the underground mine was closed in November 1997.
Geology	Deposit type, geological setting and style of mineralisation.	The Youanmi gold deposits are hosted in the Youanmi Terrane.
		They were formed where a N-striking sequence of high-Fe tholeiitic mafic rocks and BIFs intersects a NNW-striking, variably WSW-dipping high-strain zone interpreted to be a sinistral-normal shear system.



Criteria	JORC Code explanation	Commentary
		The foliation is axial planar to a S-plunging isoclinal synform. Mined deposits lie at various positions on this structure:
		 Western limb: Bunker, United North (E-dipping stratigraphy); Hinge: Rebel, Kathleen (S-dipping stratigraphy); and Eastern limb: Hill End, Main Pit (W-dipping stratigraphy).
		The east limb of the folded mafic sequence is stoped out by the irregular intrusive contact of a large monzogranite intrusion. The exposed monzogranite-mafic contact has low strain, suggesting the intrusion of the monzogranite is late in the folding and formation of the foliation.
		Interflow sediments are altered chlorite-quartz-magnetite rocks up to several metres thick. These sediments have focussed much of the strain and frequently host auriferous shears.
		The mafics and monzogranite are intruded by intermediate porphyry bodies with complex geometric and timing characteristics.
		Gold mineralisation and alteration are localised in N- to NNW-striking, and moderately to steeply W-dipping anastomosing shear zones 1m to 20 m thick, averaging 3 to 4m. The mineralogy of the shear zones is sericite-quartz mylonites with abundant sulphides, chlorite and carbonate, with accessory biotite, rutile and apatite. The gold occurs within the pyrite and arsenopyrite, which may be up to 15% of the volume of the mylonite. They are interpreted to have formed relatively late in the geological history of the area, as they crosscut the foliation and the monzogranite.
		A lesser mineralisation style is quartz vein stockwork lodes within the monzogranite. These trend NNE and are the brittle equivalent of the ductile shear zones in the mafic. The quartz veins are usually steeply dipping and a few centimetres wide, with very high grades; coarse visible gold has been noted in drilling in the Grace prospect.
		Weathering has reached more than 80m below the natural surface. Previous open-pit mining was almost entirely within the oxide zone.
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:	Exploration Results are not being reported.
	 easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole 	



Criteria	JORC Code explanation	Commentary
	down hole length and interception depthhole length.	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Exploration Results are not being reported.
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.	Exploration Results are not being reported.
	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.	Exploration Results are not being reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Exploration Results are not being reported.
Relationship between mineralisation	These relationships are particularly important in the reporting of Exploration Results.	
widths and intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Exploration Results are not being reported.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Exploration Results are not being reported.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Exploration Results are not being reported.
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.	Exploration Results are not being 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	n/a



Criteria	JORC Code explanation	Commentary
	treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	 Work planned is as follows: Digitisation of the limited historical underground mapping; Cutting of unsampled historical core to add additional intersections to the interpretation; and The use of the historic stope pickups to refine the interpretation locally. Additional infill and extensional drilling in Inferred Resource areas to upgrade resources to Indicated and target high grade zones identified in resource model.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Exploration Results are not being reported.

Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	The database is maintained by external service provider Geobase using the Azeva.XDB Database Management System. The database is stored using Microsoft's SQL Server 2019 database engine on a Secure Network server running the latest SBS Administrative access to the database is restricted to Geobase Personnel only who have been trained in database management. All appropriate and valid changes requested from site are made only by Geobase. Site personnel do not have the ability to edit the database, which allows the integrity of the data to be maintained. Geobase generates a backup of the database and associated data on a regular basis. The database is configured to store assay quality control measures undertaken on the assaying. Historical data validation and recent data merging is undertaken using Azeva.XDS software and a number of additional third-party software suites.



Criteria	JORC Code explanation	Commentary
	Data validation procedures used.	The data is subject to several validation procedures including code, multi-table and spatial. The database contains validation scripts which prevent non-standard character codes being used and checks numeric values against a minimum and maximum range.
		Historic codes have been made consistent with the new standardized coding system.
		Multi table validations have been conducted on all drill hole tables.
		All field generated data is checked for validity and completeness by Rox staff prior to being supplied to Geobase for compilation, additional validation and loading into the database.
		The Competent Person found no material errors and deemed the database was fit for the purpose of mineral resource estimation.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person visited the site in December 2022, and inspected open-pits, geological exposures, diamond core, RC drilling, core and sample handling facilities, historic plans and sections and site infrastructure, as well as having discussions with Rox staff.
	If no site visits have been undertaken indicate why this is the case.	n/a
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	The interpretation is based on the resource drilling dataset, and a selection of intervals based on geology and assay data. This interpretation is supported by the long history of open-pit and underground mining. Uncertainties will arise from the quantity and distribution of data.
	Nature of the data used and of any assumptions made.	No material assumptions have been made which affect the mineral resource reported herein.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Uncertainties in the interpretations are due to the wide spacing of some of the drilling data. The interpretations are consistent with the previously mined stopes and are not likely to be materially deficient.
	The use of geology in guiding and controlling Mineral Resource estimation.	Modelling of mineralised lode wireframes used the Interval Selection function in Leapfrog Geo software. No minimum or maximum thickness parameters were used, and lodes generally cross-cut, except against the Mine Lode Shear, where there is evidence of truncation of minor structures.
	The factors affecting continuity both of grade and geology.	Merged tables were created in Leapfrog Geo, combining lithology and assay tables. The lode intersections were interpreted based on several characteristics, such as grade, shearing, degree of mylonitisation, veining, sulphide content, or alteration and bleaching. Intervals were generally selected using the assay tables, verified using core photographs



Criteria	JORC Code explanation	Commentary				
		and logging, except where historic core was unsampled, in which case lithology tables were used.				
		Drill intercepts were snapped to the wireframes.				
		Core photography was utilised where available, for historical core, to determine hanging wall and footwall contacts, as well as to validate historical logging. Geological contacts were snapped to, with priority, over grade contacts, as some lower grade disseminated gold tends to be found outside of the visible shear contacts. So, in these cases the visible contacts were treated as hard boundaries.				
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	Twenty-one mineralised lodes have been modelled, along 2.8 km of strike length, comprising the Mine Lode and associated footwall and hanging wall lodes along the main trend corridor. The maximum depth of the Main Lode interpretation is to approximately - 600mRL, 1,060m below the natural surface. The Mine Lode is continuous down the dip for this length; other lodes have much more restricted down-dip extents.				
		The hanging wall and footwall lodes are predominantly 0.5m-2m thick, while the Mine Lode is generally in the order of 1m-3m thick, but locally exceeds 10m.				
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a	A total of 106 mineralized lode wireframes were modelled comprising the Mine Lode and associated footwall and hanging wall lodes within 7 fault blocks for Youanmi and 7 satellite deposits. No minimum or maximum thickness values were applied for interpretation of the lodes.				
	description of computer software and parameters used.	The resulting lode wireframes were then used to code the drill hole database with the intersections.				
		Fixed length sample composites were extracted for each lode according to the lode intersection coding. Composites were extracted for each lode to have a length of 1m with a minimum length of 0.25m with residual appended to the last interval. Statistical distributions of gold, arsenic and sulphur grades inside each lode were reviewed individually to determine high grade cuts (top cuts) that should be applied prior to grade estimation. Histograms and probability plots of grade distributions were analysed using Supervisor software. A top cut analysis was also conducted for each lode in Supervisor software. High grade cuts were applied that ranged from 1 g/t Au to 100 g/t gold, 150-30,000ppm for arsenic and 2,000-160,000ppm for sulphur and were applied to the individual wireframe lodes.				
		Variography was conducted using Snowden Supervisor mining software for each lode. Variograms were modelled for the down hole and all 3 orthogonal directions.				



teria	JORC Code explanation	Comme	entary			
		Gold var	riography result	s are:		
					AUc	Т
				Nugget	0.238	+
				Sill 1	0.306	1
				Sill 2	0.225	
				Sill 3	0.230	
				Range 1	14 - 7 - 7	
				Range 2	148 - 106 - 15	
				Range 3	207 - 142 - 41	
		Arsenic	& sulphur vario	graphy (global) are:		
		Γ	Nugget	0.147	Nugget	0.049
			Sill 1	0.256	Sill 1	0.265
			Sill 2	0.342	Sill 2	0.314
			Sill 3	0.250	Sill 3	0.370
			Range 1	18 - 32 - 12	Range 1	113 - 77 - 8
			Range 2	65 - 168 - 129	Range 2	224 - 168 - 57
			Range 3	233 - 171 - 130	Range 3	360 - 261 - 170
		Variograms for gold lodes that exhibited poor variography used either the model or borrowed models from neighbouring lodes. Block models rotated -30 degrees for Yoaunmi and -10 for Commonwea with parent block sizes 10m Y by 5m X by 5m Z and sub-block sizes 1.0m 0.5m Z. Lode wireframes were coded into the block models. Four different rock types, overburden, laterite, mafics and granite were block models: and six weathering profiles, overburden, laterite, oxide, u transition and fresh rock. Densities were assigned for each of the rock m shown below:			monwealth were created zes 1.0m Y by 0.5m X by ite were coded into the oxide, upper & lower	



Criteria	JORC Code explanation	Commentary						
				Geology				
			Weathering	OVB	LAT	MAF	GRN	
			SOIL		1	.60		
			LAT	1.60	1.76	2.90	2.75	
			OXID	1.31	1.44	2.38	2.25	
			UTRN	1.42	1.54	2.52	2.42	
			LTRN	1.53	1.63	2.66	2.57	
			FRSH	1.60	1.78	2.89	2.79	
		 Minimum Block discussion A hard boundary was Inverse Distance Wes mineralized lodes. 	asses. Gold grad was implement lowing base par ages: 20m x pliers: x1, x2 and maximum s retisation (x, y, s s used to estim righted squared	les were ted, such rameters (40m x 5 (, x4; samples z): 3, 3, ate block method	estimate that sea were de m; per estim 3, <s within<br="">s were al</s>	ed using to irch ellipso fined: nate: 8 & each lode lso comple	op cut ass es orienta & 16; and e. Check e eted for a	ays. Ited into the plane estimates using the Il blocks with the
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	The current resource resource estimates. The Project has been over a period of abo below	n mined by both	n underg	round an	id open-p	it method	ls intermittently



Criteria	JORC Code explanation	Commentary						
		Company	Period	Tonnes	Head	Recovered	Recovery	Reported Gold
			1908-1921	339,000	-	15.2	· · ·	166,000
		Youanmi Gold	1937-1942	365,000	-	8.1		95,000
		Mines Ltd	Other	46,000		10.2		15,000
			Total	750,000	-	11.44		276,000
			1	Op	en-pit Opera	ations		
		Eastmet Ltd	1987-1993	2,665,535	3.43	3.07	89.43	262,717
				Unde	erground Op	erations		
		Gold Mines of Australia Ltd (GMA)	1995-1997	411,858	11.36	9.69	85.27	128,278
		Historica	al Total	3,827,393		5.42	-	666,995
	The assumptions made regarding recovery of by-products.	& Associates: 9.07Mt @1.89g for a total of 18 Grace). (20th April 2022 1.0Moz – Total 1 n/a	.01Mt @ 1.7 2 (RXL Annou	4g/t gold an	d 1,004 kC ⁄ouanmi N	Dz using a 0.5g	/t gold cuto	off (1.5g/t at
	Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	Non-JORC estim guidance in futu		•			d where da	ta available fo
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The dimensions sub-celling in X degrees rotation estimation rang to 80m for surfa	and Z to 0.5r n). Anisotrop ing from 50r	n; the block ic ellipsoid s n to 500m. ⁻	s are rotat search was	ed into the stri employed wit	ike directio h search di	n (minus 30 stances for
	Any assumptions behind modelling of selective mining units.	N/A						
	Any assumptions about correlation between variables.	No definitive as correlations ma	•		-	-	ition of vari	ables, limited
	Description of how the geological interpretation was used to control the resource estimates.	Logged geology within the resou					•	



Criteria	JORC Code explanation	Commentary
	Discussion of basis for using or not using grade cutting or capping.	High-grade cuts were applied to reduce the effect of outlier grades and reduce the Coefficient of Variation to a value less than 2, if possible. High grade cuts were applied to all mineralised lodes and ranged from 1 g/t Au to 100 g/t gold, 150-30,000ppm for arsenic and 2,000-160,000ppm for sulphur and were applied to the individual wireframe.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	 The grade estimate was validated by three different methods: Visually – displaying block grades with drill hole sample grades for direct visual comparison; Mathematical by lode – the average block grade for each lode and compare to the average sample composite grades for each lode; Mathematical by swath plot – the average block grades for "swathes" or intervals of easting, northing and elevation compared to the average composite grades for the same intervals. Simultaneous comparisons were made with the estimated Ordinary Kriging, Inverse Distance Weighted and Nearest Neighbour grades with the sample composite grades; and The overall validation showed the estimated grades are reasonable compared to the composite grades, with some slight over-estimation in the deeper areas below -275m RL. The majority of this material has been classified as Inferred.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages have been estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The Mineral Resources were reported at a 0.5 g/t for near-surface material (open-pit) and 2.5 g/t cut-off for underground resources. The cur-offs are derived from updates to the economic criteria from the previous Scoping Study.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Due to the depth, and the previously developed underground mine, the resource is considered suitable for underground mining by long hole open stoping. Previously mined areas may be accessible by the use of cemented fill. No detailed mining assumptions have been made and no external dilution has been added to the resource.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral	A 120 tpd bacterial oxidation circuit was commissioned in September 1994 to treat sulphide concentrates, using the BacTech process. BacTech uses a moderately thermophilic culture with an optimum growth temperature of 45C.



Criteria	JORC Code explanation	Commentary
	Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions	A pilot plant trial from October 1993 to July 1994 tested three bulk samples of concentrate. After bacterial oxidation, recoveries up to 99% were achieved.
	made.	The performance between 1995 and 1997 of the flotation and bacterial oxidation circuit was generally lower than budgeted due almost entirely to below budget ore deliveries. Although the plant rarely achieved its full capability, it consistently exceeded the projected metallurgical recovery of 81%, with an average recovery of 87.5%.
		Blending of ore was not anticipated prior to commissioning and feed variability created significant problems for both the flotation and bacterial oxidation circuits.
		Operating performance history demonstrates a steadily increasing recovery, with initial commissioning values of 85% increasing rapidly to a maximum of 92.4% in 1994-95. This is indicative of improving metallurgical control and diminishing amounts of reactive sulphide from transitional zones. Based on historical operating data, one of the most significant factors affecting both throughput and recovery was mechanical and equipment failures within the bio-oxidation circuit.
		Work was conducted in 2021 by OMC Mineral Consultants to define the characteristics of the ore and defining flowsheet options. Work involved two phases of mineralogical investigation; thin sections from core and quantitative analysis using electron microscopy, XRD and laser ablation ICP-MS. Metallurgical extraction test work included comminution test work, whole of ore leach tests and flotation test work. The flotation concentrate was subject to 4 extraction options; Ultrafine Grinding to P ₈₀ of 15 and 10 µm material, basic two-stage roasting, basic pressure oxidation (POX) and Neutral Albion Process [™] Leach (NAL).
		The study concluded the recommended flowsheet for the Scoping Study would comprise grinding to P_{80} at 75 μ m, flotation, Albion Process TM oxidation of the concentrate, cyanide leaching of the processed concentrate and separate cyanide leaching of the flotation tail with carbon adsorption to recover the gold from solution
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this	No assumptions regarding possible waste and process residue disposal options have been made. Youanmi is a previously mined site, with historic waste dumps and tailings dams.



Criteria	JORC Code explanation	Commentary
	should be reported with an explanation of the environmental assumptions made.	
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	Bulk density data is predominantly derived from some standard Specific Gravity (SG) immersion measurements carried out between 1989 and 1992. Within the interpreted mineralised lodes, the mean density of the samples was 2.88tm-3. It was not deemed possible to subdomain this dataset into areas of differing bulk density values. A single value of 2.88tm-3 was assigned to the fresh lode material throughout the deposit.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	The water immersion method measurements were determined by measuring the weight of part or the entire sample in air and water and then applying the formula bulk density = weight_air/(weight_air-weight_water).
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	n/a
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The mineral resource was classified as Indicated or Inferred based on the level of geological understanding of the mineralisation and the drillhole spacing. The classification of the Youanmi mineralisation resource was developed from the confidence levels of key criteria including drilling methods, geological understanding and interpretation, sampling, data density, data location, data quality, grade estimation and quality of the estimates.
		Generalised criteria applied were:
		 Measured None applied; Indicated Search Volume 1, SR ~> 0.6, KE ~>0.3, AveDist ~< 40m; Inferred Search Volume 2, SR ~> 0.4, KE ~>0.1, AveDist ~< 60m; and Exploration Potential Search Volume 3; individual lodes supported by less than ~6 drillholes; and all other material not classified above as Measured, Indicated or Inferred.
	Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	The classification reflects the overall level of confidence in mineralised domain continuity based on the drill sample data numbers, spacing and orientation, QAQC results, survey control and drilling methods and geological interpretation.



Criteria	JORC Code explanation	Commentary
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The mineral resource classifications applied appropriately reflect the view of the Competent Person.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The mineral resource was audited by an independent, third-party consultant, Mining Plus, which verified the technical inputs, methodology, parameters and results of the estimate
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	The accuracy of the mineral resource is communicated through the classification assigned. The mineral resource has been classified in accordance with the JORC Code (2012 Edition) using a quantitative and qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this table.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The accuracy of the mineral resource is communicated through the Inferred or Indicated classification assigned to the deposit. The mineral resource has been classified in accordance with the JORC Code. All factors that have been considered have been adequately communicated in Section 1, Section 2 and Section 3 of this table. The mineral resource Statement relates to a global estimate of in-situ tonnes and grade.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available	No comparisons of production data versus digital stopes was undertaken, largely due to lack of detailed information on individual stopes ID's and production values. Further analysis and modelling are required to understand the differences and refine the model.

Section 4: Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Mineral Resource estimate used for the basis of the Ore Reserve was the 2024 Youanmi Mineral Resource estimate.
conversion to Ore Reserves	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Measured and Indicated Mineral Resources are reported inclusive of the Ore Reserves.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The competent person has conducted multiple visits to site, which included inspections of the existing open pits, core processing & storage facility and proposed infrastructure areas.
	If no site visits have been undertaken indicate why this is the case	n/a



Criteria	JORC Code explanation	Commentary
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	The Ore Reserve estimate is based on the results of a Pre-Feasibility study.
	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	 The Ore Reserve estimate is based on the results of a Pre-Feasibility study. A complete mine design has been produced from the resource model, using stope shapes derived from material above the prescribed cut-off grade. The competent person considers the mine plan is technically achievable and economically viable. Appropriate modifying factors have been applied for estimation of costs, metallurgical recovery, metal prices and existing royalty agreements have been applied.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	The gold price for determining the Ore Reserve cut-off is A\$2,600/oz. This revenue was offset by mining, processing and royalty costs.
		Metallurgical recovery factors are based on test work programs conducted since 2022.
		A stoping cut-off grade of 3.0 g/t Au was used for stope shape optimisation.
		A development ore cut-off grade of 1.3 g/t Au was applied which covers rehandle, processing and administration costs.
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	The Mineral Resource has been converted to an Ore Reserve following the completion of a detailed mine design and schedule (completed in Deswik) and is supported by a detailed financial assessment.
	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre- strip, access, etc.	The mining methods selected are open stoping with pillars in areas less than 600m below surface, and modified Avoca in areas deeper than 600m from surface and have been selected due to orebody and geotechnical guidance.
		Access to the underground mine will be via portals located within existing open pits.
		Level spacing is 20m for the Pollard and Main deposits, and 15m for the Link deposit due to having a slightly shallower dip.
		Development will be completed by twin boom Jumbos, and loading & haulage conducted by 17 tonne and 63 tonne class equipment respectively.
	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	All underground designs, including ground support designs are based on parameters provided by independent consultant Turner Mining and Geotechnical.
		Stope lengths of 70m above 600m depth and 20m below 600m depth, at the designed sub- level intervals have been recommended.



Criteria	JORC Code explanation	Commentary
		Stope spans are separated by rib pillars >1 x stoping width
		Sill pillars are designed where stoping heights exceed 100m, and are 3 x stoping width
		Below 600m depth, stopes are mined in 3 level panels, with the lower level mined first and filled with CRF, and the second level mined and filled with waste rock. The panels are mined in a top-down sequence.
		Grade control drilling will be carried out using diamond drills, with holes drilled from decline stockpiles.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	The 2024 Mineral Resource model as stated above was used for all stope optimisations
	The mining dilution factors used.	Stope planned dilution of 0.5m (0.3m hangingwall and 0.2m footwall) at the block model grade was added in the stope optimisations.
		Development has a dilution of 10% applied.
	The mining recovery factors used.	Development recovery is 100%.
		Stope recovery is 95%.
		All pillars are assumed to be non-recoverable.
	Any minimum mining widths used.	A minimum mining width 2.0 m was applied. This minimum mining width is exclusive of the 0.5m planned stope dilution.
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	The Mineral Resource classifications consist of Measured, Indicated and Inferred. The underground Ore Reserve does not include the value of any Inferred resource and the Underground Ore Reserve is technically and economically viable without the inclusion of any Inferred resource.
	The infrastructure requirements of the selected mining methods	Infrastructure to support the mining plan such as dewatering systems, mine ventilation, power supply and services have been designed, scheduled and included within cost estimates.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	The Youanmi process plant consists of crushing, grinding, flotation ana a CIL, elution and gold recovery circuit for flotation tails. Flotation concentrate is processed via the Albion Process™ to oxidise the flotation concentrate prior to leaching in the CIL circuit.
		91% of the gold is recovered by flotation, and the remaining 9% will be co-leached with the Albion Process [™] residues through the CIL plant to produce gold doré.



Criteria	JORC Code explanation	Commentary
	Whether the metallurgical process is well-tested technology or novel in nature.	CIL and flotation is a well-used and understood gold extraction process for free milling ores. Albion Process [™] is proven technology for rapid oxidation of sulphide minerals. There are Albion circuits in operation around the works which are used to improve recovery for both precious and base metals.
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	Metallurgical testwork programs have been completed on flotation of sulphide minerals as well as in various methods of oxidising of the sulphides. The testwork has shown that the Youanmi ore is highly amenable to gold recovery via flotation, oxidising of sulphides via the Albion Process [™] and cyanide leaching of the flotation tailings and Albion residues. Rox is currently undertaking a geological and metallurgical domaining process to better define the different domains. The outcomes of this work will enable metallurgical variability
		 testwork to be conducted on the different domains. The following metallurgical recovery factors have been used: Albion Process[™] gold recovery: 96% Flotation tailings gold recovery: 56% Overall gold recovery: 92.6%
	Any assumptions or allowances made for deleterious elements.	No deleterious elements are expected to impact gold recovery.
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	No bulk sample or pilot scale test work has been undertaken. Youanmi ore was previously successfully treated using flotation methods and bacterial leaching of the flotation concentrate.
	For minerals that are defined by a specification, has the Ore Reserve estimation been based on the appropriate mineralogy to meet the specifications?	No minerals are defined by a specification
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the	Baseline environmental studies have been completed for Youanmi including flora and vegetation, terrestrial fauna, heritage, hydrological and hydrogeological.
	consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	Waste characterisation studies have been conducted on mine waste and tailings. This has determined that both mine waste and tailings are non-acid generating. Further, all mine waste is planned to be stored within the existing open pit, reducing the risk of any acid mine drainage.
		No mining approvals have been sought at this stage of the study; however it is expected that any approvals would be granted within a reasonable timeframe prior to mining commencing. All material in the mine plan is located on granted mining leases.



Criteria	JORC Code explanation	Commentary
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the	The site is located on the Youanmi-Lake Barlee Road, and 4km off the Paynes Find- Sandstone Road. Both roads are unsealed, however are well maintained and suitable for transportation.
	infrastructure can be provided, or accessed.	A small airstrip is located at Youanmi and is suitable for small aircraft, and a larger airstrip is located at the Penny operation (Ramelius Resources) approximately 30km to the south of Youanmi.
		Processing infrastructure is planned to be constructed on granted mining tenements held by Rox Resources
		Labour is planned to be sourced primarily from Perth on a fly in fly out basis.
		Sufficient water will be available for operations from mine dewatering. Dewatering of the existing mine is planned to be undertaken via a pipeline to nearby Lake Noondie.
		Expansion of the mine village and power supply infrastructure is required. Discussions have commenced with suitable suppliers/contractors and will be advanced as required to meet schedule requirements.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study.	Capital costs for the project have been provided from external studies for the project including:
		 MACA Interquip Mintrex – Processing plant;
		 Knight Piesold – Tailings Storage Facility; McNally Group – Village upgrade;
		 Stalteri Engineering – Underground infrastructure (electrical, pumping,
		communications etc);
		 OzVent Consultants – Primary ventilation fans; Greenlands Equipment – Dewatering pumps and pipeline; and
		 Barminco – Underground establishment and mining costs.
	The methodology used to estimate operating costs.	Operating costs for the project have been sourced by reputable mining contractors and consultants.
		Underground mining costs were sources from budget quotations provided by reputable mining contractors.
		Processing costs were supplied by MACA Interquip Mintrex and based on a PFS level processing plant design.
		General and administration costs were built up from direct quotation and first principles estimates.



Criteria	JORC Code explanation	Commentary
	Allowances made for the content of deleterious elements.	No deleterious elements have been identified in metallurgical testwork and as such, no allowances have been made.
	The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.	A single commodity price for gold of AUD \$2,600/oz has been used for the estimation of Ore Reserves.
		No economic bi-products or co-products have been identified.
	The source of exchange rates used in the study.	All costs and revenues are in Australian dollars.
	Derivation of transportation charges.	Concentrate transport, handling and shipping costs are based on estimates provided by an experienced logistics company.
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	All concentrate will be processed on site, no treatment and refining charges apply.
	The allowances made for royalties payable, both Government and private.	Royalties allowed for include:
		 WA State Government royalty – 2.5%; Venus – 1%; and
		 St Barbara – 2.5% (only on tenement M57/10 which has no gold production in this Study).
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	Production and recovery values used for revenue calculations are based on detailed mine schedules, mining and processing modifying factors and cost estimates obtained as part of the Pre-Feasibility study.
	The derivation of assumptions made of metal or commodity price(s), for the	A gold price of AUD \$2,600/oz has been used for the estimation of Ore Reserves.
	principal metals, minerals and co-products.	The competent Person considers the Revenue Factors to be reasonable assumptions based on the level of study.
Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	There is a well-established and transparent market for gold doré sales.
	A customer and competitor analysis along with the identification of likely market windows for the product.	No customer and competitor analysis has been completed at this stage.
	Price and volume forecasts and the basis for these forecasts.	There is a well-established and transparent market for gold. Rox Resources has used conservative price forecasts to account for short term variation in price.



Criteria	JORC Code explanation	Commentary
	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	Not applicable
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	Capital and operating cost estimates have been taken from contractor and supplier costings provided during the study, at the relative accuracy of ±25% No escalation has been applied to costs or price forecasts. A discount rate of 8% has been used to calculate the project NPV.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	Sensitivities have been assessed at various gold prices, capital and operating costs, discount rate and metallurgical recovery.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	Rox has established land access agreements as well as frequent consultation and engagement with Sandstone Shire and hold good standing with the local community.
		Rox will continue to communicate and negotiate in good faith with key stakeholders, as part of the proposed mining and processing operation and it is not expected that there will be any significant impediments to the development of the project.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks.	No naturally occurring risks have been identified as part of the study.
	The status of material legal agreements and marketing arrangements.	All tenements are held in good standing, and communications with key stakeholders is ongoing.
		The Competent Person does foresee any reason why legal agreements and marketing arrangements would not be resolved within the required timeframe.
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and	No government agreements or approvals have been identified that are likely to materially impact the project.
	statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the	Rox anticipated that any future agreements and approvals will be granted in the required timeframes for the successful commencement of the project.
	materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	There are no known unresolved matters relating to any third party which may affect the development of the project.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	Classification of the underground Ore Reserve Estimate has been carried out in accordance with the JORC Code 2012.



Criteria	JORC Code explanation	Commentary
		The Probable Ore Reserve is based on the portion of Indicated Mineral Resources within the mine design which can be economically extracted and includes recovery and dilution factors.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The result appropriately reflects the Competent Person's view of the deposit.
	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	No Measured Mineral Resources have been included in the Ore Reserve Estimate.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	The Ore Reserve estimate has been internally reviewed by Rox Resources. No external audits have been conducted.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	The design, schedule and financial model for the Youanmi Ore Reserve Estimate has been completed to a Pre-Feasibility standard with a ±25% (or better) level of confidence. A degree of uncertainty exists with the geological estimates used to form the Ore Reserve Estimate which is reflected in the Mineral Resource Classification.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Ore Reserve is best reflected as a global estimate.
	Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the	There is a degree of uncertainty regarding estimates of modifying mining factors, geotechnical and processing parameters that are of a confidence level reflected in the level of the study.
	current study stage.	There is a degree of uncertainty in the commodity price used, however, the Competent person is satisfied that the assumptions used to determine the economic viability of the underground Ore Reserve are based on reasonable current data.
		The Competent Person is satisfied that a suitable margin exists that the Ore Reserve estimate would remain economically viable with any negative impacts applied to these factors or parameters.
	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Past production data at Youanmi is not a reliable indicator of potential future production data given the different mining methods and modern mining techniques.



Criteria	JORC Code explanation	Commentary
		Metallurgical test work conducted during this study aligns well with historical records providing confidence in metallurgical processes.



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