



## **Bendigo-Ophir Gold Project - Pre-Feasibility Study**

Developing New Zealand's newest and richest gold mine

November 2024

# Disclaimer



## Disclaimer

All information contained in this presentation is of a general nature. Potential investors are cautioned against using the content of this presentation, in isolation, for making investment decisions and should also refer to Santana Minerals Limited ('Santana') Annual Reports and ASX:SML releases. For further information about Santana visit our website at [www.santanaminerals.com](http://www.santanaminerals.com).

Best efforts have been made to ensure the accuracy of information contained (at the time of preparation). Where forward targets and/or assumptions have been included – all such instances are indicative only and subject to alteration and/or cancellation as and when the management of Santana determines.

Research and advice of a qualified financial advisor or accountant are strongly recommended to anyone considering investing in listed company securities, including those of Santana.

The Prefeasibility Study, including the production target and the forecast financial information derived from the production target, referred to in this Presentation (PFS) was released to the ASX on 15 November 2024. This Presentation includes summary excerpts from the PFS and does not purport to be all-inclusive or complete.

## Forward-Looking Statements

This Presentation contains various forward looking statements. Forward-looking statements in this presentation include, but are not limited to, statements regarding the production target, financial information based on that production target and statements statements with respect to Santana's future plans, strategy, activities, events or developments the Company believes, expects or anticipates will or may occur. By their very nature, forward-looking statements require Santana to make assumptions that may not materialize or that may not be accurate. The Company has concluded that it has a reasonable basis for providing these forward-looking statements, including the production target and the forecast financial information included in this Presentation. The detailed reasons for these conclusions are outlined throughout the ASX releases dated 15 November 2024. However, no assurance can be given that these expectations will prove to have been correct, as actual results and future events could differ materially from those anticipated in the forward-looking statements. Accordingly, viewers are cautioned not to place undue reliance on forward-looking statements. Santana does not undertake to update publicly or to revise any of the included forward-looking statements, except as may be required under applicable securities laws.

To achieve the range of outcomes anticipated in the PFS, the PFS estimates that financing in the order of A\$340 million will be required. Santana believes that there are reasonable grounds for the assumptions it has made in satisfying itself that the requisite funding for the development of the Project will be available when required. However, Shareholders and prospective investors should be aware that there is no guarantee Santana will be able to secure this funding as required, and it is possible that the terms available may be dilutive or otherwise adversely impact the value of Santana's current shares. Additionally, Santana may explore alternative value-creating strategies, such as divesting some or all potential revenue streams from precious metals or a full or partial sale of its interest in the Bendigo-Ophir project.

## Cautionary Statement – Inferred Resources Included in Production Target

Of the Mineral Resources planned for extraction under the PFS production model approximately 94% is within the Indicated Resources category, with the balance (6%) being classified within the Inferred Resources category. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

## Competent Persons Statement

The production target and the forecast financial information derived from the production target set out in this presentation were first contained in a public announcement released to the ASX on 15 November 2024. The Company confirms that all material assumptions underpinning the production target and the forecast financial information derived from it continue to apply and have not materially changed.

The information in this report that relates to Mineral Resources is based on information contained in the following public announcements:

15 November 2024 – ASX Announcement titled "Bendigo-Ophir Pre-Feasibility Study"

2 July 2024 – ASX Announcement titled "Infill drilling increases RAS Indicated category to 1.45Moz"

16 February 2024 – ASX Announcement titled "1.3M ounces upgraded to Indicated category from RAS drilling:"

28 September 2021 – ASX Announcement titled "Bendigo-Ophir Gold Resources Increased 155% to 643k Oz"

The information in this report that relates to Ore Reserves is based on information contained in the public announcement made to the ASX on 15 November 2024.

The information in this report that relates to Exploration Results is based on information contained in the following public announcement:

22 August 2022 – ASX Announcement titled "MDD054 Jewellery Box Re-Assays to 1400 g/t Gold"

A copy of these announcements are available to view on the Santana Minerals Limited website [www.santanaminerals.com](http://www.santanaminerals.com) or on the ASX platform [www.asx.com.au](http://www.asx.com.au).

The reports were issued in accordance with the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements referenced above and, in the case of the Mineral Resource estimates, that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the relevant announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.



# PFS SUMMARY

Based on a spot gold price of A\$4,000/oz



## ROBUST RETURNS

**A\$1.06 billion NPV<sub>g</sub> (after tax)**

68% IRR (after tax)

<1yr payback (from production)



## HIGH GRADE

**>3g/t from RAS in early stages**

2.3g/t on average for project

150koz pa in Yr1 & Yr2



## HIGH MARGIN

**>A\$1,500/oz margin after-tax**

After all costs and full depreciation of CAPEX



## RESPONSIBLE

**Strong environmental focus**

Avoid, mitigate, offset strategy

Mining consents in line with strict NZ criteria



## LOW HURDLE

**A\$340M max cash drawdown**

A\$1,416/oz Au AISC

Surrounded by existing workforce & services



## SIGNIFICANT

**Designated by NZ Government**

Nationally & regionally significant

Fast Track Approval eligibility

# Bendigo-Ophir Gold Project PFS outcomes



## Production profile

**9.2 years**

initial mine life

**16.8Mt @ 2.3g/t**

ore mined

**1.15Moz of Gold**

sold

~900koz Inferred resources  
remaining

**125koz pa**

average production over  
initial mine life



## Capital & Operating

**A\$340M**

total pre-production  
cash drawdown

**A\$66.4/t**

C1 cash cost per tonne  
milled

**A\$96.9/t**

AISC per tonne milled

**A\$1,416/oz**

AISC per ounce



## Financials at Spot Gold Price A\$4,000

**<1yr**

simple payback (from  
production)

**A\$4.6 billion**

revenue

**A\$3.1 billion**

EBITDA

**A\$1.8 billion**

after tax free cash

**A\$1.06 billion**

NPV<sub>8</sub> after tax

**68%**

IRR after tax

## BOGP PFS Outcomes

- Robust economics
- Exceptional margins
- Low hurdles
- Rapid payback
- Growth not yet included
  - ~770koz Inferred resources still to be converted at RAS
  - ~150koz Inferred at SRX and CIT

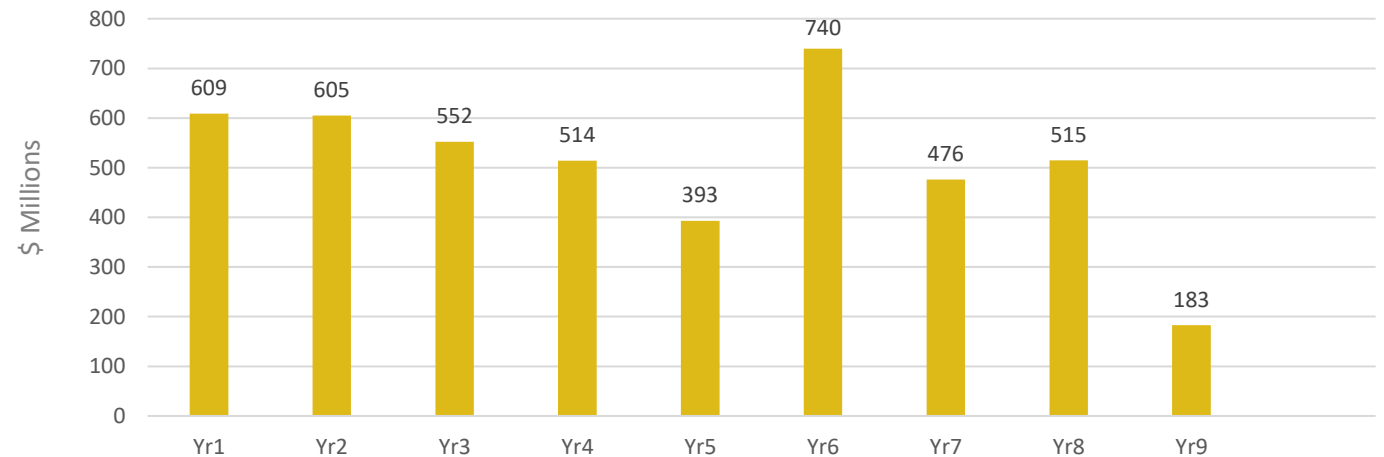


# Highly profitable investment case

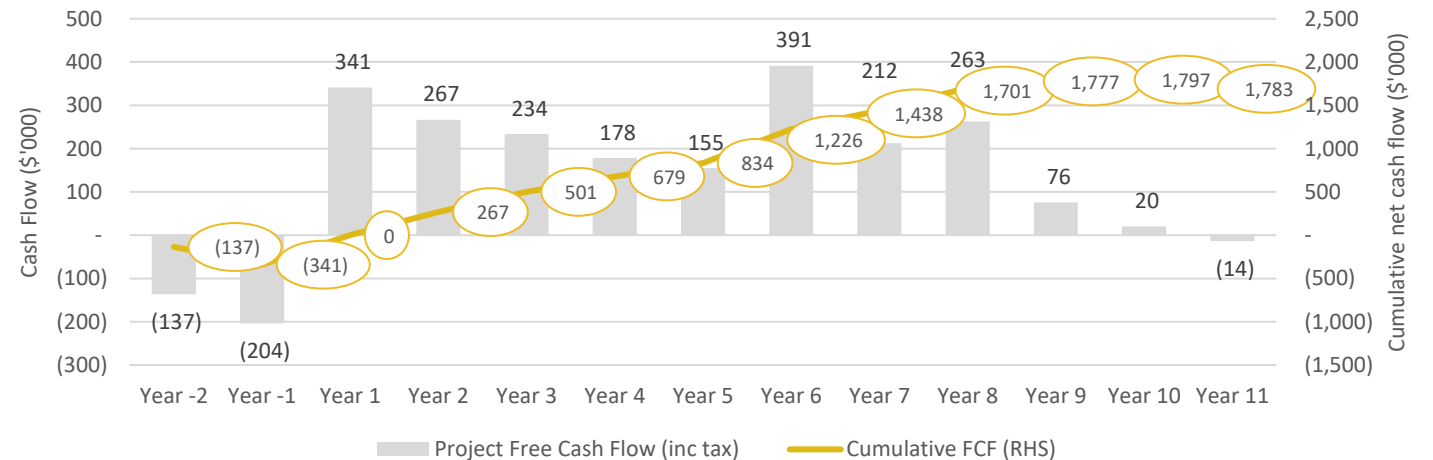


Strong financials	Units	Total A\$
Revenue	\$ billion	4.6
EBITDA	\$ billion	3.1
Free cash after tax	\$ billion	1.8
Taxes	\$ million	728
After tax NPV	\$ billion	1.06
After tax IRR	%	68
After tax Payback	yrs.	<1

Revenue per annum A\$ millions (main production years)



Cash flows from pre-production to conceptual mine closure



# Proposed mine infrastructure and layout

Project is located on private free-hold farm land with agreements in place to mine.

Allows a smooth pathway to permitting.

## Project infrastructure includes

Open pit mine



Underground mine



1.5/2.1Mtpa process plant



Workshops and stores



Temporary camp



Tailings storage facility (TSF)



Environmental land fill (ELF)



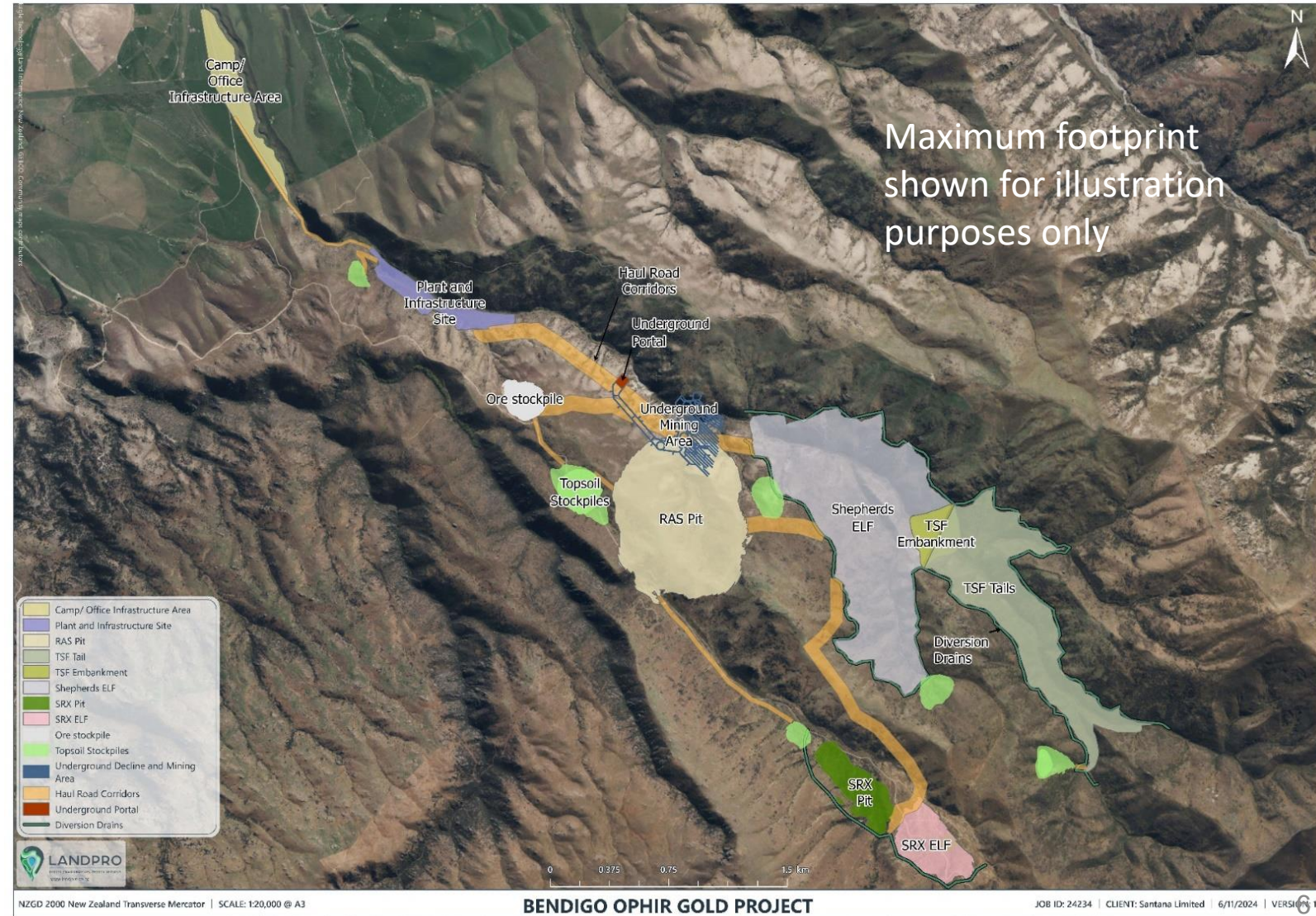
Water pipeline



Power line to national grid



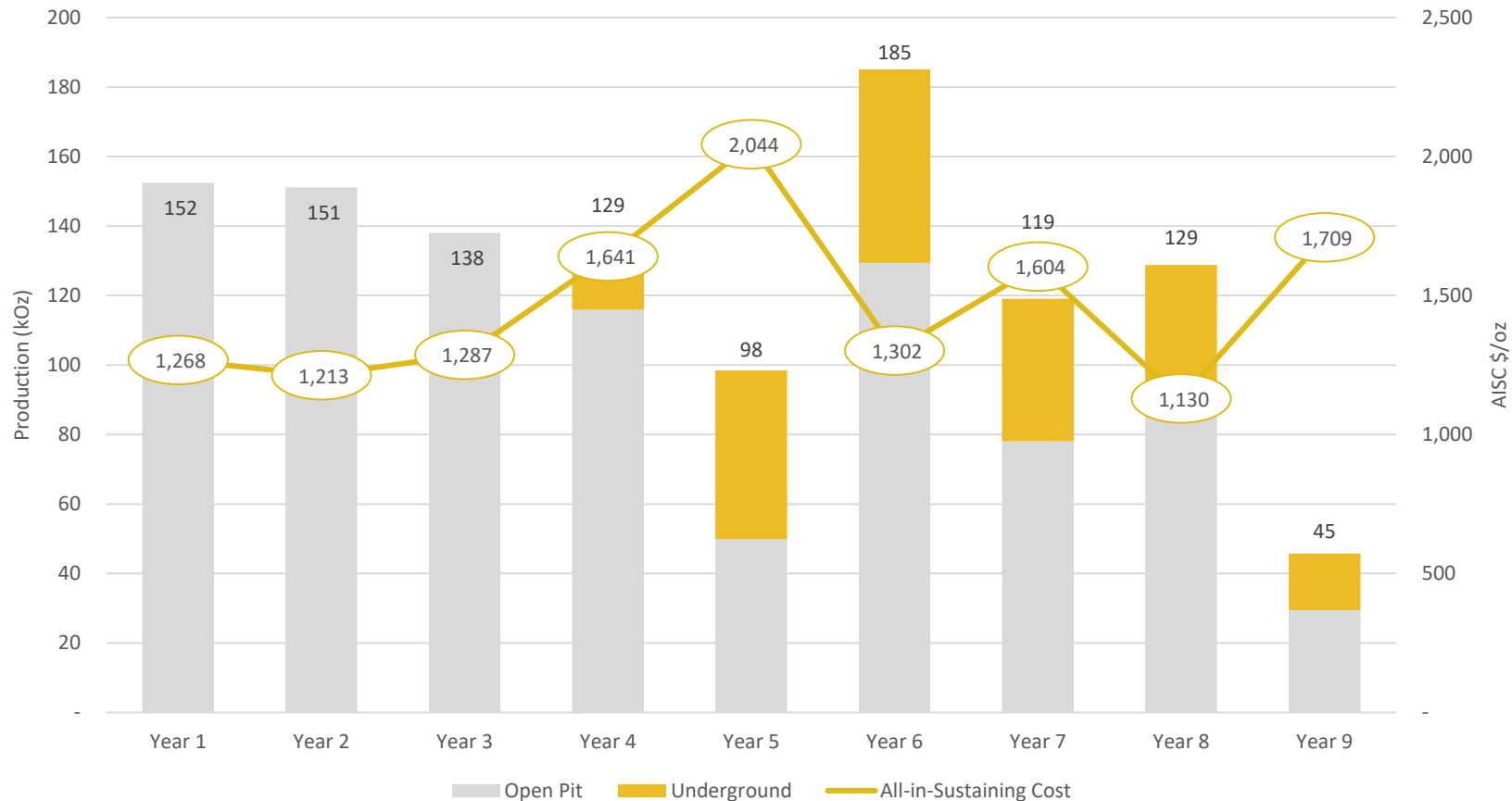
Maximum footprint shown for illustration purposes only





# Very high grades in early years enables fast payback

Gold Production OP/UG (oz per annum) w/ AISC AUD (primary production years)



**MDD054 1400 g/t – Jewellery Box**

Rich high grade core at RAS

Mining over 3.5 g/t in Yr1

Requires stockpiling and blending

Scheduling to smooth output

# Open pit mining at Rise & Shine (RAS) and Srex (SRX)

RAS/SRX gold inventory

**1Moz**

14.4Mt at 2.2g/t



## Mining method

Five stages of cutbacks  
250t class excavators  
150t class rear dump trucks

220Mt total rock  
40Mt pre-strip  
14.4Mt ore  
12.5:1 operating strip ratio



## Mining physicals

8yrs mining  
13Mt @ 2.36g/t from RAS  
1.4Mt @ 0.68g/t from SRX

94% ore feed is Probable Reserve

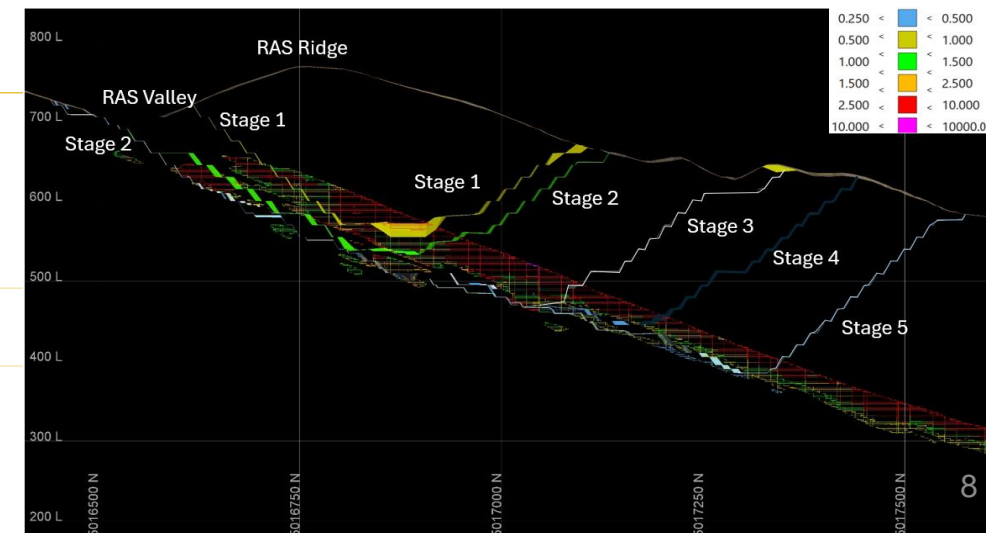
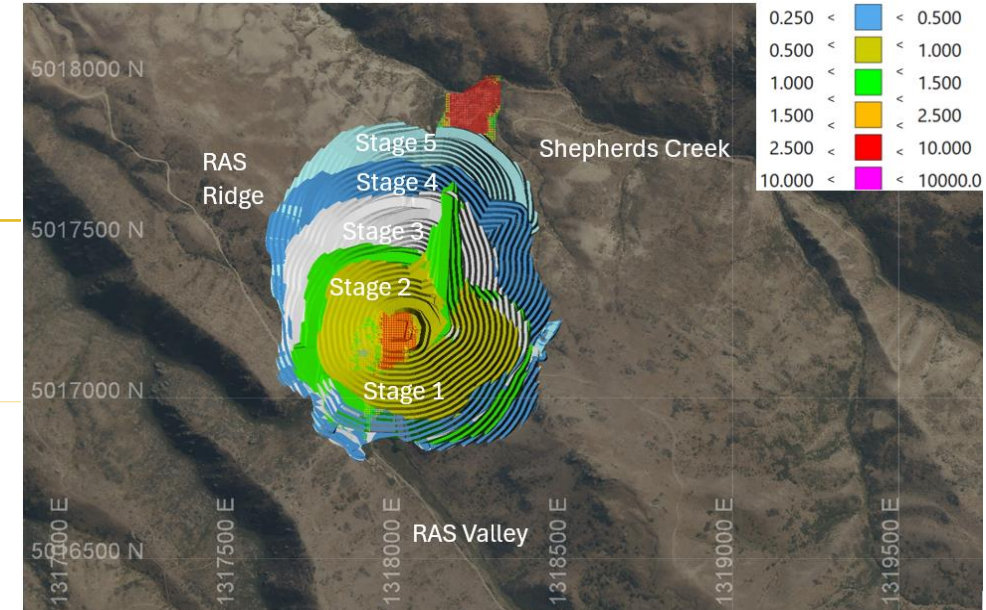


## Mined gold

982koz Au from RAS  
31koz from SRX  
>1Moz Au total

Overall grade 2.19g/t

**Come-in-Time (CIT) to  
be added as supplementary feed**



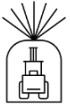


# Underground mining at RAS

RAS UG inventory

**232koz**

2.4Mt at 3.0g/t



## Mining method

Long hole stoping w/paste fill  
5.5mW x 5.5mW twin declines  
Cable bolts and shotcrete

12km development  
1.9Mt paste fill  
36km of cables  
17k m<sup>3</sup> shotcrete



## Mining physicals

6yrs mining  
2.4Mt ore  
Total development 12km

96% Indicated ore feed

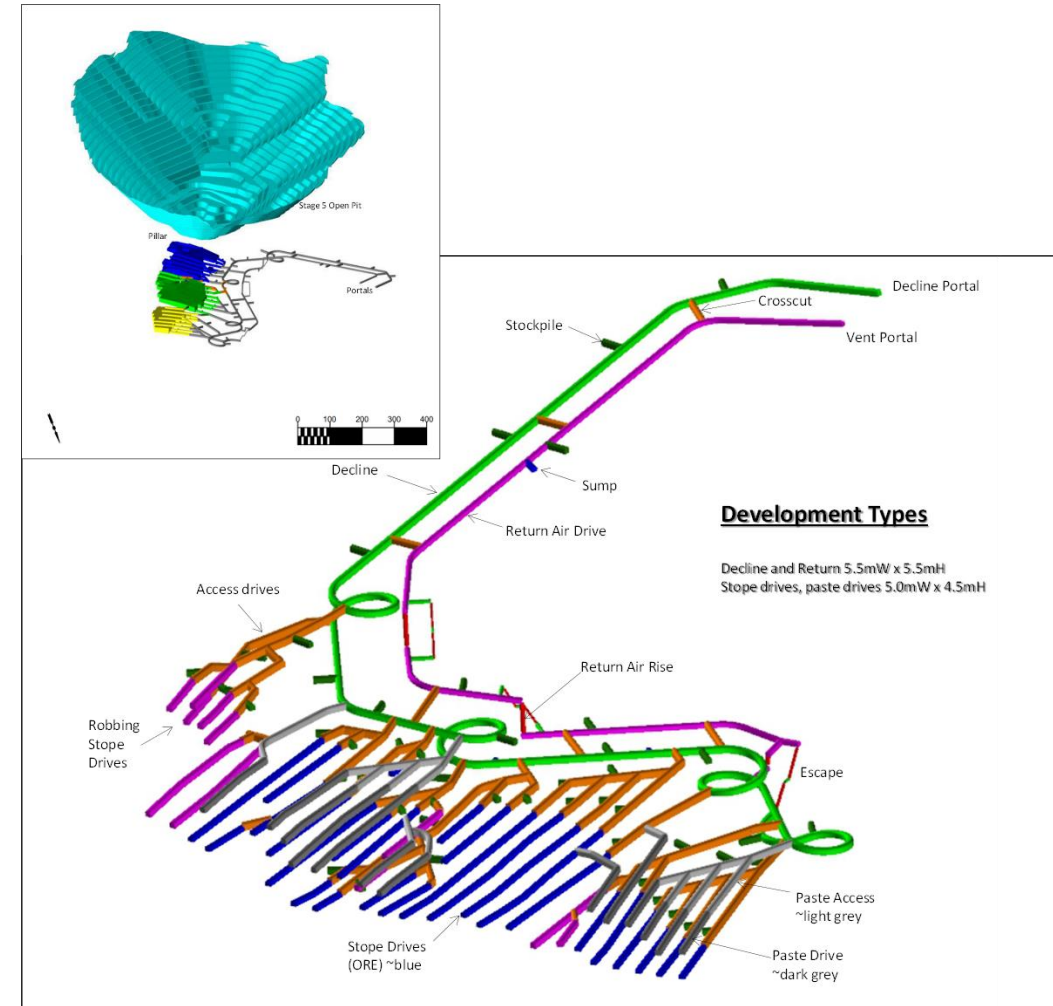


## Mined gold

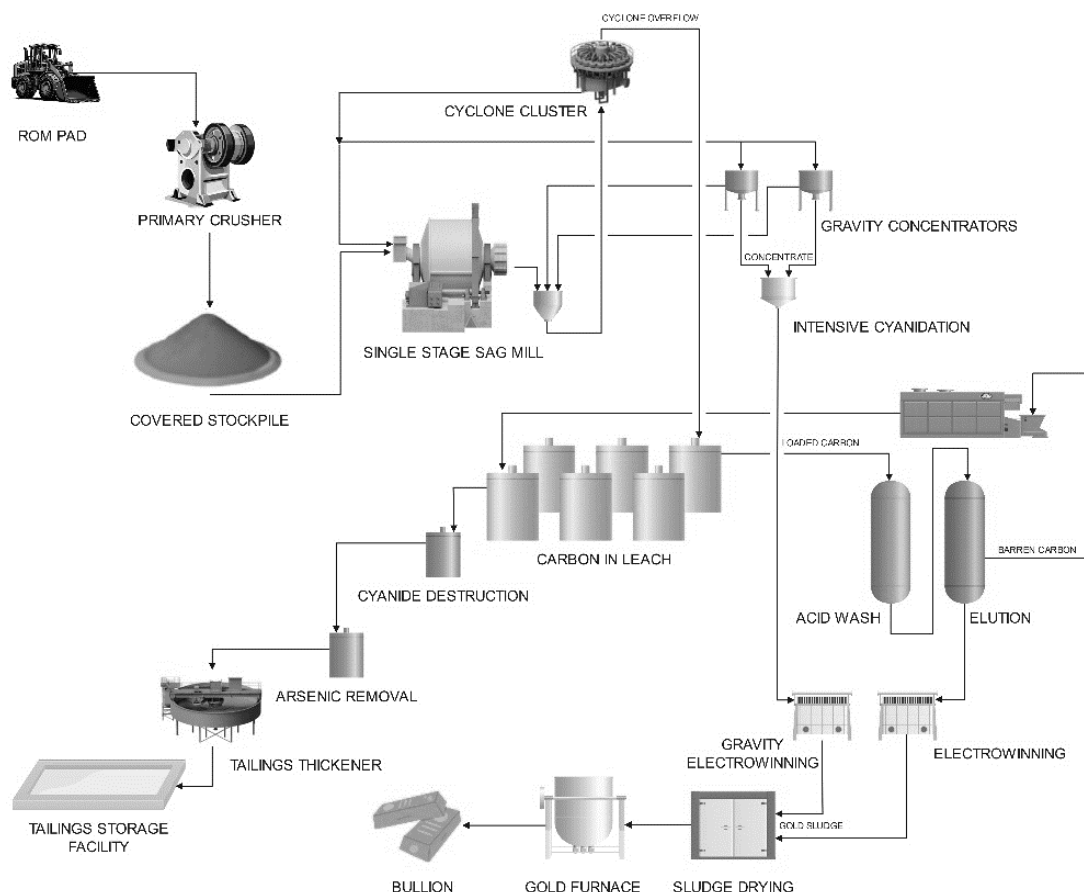
235koz Au

Grade 2.99g/t

**~770koz Inferred resources at  
RAS to be converted**



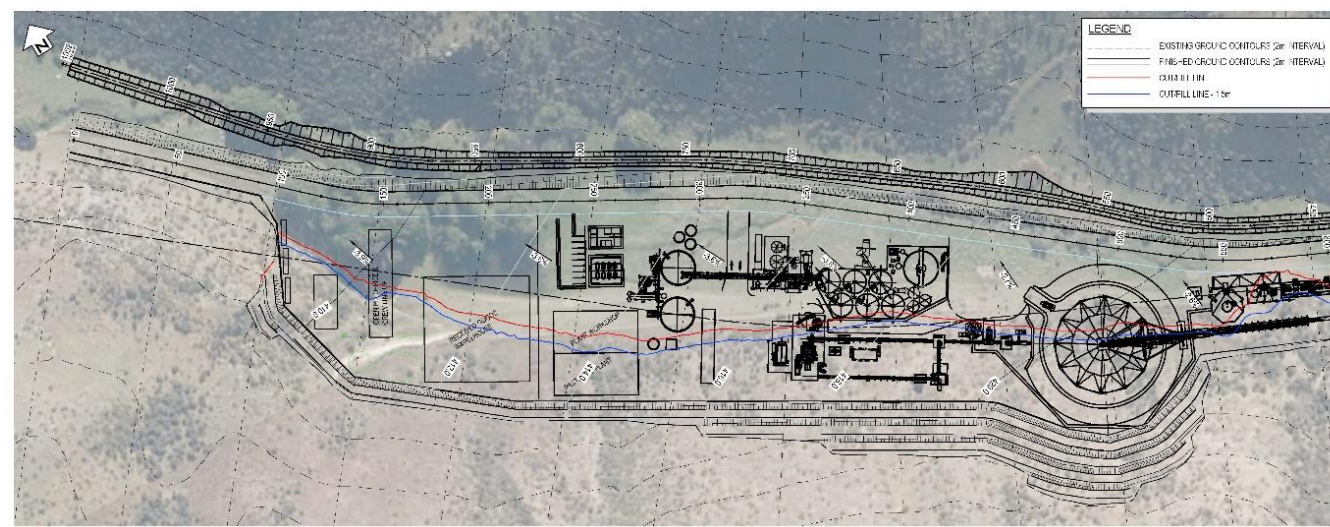
# Conventional CIL processing plant



Five phases of metallurgical testing completed

Very high recoveries at RAS of 93%

Overall PFS recovery of 92.4%



THE PFS DESIGN USES SIMPLE CIL TECHNOLOGY TO GENERATE VERY HIGH RECOVERIES





# CAPEX and OPEX breakdown

## PRE-PRODUCTION CAPITAL

**A\$340M**

Significant cost items:

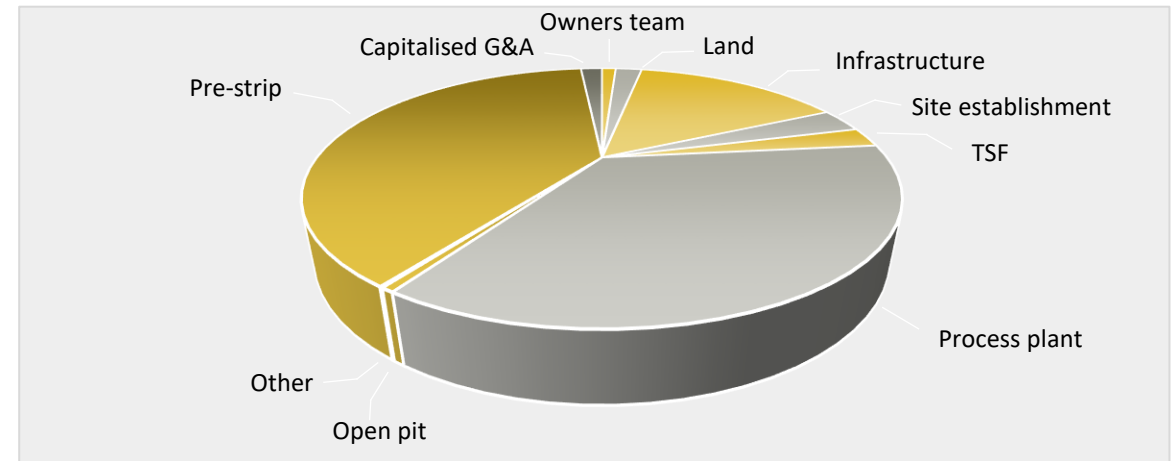
Processing plant \$123M

Pre-strip mining \$133M

Site infrastructure \$51M

Underground infrastructure \$71M (funded with cash)

Capitalised OPEX UG \$51M (funded with cash)



## OPERATING COSTS

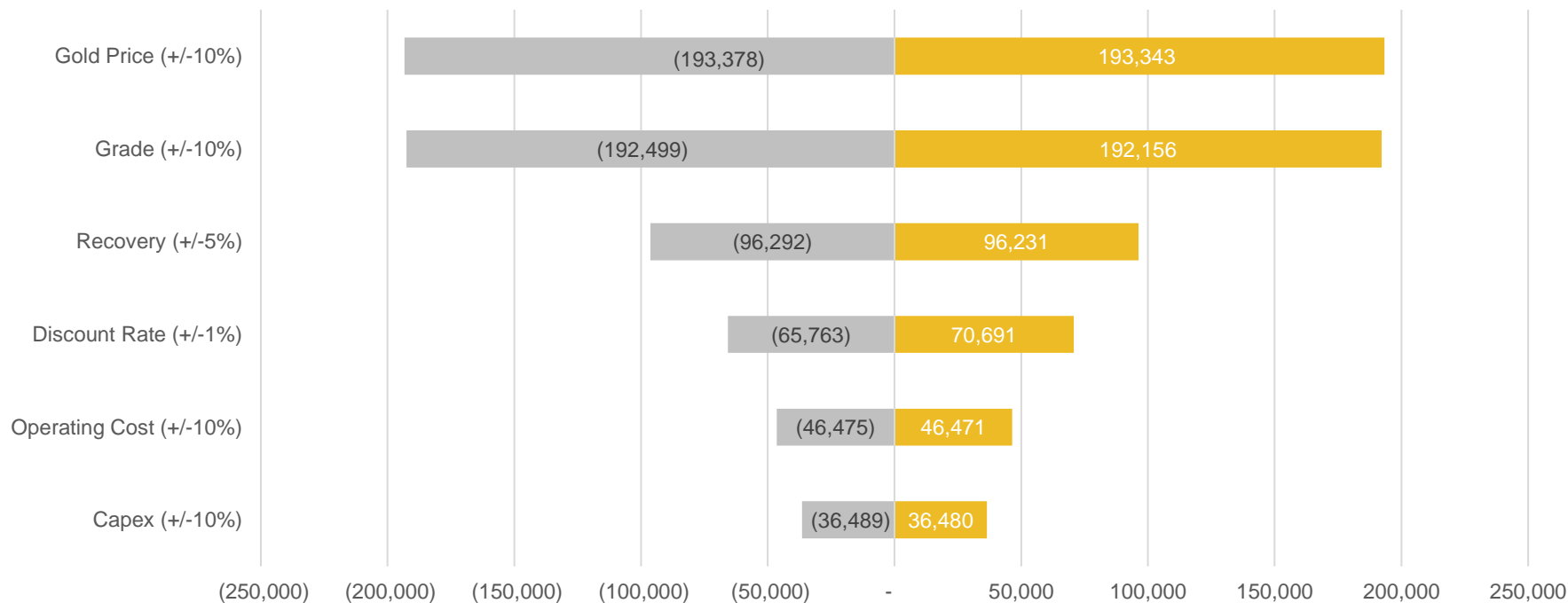
Mining cost	A\$/t milled	45.9
Milling cost	A\$/t milled	17.2
G&A	A\$/t milled	3.3
<b>C1 Cash cost</b>	<b>A\$/t milled</b>	<b>66.4</b>
Selling/royalties/sustaining CAPEX	A\$/t milled	30.5
All-in sustaining cost (AISC)	<b>A\$/t milled</b>	<b>96.9</b>

## SUSTAINING CAPITAL EXPENDITURE (funded from cash flow)

TSF	A\$30.5M
Process plant	A\$27.5M
Infrastructure	A\$8.5M
Underground infrastructure	A\$3.8M
Site establishment, owners team & other	A\$13.5M
<b>Total</b>	<b>A\$83.8M</b>

# Resistant against price fluctuations

## Project NPV<sub>8</sub> Sensitivities ('000) Post Tax – Spot Gold Case



**Strong Base-Case**

**@**

**A\$2,894/oz**

**NPV<sub>8</sub> A\$535M**

**IRR 42%**

**Payback 1.7Yrs**

**(Unleveraged, Post Tax)**

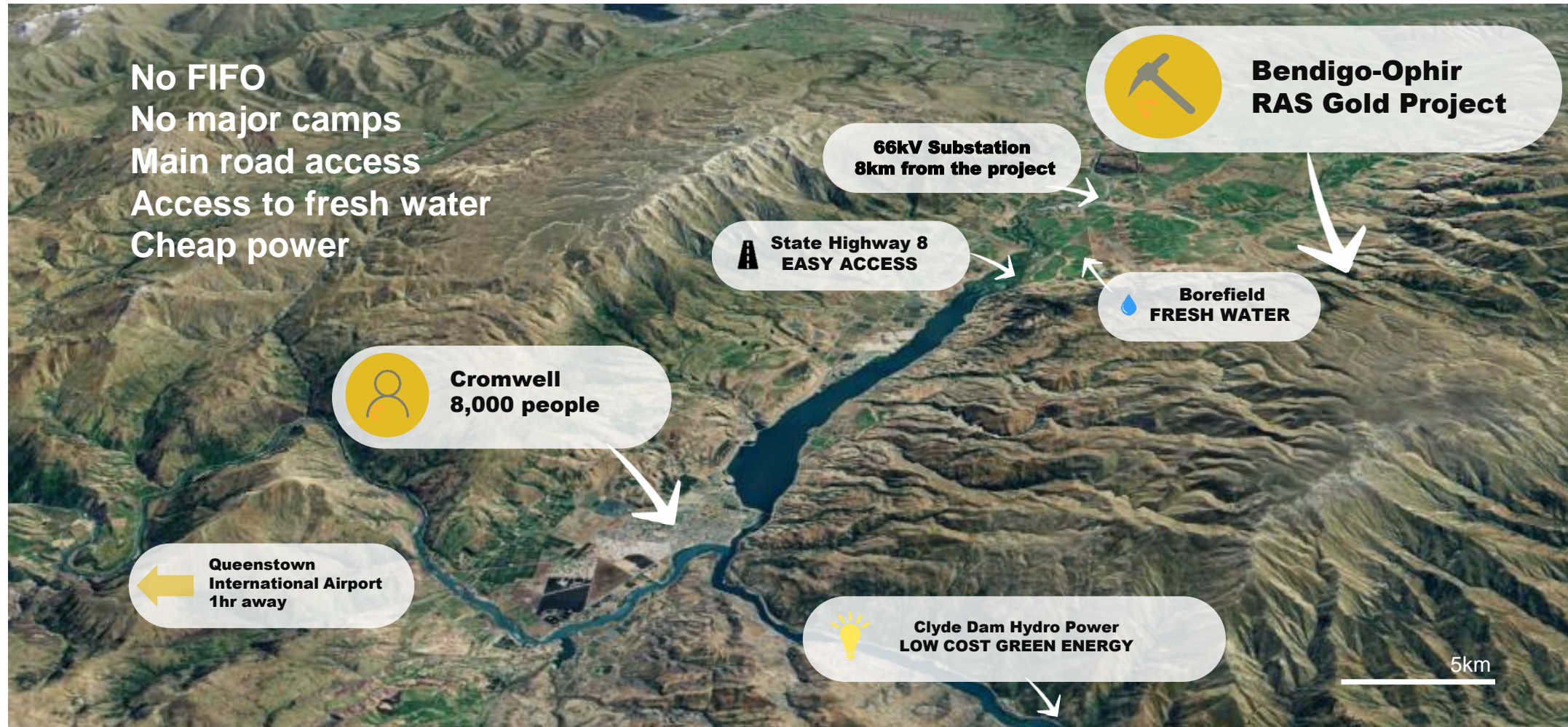


# Permitting and timeline to first gold

Timeline subject to permits		Q4/24	Q1/25	Q2/25	Q3/25	Q4/25	Q1/26	Q2/26	Q3/26	Q4/26
Approvals	Lodge Application									
	Approval									
Process Plant	Detailed engineering	Detailed engineering and contract awards period								
	Mobilisation									
	Earthworks									
	Plant Construction									
Mining	<b>Pioneering</b>	Detailed engineering and contract awards period								
	Mobilisation									
	ELF strip & haul roads									
	RAS strip & early mining									
	<b>Bulk Mining</b>									
	Mobilisation									
Support	Pre-strip	Detailed engineering and contract awards period								
	Temporary camp									
	Site access road									
	Piped water									
	Power									
TSF	Embankment prep	Detailed engineering and contract awards period								
	Buttress build									
First Gold										



# Infrastructure and workforce already in place





## MOVING IMMEDIATELY TO DETAILED CONSTRUCTION PLANNING

Based on a spot gold price of A\$4,000/oz



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# Maiden Ore Reserves – High conversions

**PFS targeted 1.45Moz of Indicated resources and converted 82% (1.18Moz) to a Probable Reserve**

Bendigo-Ophir  
Maiden Ore Reserve

**15Mt @ 2.37g/t**

Area	Proven		Probable		Total		
	Mt	Au g/t	Mt	Au g/t	Mt	Au g/t	Au koz
RAS (open pit)	-	-	11.9	2.42	11.9	2.43	928
RAS (Underground)			2.3	3.03	2.3	3.03	223
SRX (open pit)			1.3	0.70	1.3	0.70	30
<b>Total</b>	<b>-</b>	<b>-</b>	<b>15.5</b>	<b>2.37</b>	<b>15.5</b>	<b>2.37</b>	<b>1,181</b>

Note 1: RAS Open pit cut-off grade 0.3 g/t at \$US1,650/oz Au price

Note 2: RAS Underground cut-off grade 1.75 g/t at \$US1,650/oz Au price

Note 3: SRX Open pit cut-off grade 0.35 g/t at \$US2,100/oz Au price

Note 4: Underground Reserves are from the quoted Open pit Resources area

Note 5: The effective date of the Mineral Reserve is 1 November 2024, estimated by Rodney Redden (MAusIMM and CP-Mining), a contractor to Santana Minerals Ltd.

Note 6: Approved consents and required permits are yet to be granted to enable mining of the RAS and SRX deposits.



# Appendix 1: Mineral Resource Estimate

Deposit	Mining method	Category	Cutoff (Au g/t)	tonnes (Mt)	Au (g/t)	koz
RAS	open pit	Indicated	0.25	19.6	2.3	1,452
		Inferred		9.9	2.0	634
		Total		29.5	2.2	2,086
	underground	Indicated	1.5	0	1.9	0
		Inferred		2.1	2.2	145
		Total		2.1	2.2	145
	RAS Total	Indicated		19.6	2.3	1,452
		Inferred		12	2.0	779
		Total		31.6	2.2	2,231
SRX	open pit	Indicated	0.25	2.6	0.7	59
		Inferred		2.4	0.9	73
		Total		5.0	0.8	132
SRE	open pit	Indicated	0.25	0.4	0.7	10
		Inferred		0.1	0.9	3
		Total		0.5	0.8	13
CIT	open pit	Inferred	0.25	3.2	0.8	81
Total	combined	Indicated		22.6	2.1	1,521
		Inferred		17.7	1.6	936
		Total		40.3	1.9	2,457

The July 2024 RAS Mineral Resource Estimates (MRE) and the SRX and SRE November 2024 MRE is based on work completed by Mr Kerrin Allwood, a Competent Person (CP) who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Allwood is a Principal Geologist of GeoModelling Limited, Petone, New Zealand and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is 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". Refer to ASX announcement on 16 February 2024 for further detail.

The information in this report that relates to prior 2021 Mineral Resource Estimates (2021 MRE) for CIT, SHR and SRE deposits completed by Ms Michelle Wild (CP) continue to apply and have not materially changed. Refer to ASX 17 announcement on 28 September 2021 for further detail.