



NORTHERN STAR
RESOURCES LIMITED

KCGM Site Visit Presentation

August 2024

Forward Looking Statements, Reserves and Resources

Forward Looking Statements

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ASX Listing Rules Disclosures

This announcement contains current estimates of Northern Star's KCGM Operations' Ore Reserves and Mineral Resources. The information in this announcement that relates to the current Ore Reserves and Mineral Resources, and production targets of Northern Star has been extracted from the ASX release by Northern Star entitled "Resources, Reserves and Exploration Update" dated 2 May 2024 available at www.nsrld.com and www.asx.com ("Northern Star Announcement").

Northern Star confirms that it is not aware of any new information or data that materially affects the information included in the Northern Star Announcement other than changes due to normal mining depletion during the four month period to 4 August 2024, and, in relation to the estimates of Northern Star's KCGM Operations' Ore Reserves and Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the Northern Star Announcement continue to apply and have not materially changed. Northern Star confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from that announcement.

Assumptions made in relation to the Ore Reserves and Mineral Resources underpinning the production targets in that announcement are (in summary):

- Current operational capital and operating cost structures,
- Current mining and metallurgical performance,
- The gold price, exchange rate, dilution allowance and mining recovery rates are as set out in each prior public report referred to in ASX Listing Rule 5.19 disclosures, and
- 5 year gold production profiles are based on 100% current JORC compliant Ore Reserves.

Rounding is applied in this presentation for the percentage comparisons and for the 31 March 2024 Ore Reserves and Mineral Resources figures.

Authorised to release to the ASX by Stuart Tonkin, Managing Director & CEO.



NORTHERN STAR
RESOURCES LIMITED

KCGM
OPERATIONS

Our key global gold asset



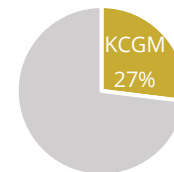
KCGM

100% ownership

% NORTHERN
STAR GROUP

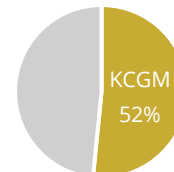
437_{koz}

FY24 Gold Sold



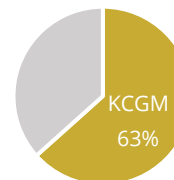
32_{Moz}

Mineral Resource



13_{Moz}

Ore Reserve



Working at KCGM



Residential workforce (~90%)



890 KCGM employees (35% Female | 65% Male)
(+380 Northern Star Mining Services employees)



Operational 24 hours per day, year round



Production shifts are 12 hours
Successful Enterprise Agreement vote July 2024



Village accommodation available for mill
construction workforce



KCGM asset overview

ORE SOURCES

OPEN PIT

Fimiston South

Oroya Brownhill

Golden Pike North

UNDERGROUND

Mt Charlotte

Fimiston UG

STOCKPILES

137Mt @ 0.7g/t

High grade

Low grade

PROCESS PLANT

Capacity

Location

EXISTING

13Mtpa

Fimiston Plant
Gidji Plant

**EXPANSION
(UNDER CONSTRUCTION)**

27Mtpa

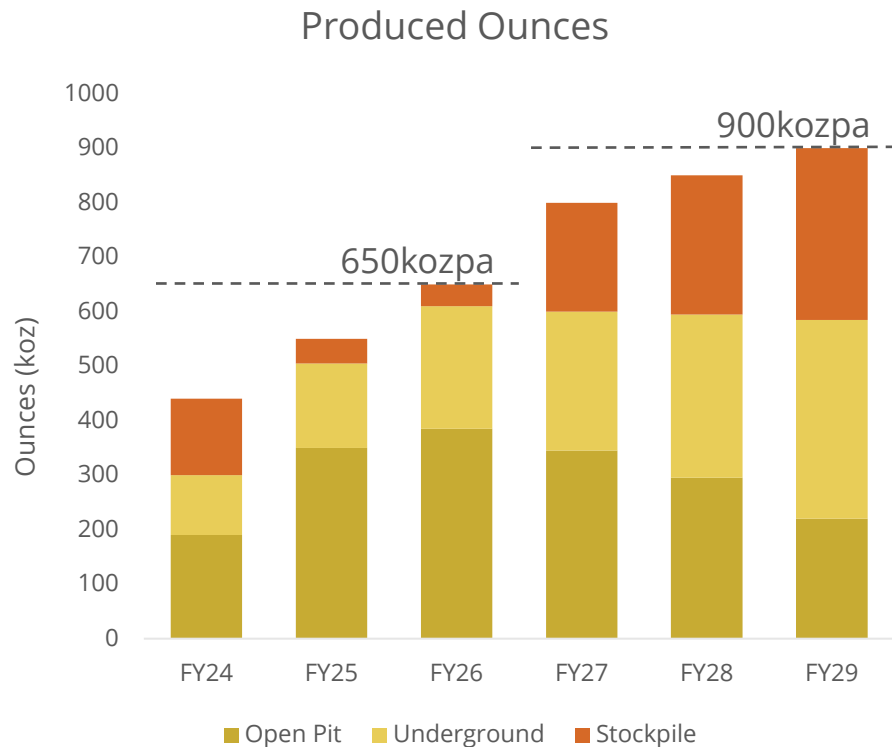
Fimiston Plant



NORTHERN STAR
RESOURCES LIMITED

PROCESSING
Positioning for tomorrow

KCGM pathway to 900kozpa, a top 5 global gold mine



Pathway to 650kozpa by FY26

- KCGM on track to deliver 650kozpa towards the Group's 2Moz profitable growth strategy

Pathway to 900kozpa by FY29

- Production from high-grade Golden Pike North (FY24-FY29)
- Preferentially treating high grade open pit mined ore
- Draw down on historic stockpiled ore, bringing forward value

KCGM Mill Expansion: Highlights

Key operational metrics

13Mtpa » **27**Mtpa
Fimiston Processing Plant

3YR
build time
FY24-FY28
PLUS **2YR**
ramp-up

FY29 steady state
900kozpa
KCGM Gold Sold
A\$1,425/oz
KCGM AISC

Post-tax IRR
A\$3,500/oz gold price

26%

Post-tax Payback
A\$3,500/oz gold price

3.3yrs

Strong Balance Sheet
Throughout build phase

**Net
Cash**

KCGM Mill Expansion: 12-month progress

July 2023



July 2024



Early works completed
Initial construction infrastructure in place

KCGM Mill Expansion: Construction progress by areas

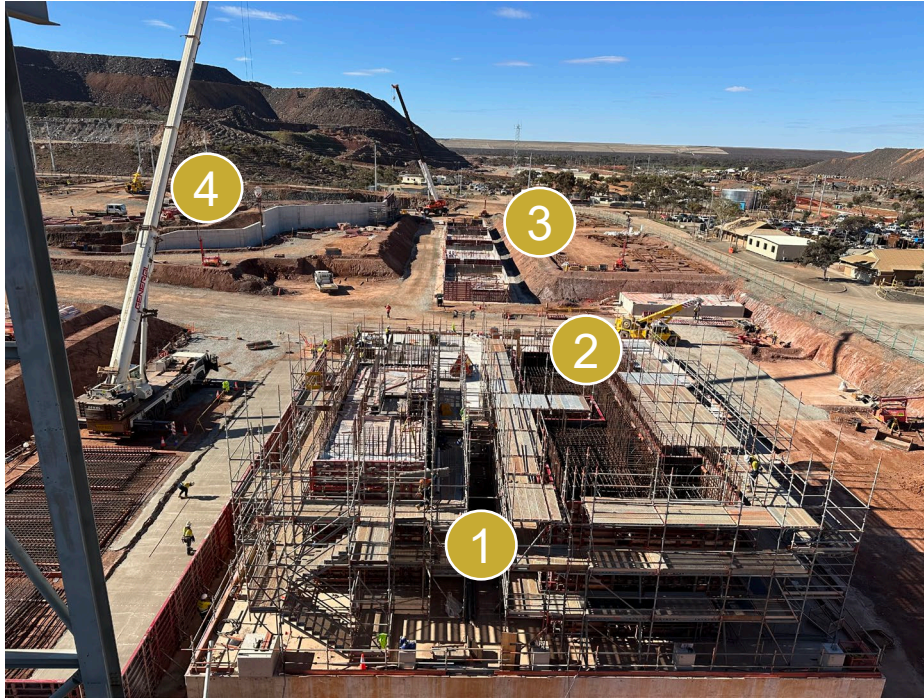
Primary Crushing Area Concrete Works



Flotation Thickener Concrete Works



KCGM Mill Expansion: Foundations set



- 1. SAG mill
- 2. Ball mill

- 3. Flotation cells
- 4. Thickener (60M dia)



- 5. Primary Crusher
- 6. Coarse Ore Stockpile

KCGM Mill Expansion: Major milestones

FY24 and to date

- All critical project milestones achieved and primary contractor established on site
- Engineering 45% complete, reviews on track
- 8,000m³ concrete poured (26% of total project)
- 1.1Mt of earthworks completed at \$2.90/t (Northern Star KCGM Open Pits)
- Operational Readiness Team established

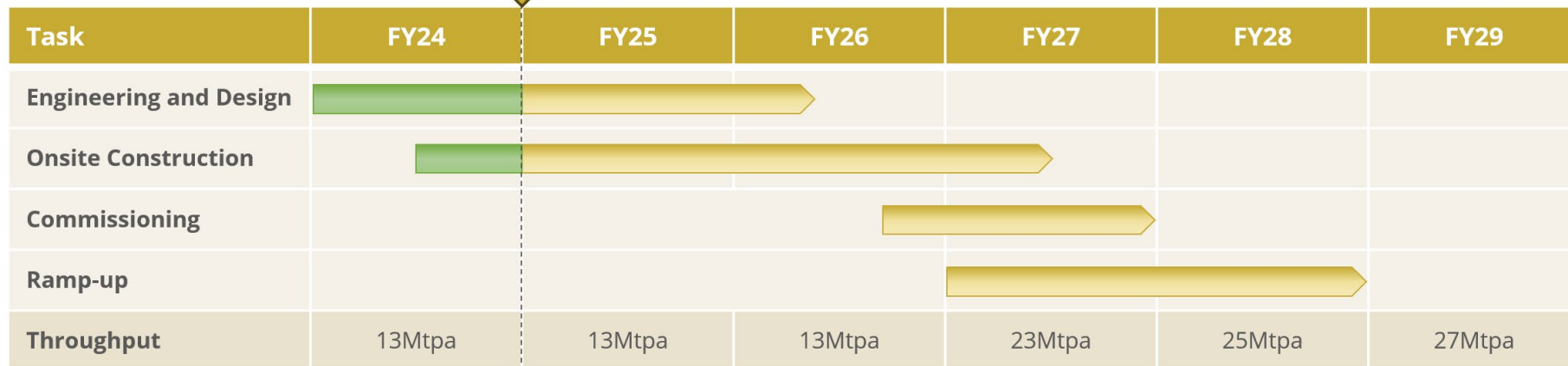
FY25 outlook

- **First Half:**
 - CIL tank installation commences
 - Major equipment shipped or onsite at KCGM
- **Second Half:**
 - Primary Crusher main shaft installation
 - SAG and Ball mill shells installation
 - TSF III & TSF G Cell construction to commence



From left to right: Primary crusher; SAG mill loading of shell; Ball mill gear undergoing mesh test

KCGM Mill Expansion: Build schedule and cost breakdown

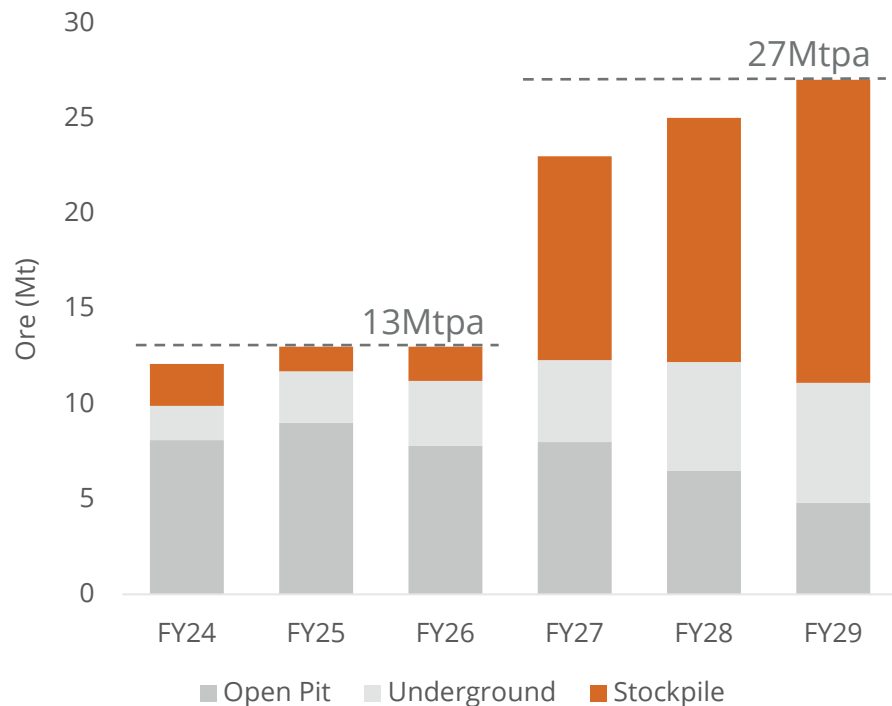


	Capital Cost Breakdown (%)			
A\$1.5B Inclusive of 10% inflation & contingency	FY24 \$348M 23%	FY25 \$500-530M 34%	FY26 ~\$530-550M ~36%	FY27 ~\$100M ~7%

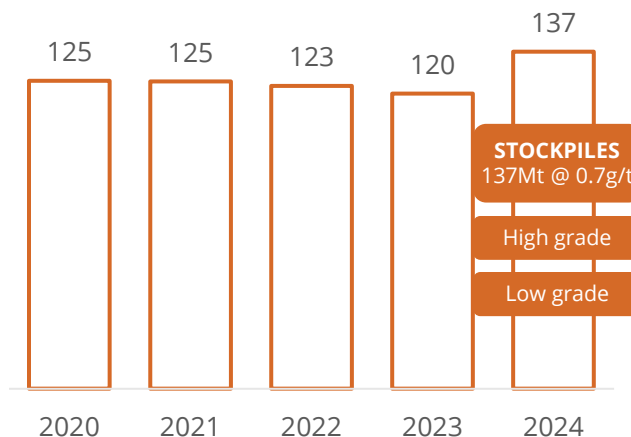
81%
of
Total Project Budget
committed

KCGM stockpiles underpin Mill Expansion

Mill Feed Sources



KCGM Stockpile Balance (Mt)



Significant value in stockpiles

Mining cost of ~A\$260/oz

Cash cost to complete* ~A\$1,600/oz

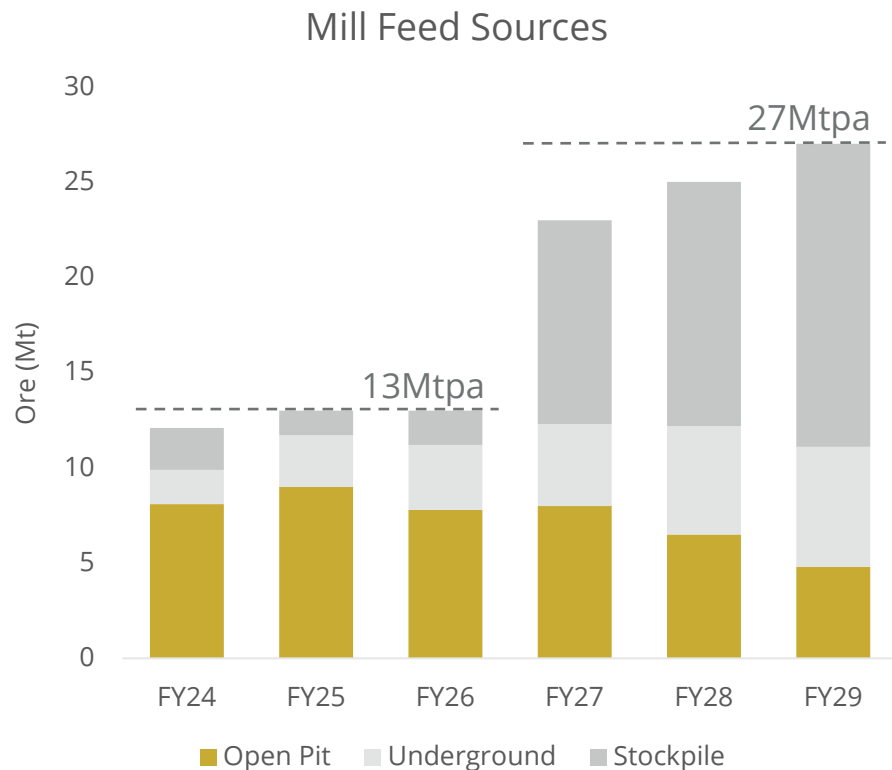
*Cash cost to complete, from stockpile to gold dore, includes current cost assumptions for rehandling, processing, admin and royalties less forecast cost savings post mill expansion.



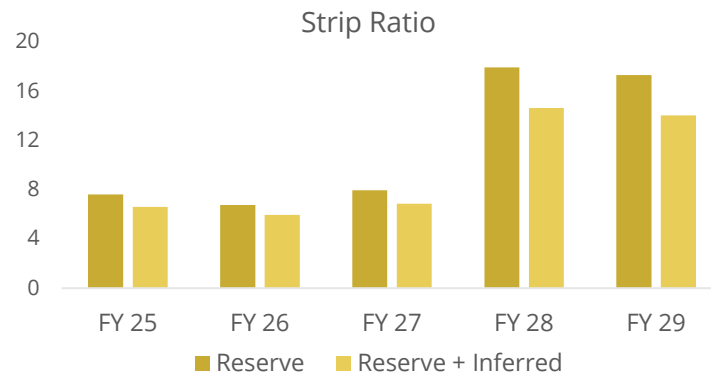
OPEN PIT
Unlocking future mining areas



Open pit contribution to mill feed



- Open Pit Reserve grade of 1.6g/t
- 13Mtpa: Open pit feed increases with Golden Pike North access
- 27Mtpa: Open pit feed lowers temporarily as trucks allocated to waste stripping
- Life of Mine strip ratio to 8:1 (Reserves only) with subgrade 6.2:1



KCGM production areas

Key mining areas:

- Oroya Brownhill (East Wall)
- Golden Pike North (full access from 2Q FY25)
- Fimiston South 6.5Moz (Reserve) long-term ore source
- Increasing profile from underground mines

KCGM Production Areas	FY25	FY26	FY27	FY28	FY29
Open Pit					
Oroya Brownhill					
Fimiston South Stage 1					
Golden Pike North					
Fimiston South Stage 2					
Underground					
Mt Charlotte					
Fimiston Underground					
Stockpiles					
Reserve Stockpiles					

Open pit fleet:

- 4x PC8000 shovels
- 2x 9400 Excavator and 2x 994K Loaders
- 45x CAT 793F trucks (+5x 793NG due 2H FY25)

CAT 793F in the Super Pit



East Wall Remediation (cutback) nearing completion

4Yrs

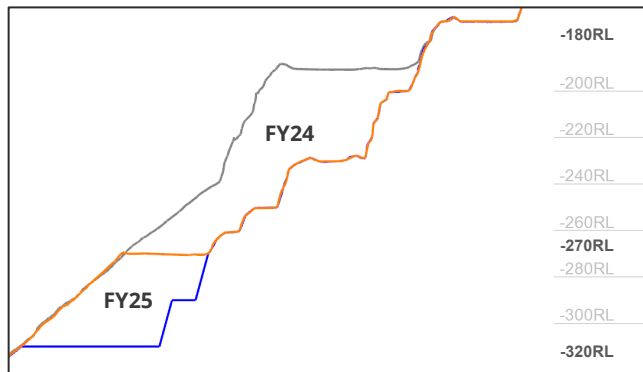
32Mt Waste
Movement



5Yrs

Enables access
to ~1.5Moz gold

- 30Mt mined to date, 2Mt remaining (94% complete)
- Current: Wall remediation complete to 270RL
- FY25: Wall remediation finishes at 320RL (expected 1Q)



May 2023



August 2024



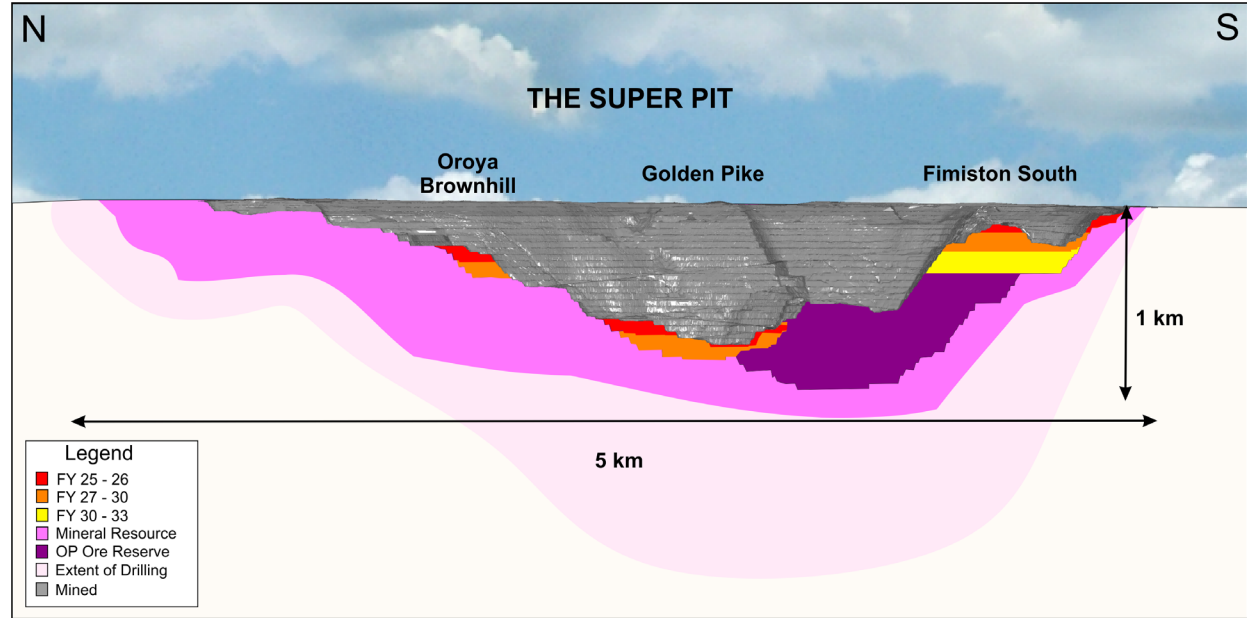
Optimisation and technology

- Caterpillar 994k remote loading unlocked early access to Golden Pike North
- Remote loader ~86 buckets per shift with 236kt mined from Golden Pike North
- Remote loader utilised to manage geotechnical areas and blasts impacted by old underground workings



Unlocking future open pit working areas

- Fimiston South cutback unlocks 129Mt of Ore Reserves @ 1.6g/t for 6.5Moz
- Increasing open pit ore volumes to feed mill expansion
 - FY23a: 5.0Mtpa
 - FY24a: 8.1Mtpa
 - FY25e: 8-9Mtpa
 - FY26e: 8-9Mtpa
- Large benches provide flexibility and higher productivities
- Total target material movement (waste + ore) of 80-90Mtpa from FY25-FY30



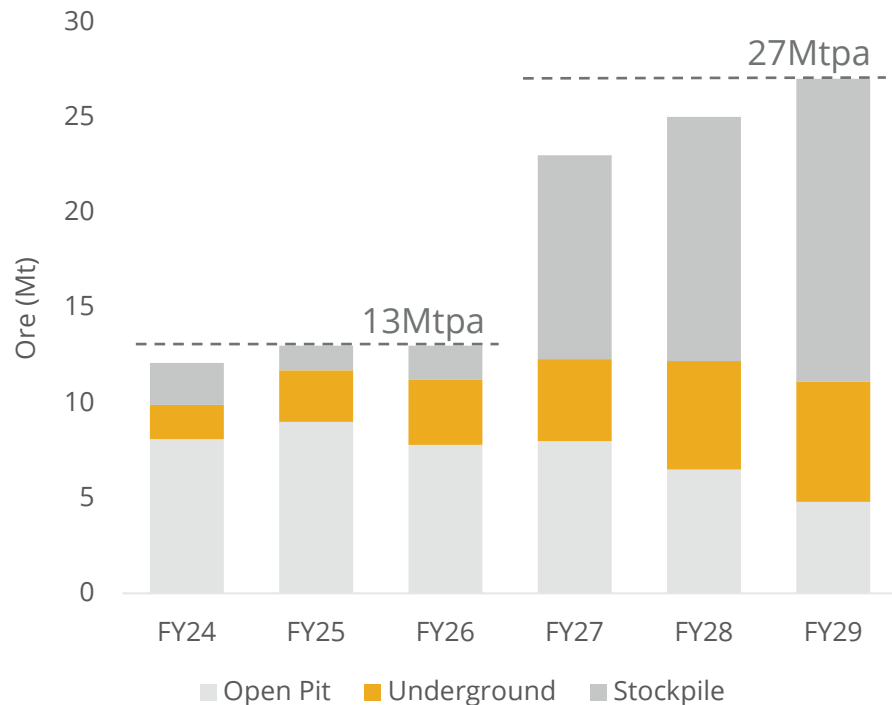


UNDERGROUND
Developing a world class underground

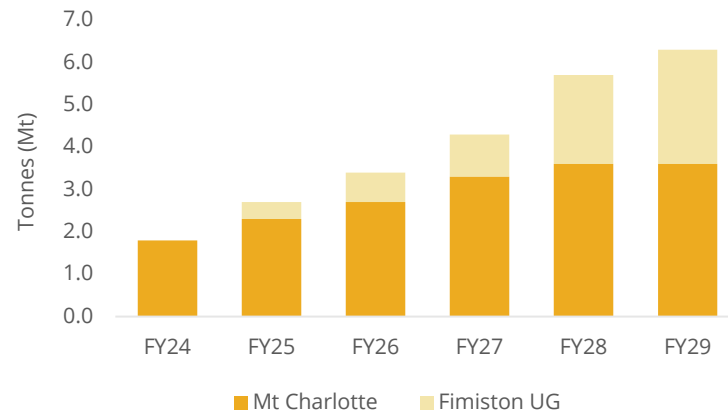


Underground high-grade ore is priority mill feed

Mill Feed Sources

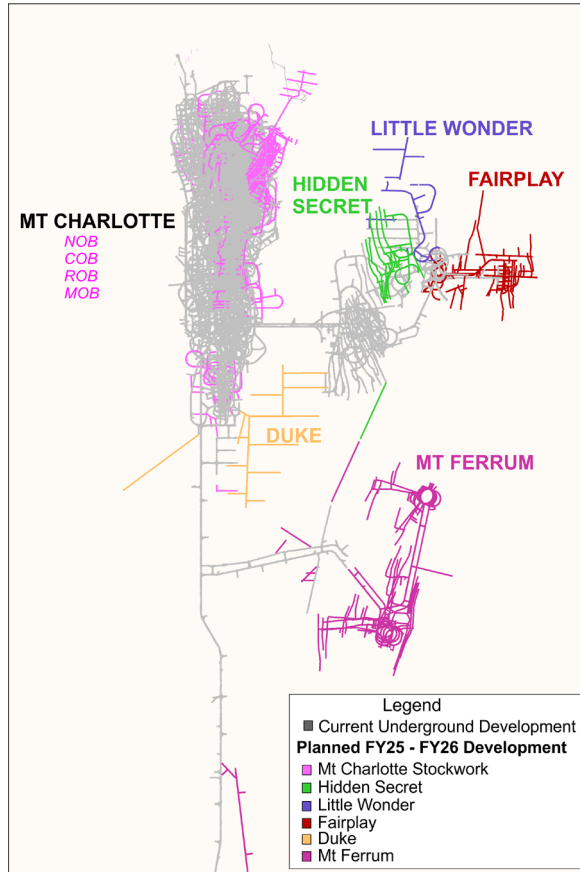


KCGM Underground Ore Tonnes



KCGM Production Areas	FY24	FY25	FY26	FY27	FY28	FY29
Underground						
Mt Charlotte - COB, ROB & MOB						
Mt Charlotte - Fairplay & Little Wonder						
Mt Charlotte - NOB						
Mt Charlotte - Mt Ferrum						
FIM - GP Stockworks						
FIM - United Col & Union Jack						
FIM - Croesus						

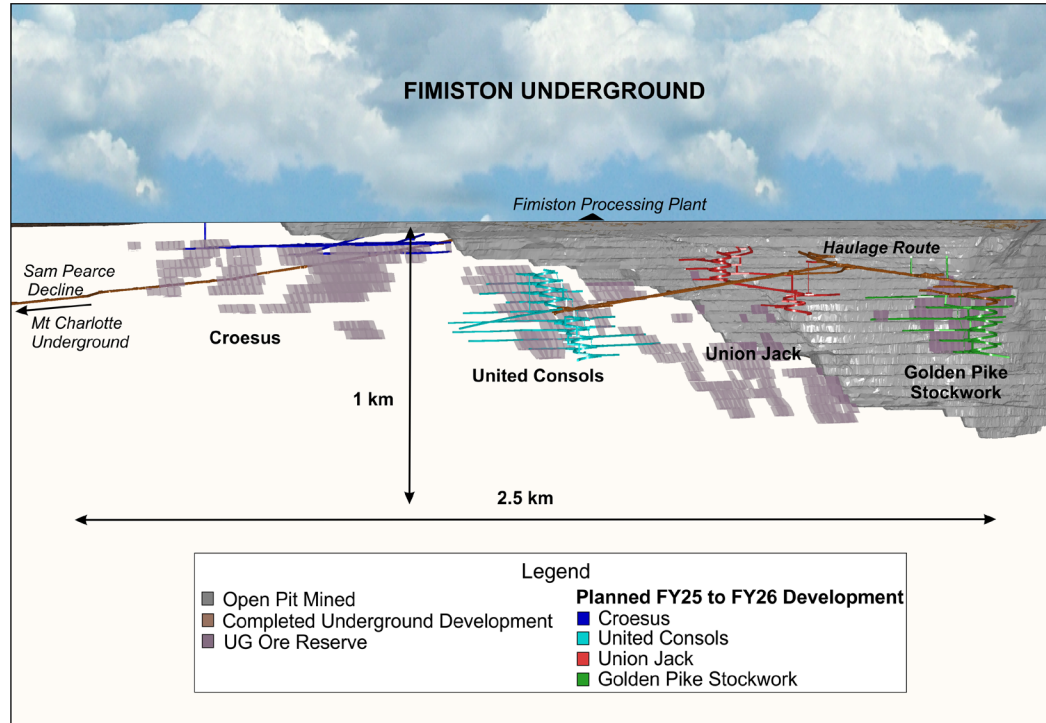
Mt Charlotte: Growing multiple underground mining fronts



Multiple independent growth areas

- Ore hauled via Sam Pearce Decline
- Mine infrastructure (ventilation, dewatering, power) with upgrades ongoing
- Mining areas: NOB, COB, ROB, MOB, Duke, Little Wonder, Fairplay, Hidden Secret
- Mt Charlotte Underground Ore Reserve of over 1.4Moz
- Mt Ferrum (new mining area):
 - Power, ventilation installed
 - Ramp-up underway

Fimiston UG: Growing multiple underground mining fronts



3 mining areas, 4 portals in FY25

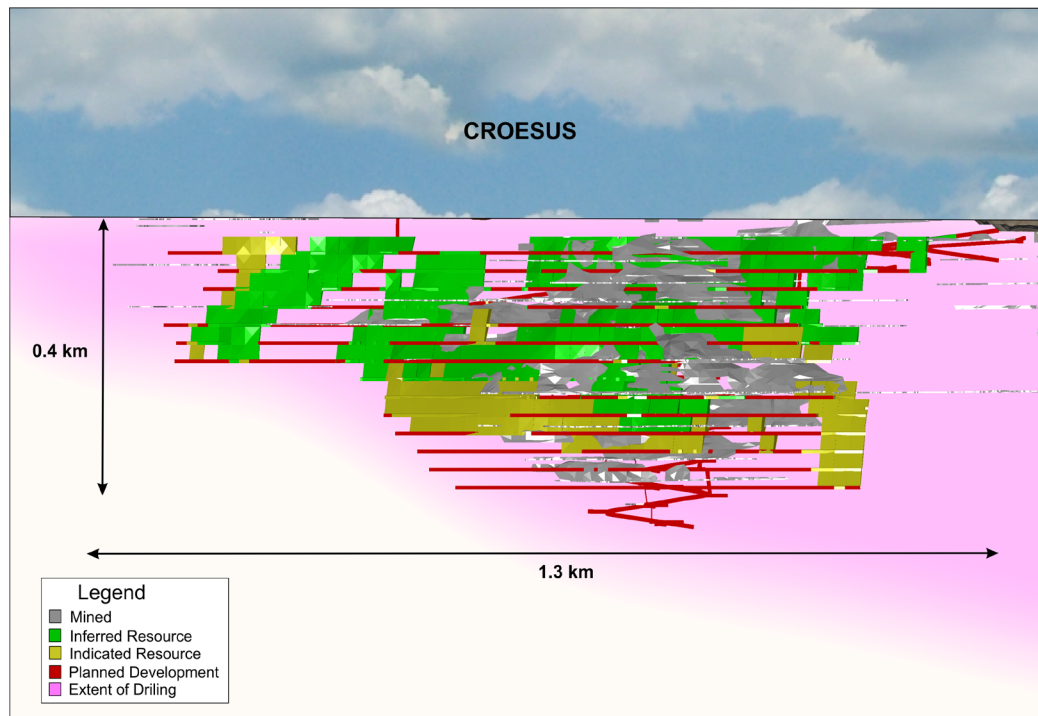
- Fimiston Underground drill platform portal commenced April 2021
 - 133,500m diamond drilling completed
 - 6,170m development metres to date
- Ore hauled via Fimiston Decline (previously underground drill platform)
- Multiple underground mines within 1 mine
 - United Consols
 - Union Jack
 - Golden Pike Stockworks
- Each mine has its own ventilation system and multiple portal accesses

Croesus underground development

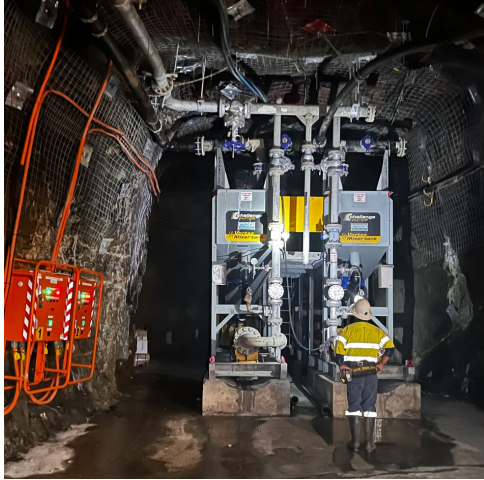
- Underground portal commences early 1H FY25
- Ore Reserves of 4.2Mt @ 2.1g/t for 290koz
- 85m from surface, 50m from existing decline
- Open at depth
- Development of Croesus has commenced from underground
- Paste mining (prior to stoping) assists with historic void management and enhances economic value

Croesus PFS

Compelling financial returns at A\$2,700/oz
+20% Post Tax IRR



Optimisation and upgrade works to position for growth



Mt Charlotte Underground Ventilation

- 2020 Inherited – 340m³/s
- 2024 Increased – 955m³/s
- 2025 Scheduled – 1,485m³/s

Fimiston Underground Ventilation

- 2023 Installed – 170m³/s
- 2025 Scheduled – 340m³/s



KCGM Underground Power

- 2020 Inherited – 5MVA
- 2024 Increased – 17MVA
- 2025 Scheduled – 23MVA

Water supply capacity into mine

- 2020 Inherited – 20L/s
- 2024 Increased – 100L/s

Dewatering

- 2020 Inherited – 10L/s
- 2024 Increased – 40L/s + 20L/s Fim



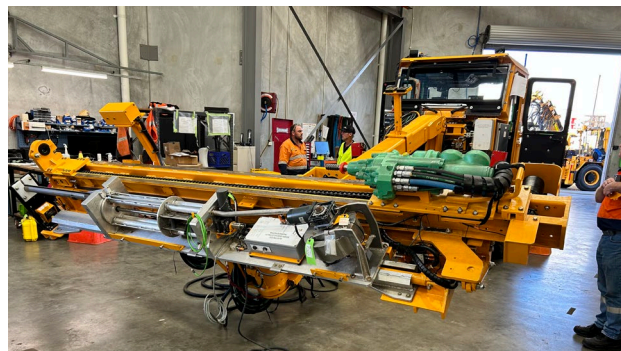
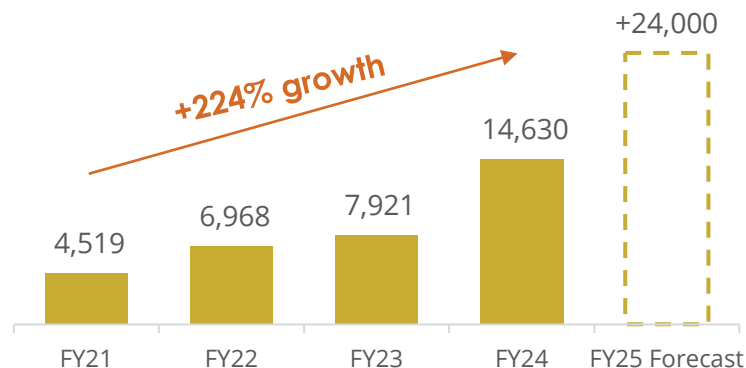
Northern Star Mining Services: A strategic advantage

- Our internal underground mining services provider focused on execution
- Commenced at KCGM in November 2020, with immediate productivity improvements
- Consistent growth in development metres unlocking this world class asset post drilling
- Highlights:
 - Longhole averaging +7,700m per month
 - Record 4Q FY24 achieving 4,240m advances

FY25 new fleet to increase development metres

- New Macleans Rock Breaker due 1Q FY25
- FY25 new fleet (+3 jumbos, +4 loaders, +6 trucks)

KCGM Development Metres

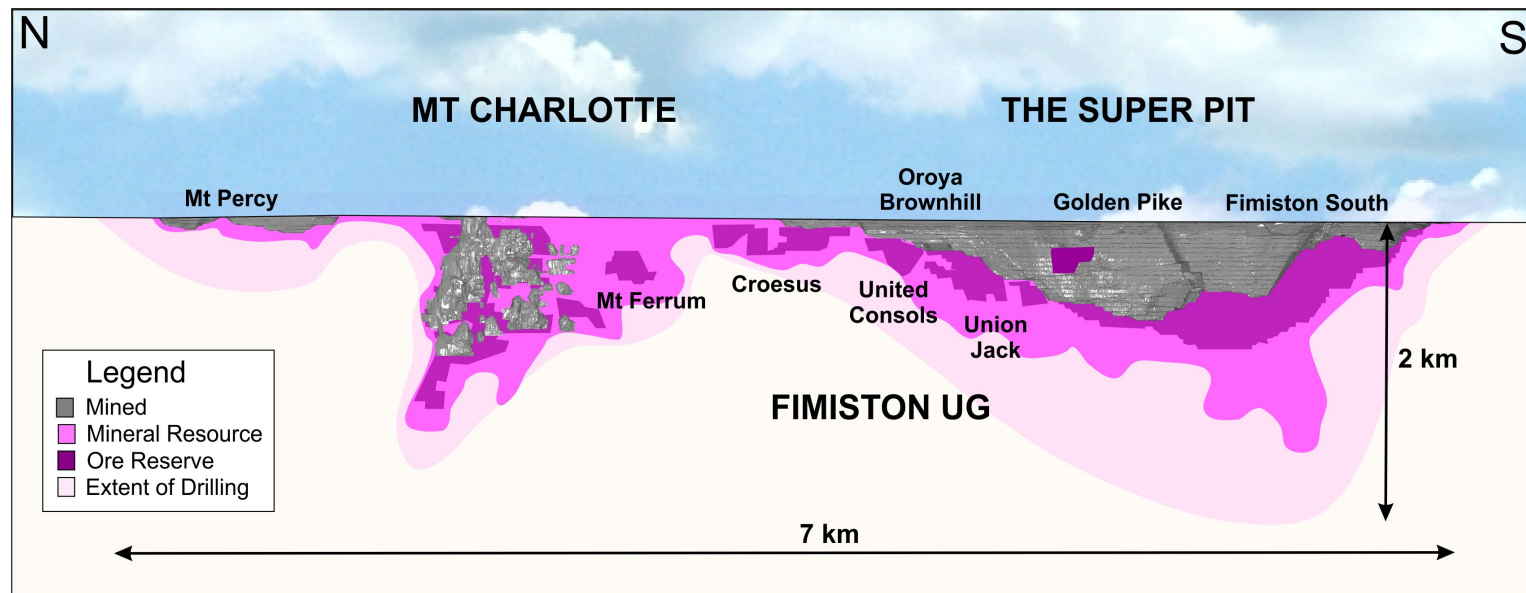


NSMS Operations & Training Centre (above) provides industry leading mining simulator and Virtual Reality training www.nsms.com



GEOLOGY
Investment drives resource growth

Continued success at the drill bit



4 years
of drilling



3,019
holes



806,077m
drilled

OPEN PIT

7.9Moz

Ore Reserve

18.8Moz

Mineral Resource

UNDERGROUND

2.1Moz

Ore Reserve

9.6Moz

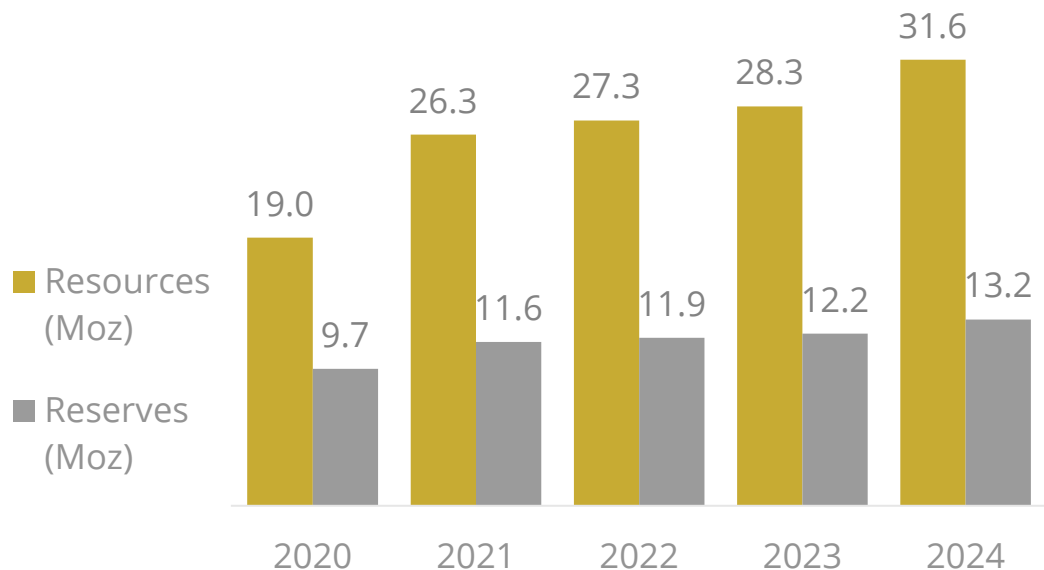
Mineral Resource

STOCKPILES

3.1Moz

Ore Reserves

A dominant and growing asset



Discovery Success	\$2/oz	\$17/oz	\$29/oz	\$8/oz
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**Mineral
Resources**

66% increase
since acquisition*

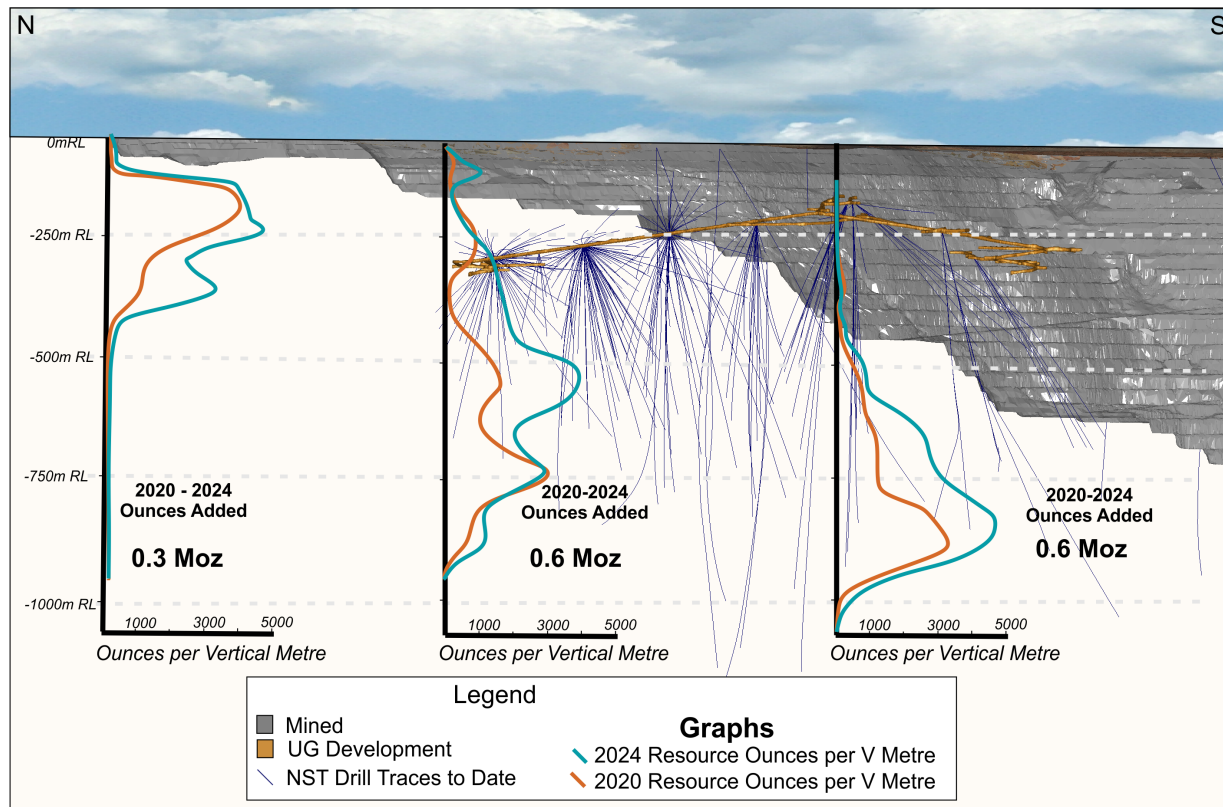
**Ore
Reserves**

36% increase
since acquisition*

**Discovery
Success**

\$14/oz
average cost since
acquisition*

Investment drives underground resource growth



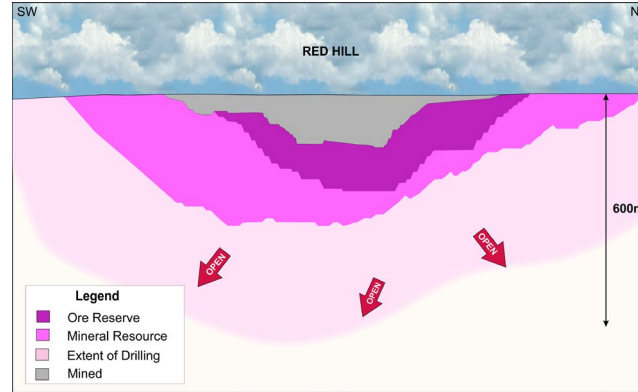
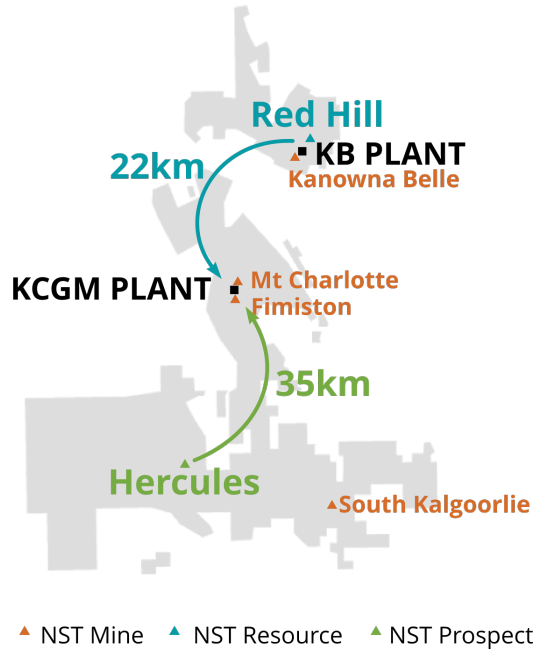
Fimiston Underground

- Three systems averaging 3,500oz per vertical metre
- Completed 133km of underground drilling
- Drilling delivered Mineral Resource addition of +1.5Moz*
- Drilling enabled Maiden Reserve at Fimiston Underground of 0.8Moz at 2.2g/t, demonstrates huge underground potential

* Added over 2020-2024: Croesus, United Consols, Union Jack and Golden Pike Stockwork Only

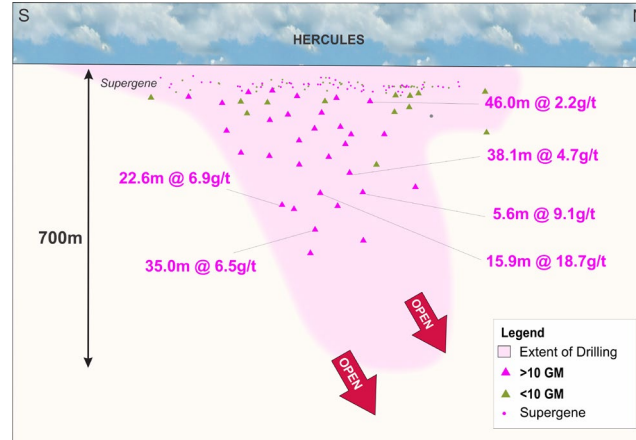
Strategic regional opportunities for KCGM

Large Regional Opportunities



Red Hill

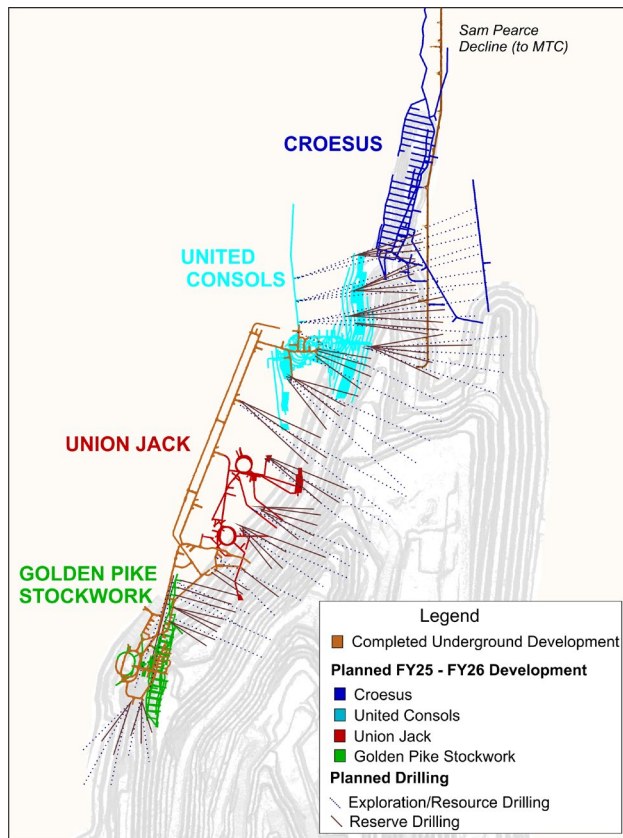
- Maiden Ore Reserve: 0.6Moz
- Mineral Resource: 1.9Moz
- Large, consistent, low risk
- Historic open pit



Hercules, discovered 2023

- Rapid acceleration of drilling activities
- Drilled to +700m, remains open
- Potential open pit and underground
- Thick, high-grade drill results

Advancing our winning strategy into the future



- Continue to establish and grow existing underground mining areas
- Underground drill platforms already established for FY25 drilling
- Required development of new drill platforms to set up FY26-FY28 drilling program
- Multiple diamond rigs to advance discovery and resource conversion
- FY25 plan (64% Discovery; 36% Resource conversion)

\$53M OF **\$180M**

EXPLORATION SPEND AT KCGM FY25 GROUP EXPLORATION GUIDANCE



NORTHERN STAR
RESOURCES LIMITED

IN CONCLUSION



KCGM: The most prominent gold address in Australia

- KCGM is a world-class asset that is significantly growing
- Open pit and underground mines with significant installed infrastructure
- Continued outstanding long-term geological potential
- Mill Expansion construction on track, no interruption to operational cash flow
- FY25 Kalgoorlie Production Centre guidance:
 - Planned major mill shut schedule in 1Q and 3Q KCGM, CDO and Kal Ops
 - 1H < 2H weighted
 - KCGM growing from increasing grades at Golden Pike North and underground ramp-up
 - CDO and Kal Ops stable production

FY25 Group guidance

FY25 GUIDANCE	UNITS	KALGOORLIE	YANDAL	POGO	TOTAL
Gold Sold	koz	890 - 980	505 - 555	255 - 265	1,650 - 1,800
AISC	A\$/oz	1,740 - 2,000	1,930 - 2,210	US\$1,395 - 1,460	1,850 - 2,100
Growth Capital Expenditure*	A\$M	555 - 595	285 - 307	US\$60 - 65	950 - 1,020
<i>plus</i> KCGM Mill Expansion Project		500 - 530	-	-	500 - 530
Exploration	A\$M	-	-	-	180

GOLD SOLD OUTLOOK	KALGOORLIE	YANDAL	POGO	GROUP
	KCGM grade increase CDO & Kal Ops stable	Jundee to normalise TBO 6Mtpa from 2H	1Q25: ~50koz, due to major works	1H < 2H 1Q25: Planned major shuts across all three production centres
GROWTH CAPITAL EXPENDITURE	KALGOORLIE			
	KCGM: \$460-485M of \$555-595M			

*Total includes A\$20M of corporate growth capital expenditure.
Pogo AISC and Capital Expenditure converted at a currency using AUD:USD = 0.66.

Northern Star: A global gold leader

Our Purpose

To **generate superior returns for our shareholders** while providing positive benefits for our stakeholders through operational effectiveness, exploration and active portfolio management

www.nsrltd.com