ASX Announcement

Jervois Feasibility Study

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15 November 2022

Feasibility Study - Update

KGL Resources Limited (ASX:KGL) refers to the announcement of the Jervois Feasibility Study released on 11 November 2022.

The attached announcement is a re-release of the Jervois Feasibility Study to include Sections 1,2 and 3 of JORC Table1. These Sections were originally released to the ASX on 14 September 2022 and contain no new information. No other information relating to the Jervois Feasibility Study has changed.

This announcement has been approved by the directors of KGL Resources Limited.

Jervois Copper Project

Feasibility Study

Executive Summary

Date: 8 November 2022

1 EXECUTIVE SUMMARY

The Project is located in the Northern Territory (**NT**) of Australia approximately 380km by road north-east of Alice Springs, within existing Mineral Leases, on the Jervois Pastoral Lease owned by Jervois Pastoral Company Pty Ltd (a non-KGL Resources Limited (**KGL**) related entity).

The Jervois Copper Project (the **Project**) Feasibility Study (**FS**) has been prepared by KGL with inputs and support of a number of consultants and contracting companies.

The Project is polymetallic (copper, silver, gold) that is primarily leveraged to the US$ price of copper and A$:US$ exchange rate.

On a gross revenue basis, copper payables contribute approximately 89%, whilst silver and gold by-products contribute about 7% and ~4%, respectively. Additional potential by-products including lead, zinc and other payable metals have not been included in the FS.

The key financial metrics for the November 2022 Feasibility Study are as follows;

Metric	Unit	Value
Copper Price*	US$/lb	4.23
Gold Price*	US$/oz	1,735
Silver Price*	US$/oz	22.70
Exchange Rate	A$:US$	0.70
Discount Rate	%	8.0
Net Present Value (post-tax)	A$ million	241
Internal Rate of Return (post-tax)	%	20.7
Project Capital Payback	Years	4.2

*Source: * Bloomberg Consensus – 2025 (30 September 2022)*

Project construction capital is (A$298 million) and pre-production mining capex, rehabilitation bond, compensation and working capital (A$90 million) together require peak funding of A$387 million during Q1 2025.

The site will be self-contained for water and power generation. Consumables will be delivered to site via road and concentrate product will be despatched by road to Mt Isa.

The number of personnel on site peaks during construction at approximately 200 people and during operations it ranges between 150 to 200 people. Construction and operational personnel will fly-in fly-out between the Project and Alice Springs commercial airport that is serviced by several commercial airlines from all major Australian capital cities.

1.1 PROJECT OVERVIEW

Exploration in the Jervois Range first commenced in 1929 following discovery of base metals in the area. Since that time systematic exploration and small-scale mining has occurred; this included the construction of a concentrator treatment plant, mining facilities, substantial mining camp/township and associated services in the 1980s.

KGL acquired the Project in 2011. The Project leases are owned by Jinka Minerals Limited, a 100% owned subsidiary of KGL and the Project will be operated by Jervois Operations Pty Ltd, also a

100% owned subsidiary of KGL. KGL completed a prefeasibility study (PFS) for the Project in December 2020, with exploration continuing throughout the subsequent development of the feasibility study (**FS**).

The FS for the Project has been prepared by KGL during the post-COVID period which remains volatile in terms of global uncertainty. In the short term, global economic growth headwinds are characterised by higher inflation, rising interest rates, supply chain constraints and, in Australia, limited skilled labour availability. In parallel, global decarbonisation objectives are driving electrification and renewable energy commitments that endorse a significant supply response of green metals (copper, cobalt, nickel and zinc).

The objective of the FS is to bring the Project into operations during the second half of this decade to coincide with the forecast critical copper undersupply situation being forecast by independent market analysts.

KGL has prepared this FS recognising and, where possible, mitigating the negative effects of these external factors via a lower risk mine development sequence that reduces project delivery complexity, project capital and initial operating expenditure.

The overall project is to be developed over a 2-year timeframe that covers infrastructure development (18 months) followed by plant commissioning and production ramp-up during the final 6 months of the development schedule.

Open-cut operations are the primary ore source for the first three years of the Project life. This reduces up front mining costs, simplifies operations during plant commissioning and reduces pre-production capital expenditure. Underground operations are progressively scheduled to deliver ore production to sustain a 1.6Mtpa process plant feed as open-cut operations cease. This mine development sequence delays higher copper grade underground reserves until later in the mine life but, more importantly, results in lower Project execution complexity.

The KGL business model is based on a fully contracted operational model for both Project development and ongoing operations. KGL will maintain a lean site based organisational structure with a contract management focus. KGL as the contract owner will maintain overall responsibility for safety and environmental compliance and will maintain control over budget planning and quality assurance of the copper concentrate.

KGL expects to produce the best Project outcomes by engaging contractors with existing capability and capacity to deliver in a resource constrained and low unemployment market to reduce Project execution risk.

All major operational components such as mining, processing and concentrate haulage will be contracted to proven service providers with demonstrated capability and capacity for safety and environmental management, operations and maintenance. These contracts will also include responsibility for maintenance related activities. The intent is to engage contractors and leverage their existing supplier relationships and draw on their internal skills capability. KGL will take an auditing and oversight role of the selected contractors.

1.2 KEY PROJECT FEATURES

The Project's key features are as follows in Table 1-1.

Table 1-1: Jervois Copper Project Key Technical Features

Project Area	Project Element	Detail
Mining	Resource	1.23 Mt Measured @ 2.53% Cu, 15.1 g/t Ag & 0.14 g/t Au 13.01 Mt Indicated @ 2.24% Cu, 33.3 g/t Ag & 0.33 g/t Au 9.55 Mt Inferred @ 1.67% Cu, 15.7 g/t Ag & 0.15 g/t Au
	Mining Areas	Open-cuts – Reward & Bellbird Undergrounds – Marshall, Reward, Rockface & Bellbird
	Reserve	1.40 Mt Proven @ 2.07% Cu, 0.12 g/t Au & 12.3 g/t Ag 10.33 Mt Probable @ 2.10% Cu, 0.31 g/t Au & 32.1 g/t Ag
	Open-Cut Mining	Conventional open-cut drill and blast, load and haul Stripping Ratio of 3.3 waste bcm / tonne of ore mined Oxide ore at surface, fresh ore mined after 1 month. Open-cut operations from Years 1 – 3.
	Underground Mining	Underground decline access, longhole stope mining with cement rockfill, secondary access via ventilation rises for each underground mine 20 months of development prior to ore stope production
	Life of Mine	11.75 years (Mining)
Processing	Flowsheet	Process plant capacity 1.6Mtpa ore Process elements include; ore crushing, grinding to 120um, two stage froth flotation with secondary regrind to 38um Concentrate and tailing dewatering and storage
	Recoveries (LOM)	92.2% Cu, 51.2% Au, 71.3% Ag
	Plant Operations	11.25 years from first concentrate production Q4 2024 to Q2 2025: Plant commissioning / ramp up Q3 2025 to Q2 2034: Steady state mill feed @ 1.6Mtpa Q3 2034 to Q1 2036: Ramp down
	Base Metal Production per annum (pa)	Total production: 278 kt Cu, 9.394 Moz Ag, 67.6 koz Au Steady State Q3 2025-Q2 2034: Cu ~26.7 kt pa, Ag ~945 koz pa and Au ~6.5 koz pa
	Average Concentrate Grade (dry concentrate basis)	~27% copper in concentrate By-products: 284g/t silver and 2.05g/t gold
	Concentrate Production (wet concentrate basis)	Steady state Q3 2025—Q2 2034: ~113,000 average wet metric tonnes per annum
Operations & Maintenance	Mining & Processing	Contractors used for open-cut mining, underground mining and process plant operations.
Tailings	Tailings Disposal	Conventional thickened tailings
	Tailings Storage Facility	Single cell facility with water recycling back to process Staged design (wall raises) using mine waste rock
Infrastructure	Site Access	Plenty Highway, Lucy Creek Station Road and then Site Access Road
	Power	13MW Power Purchase Agreement is planned. Based on a hybrid power generation facility (solar PV, wind, battery and diesel generation).

Project Area	Project Element	Detail
	Water	1,594MLpa of groundwater supply available from ML32277, ~20km north of the mine, and 87MLpa from the Jervois Dam. Supply exceeds requirements by ~25%.
	Camp	260 room camp built & operated by contractor
	Airstrip	Bonya Community Airstrip 17km from mine with minor upgrades to turning bay & apron
Product	Concentrate Transport & Refining	Concentrate to be transported via the Plenty Highway to the Glencore International AG Mt Isa Smelter

1.3 COPPER MARKET FORECASTS

Whilst in the first half of 2022 copper and other base metal commodities prices have dropped back off recent all-time highs, a long-term structural deficit in the copper market is forecast from 2025 driven by global decarbonisation targets for achieving net-zero emissions by 2050. Meeting these targets requires significant growth in electric vehicles, electrification, and renewable energy projects. These changes require more copper than conventional fossil fuel technologies, with market forecasters predicting copper demand to double by 2035.

Wood Mackenzie recently published an article on 28 September 2022 titled 'The drive for decarbonization', forecasting demand for copper to more than double by 2050 under their accelerated energy transition 1.5-degree scenario (AET-1.5). Copper consumption (including direct scrap use) grows from 28.8 Mt in 2020 to 68.5 Mt by 2050, representing a growth rate of 2.9% per annum, with electric vehicles and the grid key demand drivers in addition to traditional demand growth. See Figure 1-1 and Figure 1-2.

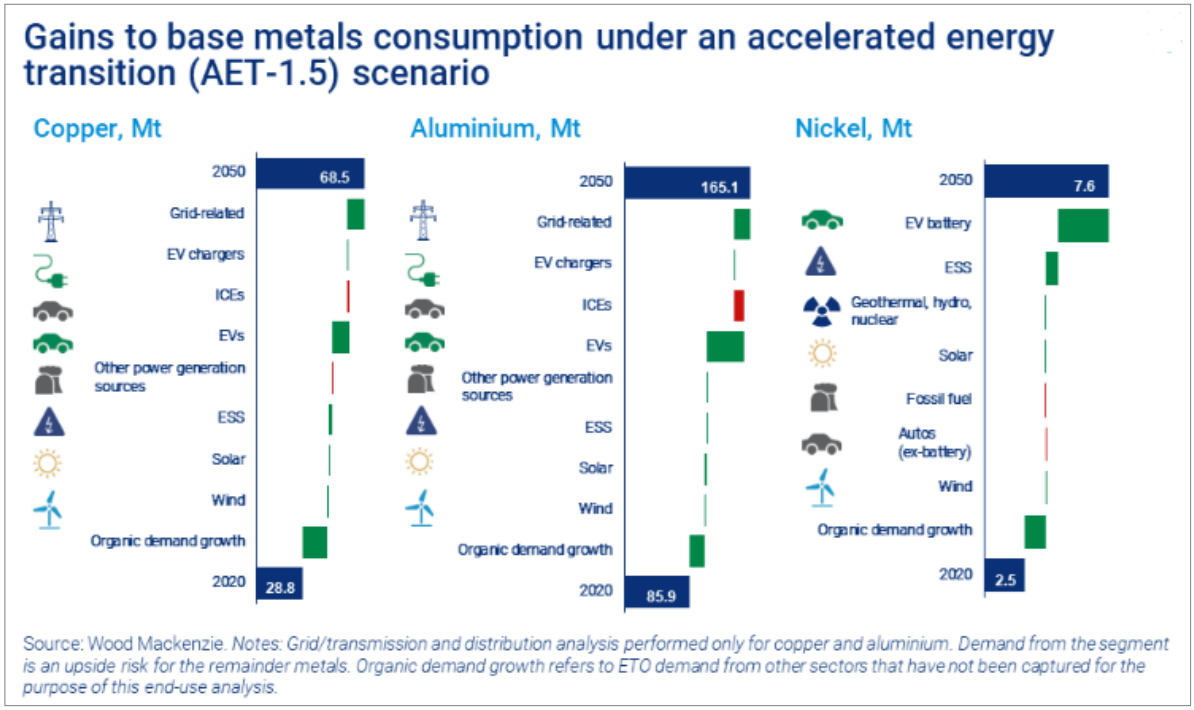


Figure 1-1 – Forecast Gains in Base Metals Consumption (Source: Wood Mackenzie 2022)

Likewise, a recent study by S&P Global[1] seeking to quantify the copper requirements of Net-Zero emissions by 2050 on the basis that power and automotive applications will have to be deployed at scale by 2035 forecasts an acceleration of refined copper demand (excluding direct scrap use by semi-fabricators) doubling from 25Mt in 2020 to about 50Mt by 2035 representing an annual growth rate of 4.6% as growing demand for renewable energy, electricity infrastructure and electric vehicles increases alongside global carbon reduction targets, "an expansion that current trends or projects in the feasibility stage of development are incapable of meeting".

The world is therefore expected to face a massive copper supply deficit from 2025 for at least the second half of the decade due to rapidly growing demand and a shortage of discoveries globally[2].

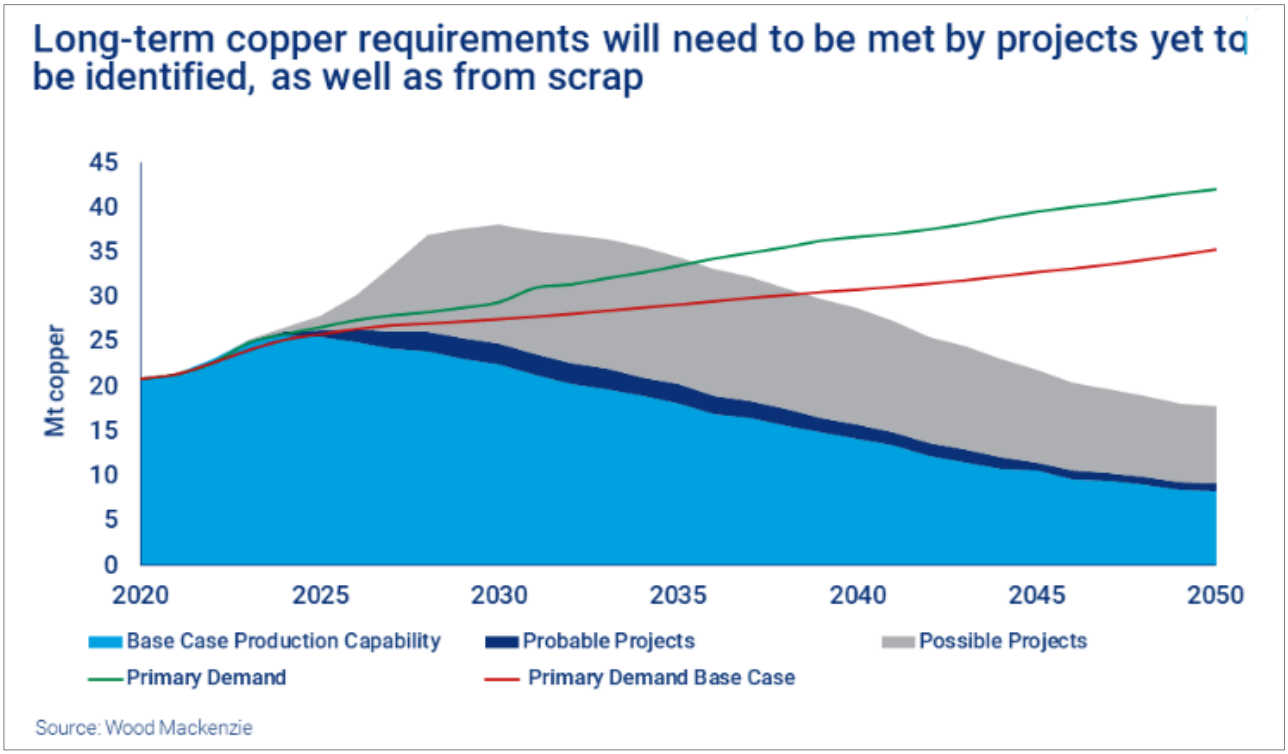


Figure 1-2 – Long Term Copper Requirements (Wood Mackenzie, 2022)

Additionally, Goldman Sachs is forecasting the largest deficit ever in the copper market by the middle of this decade, saying that the severe imbalances building up in the market may not be resolvable at current price levels. Copper will be crucial in achieving decarbonization and replacing oil with renewable energy sources, and right now, the market is facing a supply crunch that could boost the price by 100% by 2025 from the current price of US$7,500 a metric tonne (October 1, 2022).

A recent study by Goldman Sachs of 50 projects that will account for most new supply over the next five years found that the price needed to bring new projects online had risen by 30% in the past four years because of higher costs and required returns and delays. They state that the average incentive price – the amount required to generate a 15% return – now stands at US$9,000 a metric tonne. But the price needed to bring on enough copper to meet future demand is projected at US$13,000 a metric tonne.[3]

[1] S&P Global Growing appetite for copper threatens energy transition and climate goals (July 2022)
[2] Bold Baatar, Head of Rio Tinto's Copper Division
[3] Goldman Sachs. Copper Top Projects 2022. A Deficit on the Horizon. (1 September 2022)

According to Goldman Sachs, "copper does possess a clear structural bull story, which we continue to see defined by peak mine supply in 2024, and sequential record-sized copper deficits commencing 2025, all from a starting point of near record low inventories. With no increment in supply investment to start to provide support at the mine level, the ongoing sell-off will have only reinforced that restraint. Whilst that does not matter to spot conditions today, from mid-2023 onwards this will clearly have far greater weight, as the market starts to discount a much tighter and open-ended phase in supply ahead. This is why we retain our bullish price forecasts for 2024 ($14,000/t) and 2025 ($15,000/t)".

According to estimates by CRU Group, the global copper industry needs to spend more than $100 billion to build mines able to close what could be an annual supply deficit of 4.7Mt per year by 2030. The potential shortfall could reach 10Mt if no mines get built, according to commodities trader Trafigura Group. Closing such a gap would require building the equivalent of eight projects the size of the giant Escondida mine in Chile, the world's largest copper mine. [4]

According to BHP's chief economist, Dr Huw McKay, under a plausible upside case for demand, the cumulative industry wide capex bill out to 2030 could reach one–quarter of a trillion dollars to meet a potential supply gap driven by strong demand growth and lost production from declining grades and resource depletion from existing mines. [5]

The effect on project NPV of the various potential future copper prices is show in Table 1-2.

Upside cases based on forecast copper market undersupply are based on Goldman Sachs estimates. [6]

- "meet future demand" US$5.90/lb (US$13,000/t)
- "bullish price forecast" US$6.80/lb (US$15,000/t)

The following table compares the macro assumptions metal price and FX for the Project at spot (3 November 2022), Feasibility Study and potential market forecast macro assumptions.

Table 1-2 - Sensitivity Analysis Against Market Scenarios for Copper Price

	Spot Prices 3 Nov 2022	Feasibility Study	"Meet future demand"	"Bullish price forecast"
Copper Price (US$)	3.49/lb [1] 7,700/t	4.23/lb [2] 9,326/t	5.90/lb [3] 13,000/t	6.80/lb [4] 15,000/t
Silver Price (US$)	19.44/oz [1]	22.70/oz [2]	22.70/oz	22.70/oz
Gold Price (US$)	1,629/oz [1]	1,735/oz [2]	1,735/oz	1,735/oz
Exchange Rate (US$:A$)	0.629[1]	0.700	0.700	0.700
NPV - 8% real, after tax	A$134 M	A$241 M	A$701 M	A$947 M
IRR	15.4%	20.7%	40.1%	49.1%

1. Spot Prices: LME (Cu), Kitco (Ag, Au) - 3/11/22 close, FX XE.com live – 4/11/22
2. Bloomberg Consensus Forecast for 2025 (as at 30 September 2022)
3. Goldman Sachs "meet forecast market demand" Cu incentive pricing US$13,000/t
4. Goldman Sachs "bullish market price forecast" Cu incentive pricing US$15,000/t

[4] Bloomberg. The World Will Need 10 million Tons More Copper to Meet Demand (20 March 2021)
[5] BHP August Commodity Update (16 August 2022)
[6] Goldman Sachs – Copper: How low can we go? (11 July 2022)

KGL is reporting the results of Project FS based on Bloomberg consensus metals pricing, (long term 2025 real copper price) of US$4.23/lb (equivalent to US$9,326/t), and silver and gold by-products at US$22.70/oz and US$1,735/oz respectively. The A$:US$ exchange rate of 0.70 is used.

The long-term Bloomberg Consensus copper price forecast is mirrored by Wood Mackenzie Forecast Copper Price to deliver new projects under the accelerated energy transition ('AET') scenario ('AET-1.5') of $4.25/lb (US$9,370/t) in constant 2022 US dollar terms [7]

1.4 CAPITAL AND OPERATING COST ESTIMATE

KGL has compiled the cost estimate using inputs from a range of engineering consultants, equipment hire providers and mining contractors. Xenith Consulting Pty Ltd (**Xenith**), Ezyquip Hire Pty Ltd and Macmahon Contractors Pty Ltd (**Macmahon**) provided mining and equipment costs. Sedgman Pty Ltd (**Sedgman**) provided process plant costs, and Enernet Global Pty Ltd provided power supply costs.

The feasibility study has been estimated to a level of definition and intended accuracy of -10% to +15% basis end Q3 2022.

The engineering design works and drawings undertaken to date for the process plant, infrastructure and tailings storage facility have provided sufficient detail to estimate the materials volumes, labour hours and EPC costs. All equipment and materials have been quoted for the project or estimated by Sedgman, Macmahon and other contractors/consultants based on other projects completed recently. See Table 1-15 for a list of contractor and consultant contributors to the FS.

The contingency estimate considers and allows for rising unit prices for materials and labour resulting from global and domestic inflation. The contingency was determined via a risk assessment to provide sufficient funding for risks that may eventuate during construction. An allowance of A$40M (15.5%) has been provided for contingent events.

The Project construction capital of **A$298 million** includes A$258 million of construction capital and A$40 million of contingency shown in Table 1-3.

Table 1-3 - Project Construction Capital

Construction Capital	A$M
Process plant & tailings dam establishment	$ 157
Site preparation, infrastructure and water supply	$ 52
Camp	$ 21
Indirect, services & owners' costs	$ 28
Contingency	$ 40
Total	**$ 298**

Key changes in capital requirements relative to the December 2020 PFS are as a result of front-end design and engineering together with scope changes and cost escalation since the PFS was prepared:

[7] Wood Mackenzie. "Red metal, green demand. Copper's critical role in achieving net zero". October 2022.

- Increases in process plant and tailings costs +A$55M
- Increases in site preparation, infrastructure, and water supply costs +A$20M
- Reallocation of camp establishment costs from operating to capital +A$21M
- Increase in contingency +A$29m (from ~7% to 15.5%)

Camp costs are based on an upfront capital purchase by KGL, with construction, ongoing maintenance and operations performed by a specialist contractor.

The capital cost estimate for the Project construction excludes sunk costs up to 30 June 2022 and working capital.

The hybrid power generation facility is to be contracted via a Power Purchase Agreement, where capital costs are recovered through the electricity tariff on a $/kWh basis. Electricity reticulation across the Project has been included in the infrastructure cost estimate.

Rehabilitation bonds (A$10 million) and mining operational costs (A$59 million) prior to first concentrate production (working capital) are not included in the Project construction capital cost. These costs have been included in the Project financial model and the Project funding requirements.

McMahon have provided budget operating costs including contingency for the mining costs including the supply of mining equipment, operating labour, and maintenance. Sedgman has provided the budget operating costs including contingency for the operation of the plant feed, processing, concentrate handling, despatch, quality control and metallurgical requirements.

Sustaining capital of A$200 million for underground mine development and A$34 million for expansion of the tailings storage facility capacity, have been included in the Project financial model.

Total Project operating costs graph below shows the initial ramp up of costs primarily associated with open-cut mining and plant throughput ramp up through FY2025 - FY2026. The open-cut mining is completed in April 2027. Stockpiled ore from open-cut then combines with underground mine production to feed the process plant until February 2029. From March 2029 all sulphide ore production is from higher unit cost underground operations.

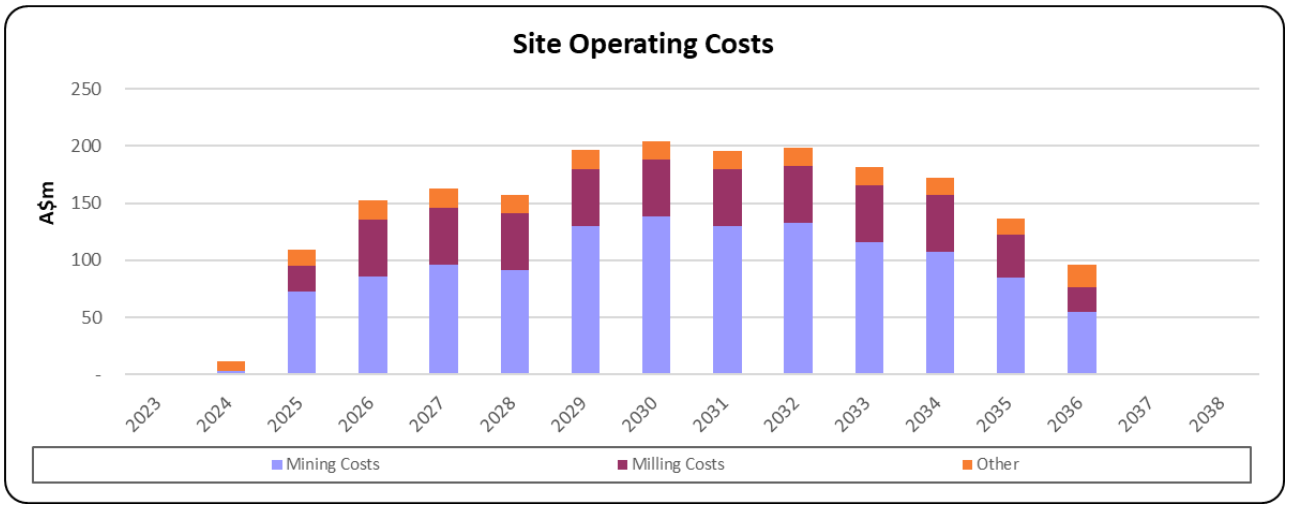


Figure 1-3 - Total Site Operating Costs – Annual (Financial Year) Basis

Operating cost inputs have been primarily sourced from external parties as at Q3 2022. Where costs have been provided prior to Q3 2022, KGL has applied appropriate escalation, for input into the financial model.

A diesel price of $1.30 per litre (ex-GST and rebates are applied) has been applied to diesel usage, which was estimated by third party contractors for underground mining and the process plant. KGL derived the open pit diesel usage from first principles.

KGL has estimated open-cut, site support services, owners' team and head office costs based on current labour rates, corporate expenses adjusted for the Project construction and operating requirements.

The operating cost estimate does not include mine closure and final rehabilitation on the basis that ongoing exploration aims to extend the existing orebodies and identify additional mineral resources within the current Mineral Lease and exploration tenements. This follows recent successful exploration results announced on 27 September 2022.

Offsite costs include concentrate transport, royalties and compensation payments. Royalty rates have been accounted for in-line with Section 9A of the *Mineral Royalty Act 1982* (NT). The economic effects of any compensation agreements have been included; this comprises initial and annual payments, annual administrative costs and shut down payments. The terms of the compensation agreements remain confidential.

Revenue related costs include refining and treatment charges, freight credit and bismuth penalties.

Royalties payable have been calculated as per the *Mineral Royalty Act 1982* (NT) and compensation payable as per KGL's ILUA obligations (commercial in confidence).

Tax payable has been calculated as per the *Income Tax Assessment Act 1997* (Cth) at the rate of 30% of taxable income, and utilises KGL's estimated tax losses incurred up to the date of production.

A summary of operating cost key metrics is summarised as follows;

Table 1-4 – Average Operating Costs over the Life of Mine

Steady State Operating Costs (Q3 2025- Q2 2034)	A$ / tonne ore	US$ / lb payable Cu
Total site operating cost	112.3	2.22
Concentrate transport and smelting	25.7	0.51
By-product credit	(25.7)	(0.51)
Total C1 Costs	**112.3**	**2.22**
Royalties	15.7	0.31
Depreciation and amortisation	30.3	0.60
Total AISC	**158.3**	**3.13**

Note: Steady state operating conditions (1.6Mtpa average plant feed) occur between Q3 2025 and Q2 2034. Outside this period the plant is either ramping to full capacity following commissioning or ramping down toward the end of the scheduled life.

1.5 FINANCIAL ANALYSIS

Financial modelling has been completed from inputs provided by various contractors and consultants coordinated by KGL and processed by Finalyse Pty Ltd. Key financial metrics and Project cash flows are shown in Table 1-5 and Figure 1-4 respectively.

The economic analysis is based on a valuation date of 31 March 2023 that coincides with the expected Financial Investment Decision (**FID**) date. Net Present Value (**NPV**) is calculated based on discounted cashflow (real, after tax) of 8% using flat real metal prices for copper, silver and gold, and A$:US$ exchange rate. Project capital payback is calculated from first concentrate production.

Table 1-5 - Key Financial Metrics

Metric	Unit	Value
Copper Price	US$/lb	4.23
Gold Price	US$/oz	1,735
Silver Price	US$/oz	22.70
Exchange Rate	A$:US$	0.70
Discount Rate	%	8.0
Net Present Value (post-tax)	A$ million	241
Internal Rate of Return (post-tax)	%	20.7
Project Capital Payback	Years	4.2

The Project generates EBITDA during steady state operations (Q3 2025 – Q2 2034) of circa A$138 million per annum. Average mining and sustaining capital over this same period is A$15 million per annum. Free cashflow averages A$58 million per annum.

Peak funding of A$387 million occurs in Q1 2025 post plant commissioning, during ramp-up. Positive operating and free cashflows are delivered from Q2 2025.

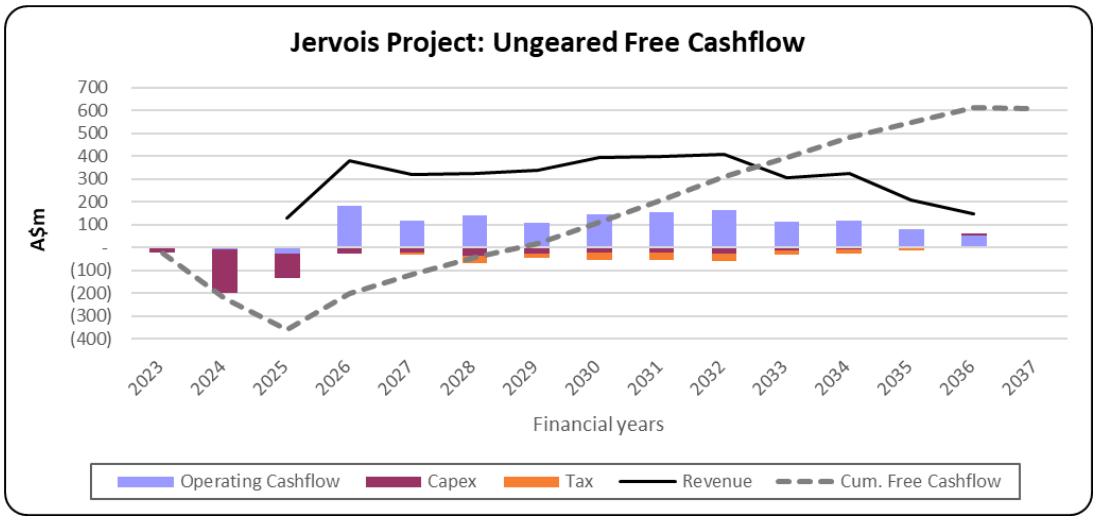


Figure 1-4 - Project Annual (Financial Year) Free Cash Flow and Cumulative cashflows

1.5.1 Sensitivity Analysis

The sensitivity analyses in Figure 1-5, Figure 1-6 and Table 1-6 show that the Project is leveraged to the A$ copper price, being a combination of the US$ price and foreign exchange rate.

Market demand supply commentators (see section 1.3 Copper Market Forecasts) are suggesting price expectations are being skewed in favour of higher US$ copper prices by between 40 – 60% above the consensus view.

The Project is also more sensitive to operating costs than start-up capital costs. Less sensitive are the by-product US$ price assumptions.

The sensitivity of gold and silver by-product US$ price is limited due to its contribution compared to the copper contribution to gross revenue (approximately 11% to gross revenue). Over the life of the Project, total by-products equate to about 32 kt Cu equivalent for payable gold and silver combined. A 1% change in metallurgical copper recovery (not shown in the above graphs), results in an incremental NPV impact of A$12 million.

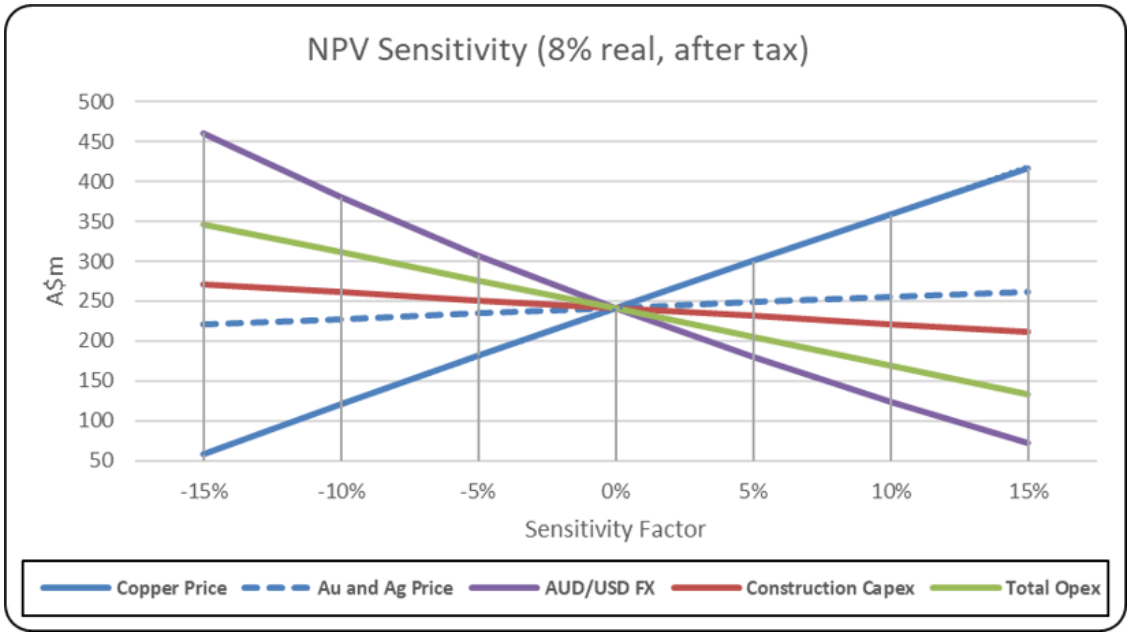


Figure 1-5 - Project NPV Sensitivity

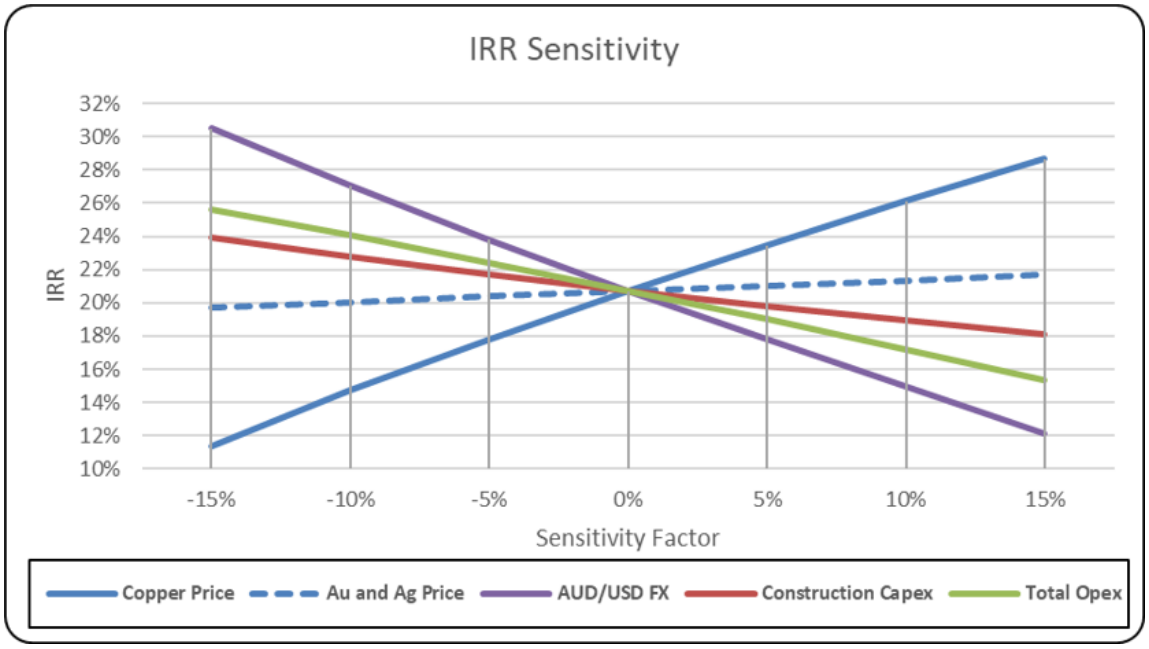


Figure 1-6 - Project IRR Sensitivity

Table 1-6 - Sensitivity Tables

NPV A$ million Sensitivity (8% real dcf, after tax) Sensitivity factor	-15%	-10%	-5%	Feasibility Study	5%	+10%	+15%
Copper US$ price	57	120	181	241	300	359	417
By-product US$ price (combined gold & silver)	220	227	234	241	248	255	262
Exchange rate	461	380	307	241	181	124	72
Construction capital (A$)	271	261	251	241	231	221	211
Operating costs (A$)	346	312	276	241	206	169	132

IRR Sensitivity Sensitivity factor	-15%	-10%	-5%	Feasibility Study	5%	+10%	+15%
A$:US$ FX	0.595	0.630	0.665	0.700	0.735	0.770	0.805
Copper US$ price	11.3%	14.7%	17.8%	20.7%	23.5%	26.1%	28.6%
By-product US$ price (combined gold & silver)	19.7%	20.0%	20.4%	20.7%	21.0%	21.4%	21.7%
Exchange rate	30.5%	27.0%	23.8%	20.7%	17.8%	14.9%	12.1%
Construction capital (A$)	23.9%	22.8%	21.7%	20.7%	19.8%	18.9%	18.1%
Operating costs (A$)	25.6%	24.1%	22.4%	20.7%	19.0%	17.2%	15.3%

1.6 PROJECT LOCATION

The Project is located in the Northern Territory (**NT**) of Australia approximately 380km by road north-east of Alice Springs see Figure 1-7. The Project is located on existing Mineral Leases located on the Jervois Pastoral Lease owned by Jervois Pastoral Company Pty Ltd (a non-KGL related entity).

The main logistical service hubs relevant to the Project are Alice Springs, Adelaide, Darwin and Mt Isa. Major highways intersect with the Stuart Highway giving access in and out of the NT via the Barkly Highway into Queensland and the Victoria Highway into Western Australia. These highways are all weather and have regularly spaced fuelling stations for commercial transport. The majority of materials imported to the Project will come from Darwin via the Stuart and Plenty Highways.

A 3.2km road will be formed to connect the Project area to Lucy Creek Station Access Road (Road 194) which joins the Plenty Highway 16km to the south, see Figure 1-8. The Plenty Highway is mostly sealed toward the Stuart Highway 290km to the west of the Project. The Stuart Highway extends between Adelaide, through Alice Springs to Darwin. A continuation of funding to continue sealing the Outback Way, which includes the Plenty Highway, was committed to by the Federal Government[8] in October 2022.

The Project area has a defined, brief wet season generally between November and April which can result in short delays to road and air access. The expected impact to site access is less than 7 days a year based on historical knowledge. A warehouse facility and associated laydown areas are to be prepared early in the construction sequence to store sufficient stock to allow operations to continue for up to two weeks, as a result of limited site access.

[8] www.infrastructure.gov.au/about-us/corporate-reporting/budgets/budget-october-2022-23

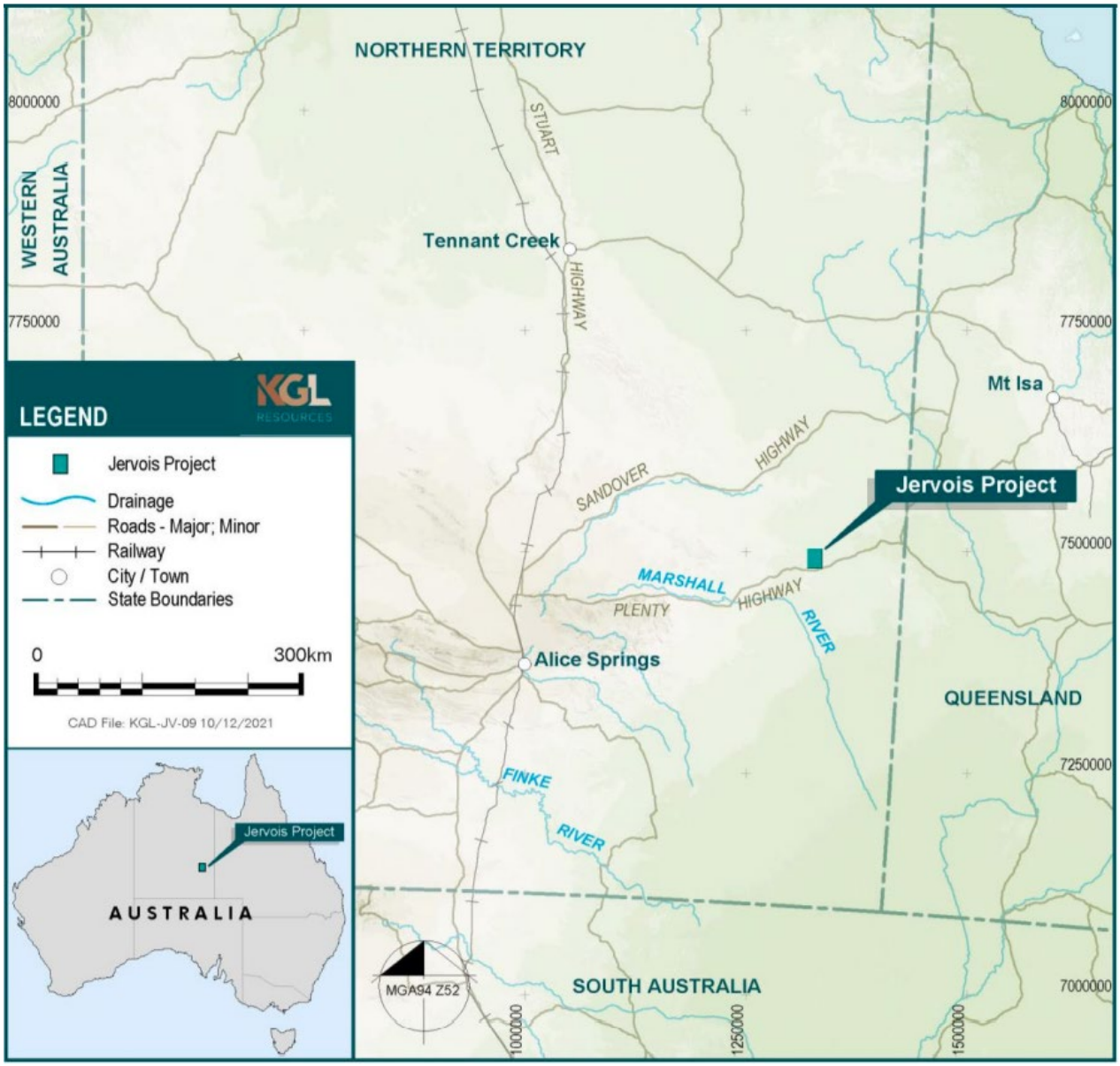


Figure 1-7: Project Location

1.7 PROJECT INFRASTRUCTURE

The Project is modelled to be a remote stand-alone facility that will comprise all components required for operations producing copper concentrate. Major components include accommodation, power supply/reticulation, water supply, processing plant, tailings storage facility, warehousing, workshops, laboratory, fuel storage and explosives magazine. Access to the Project is via NT public roads or via the local Bonya aerodrome located 17km south-west of the Project Mineral Leases.

Infrastructure and mining will be undertaken within the existing Mineral Leases. Sustainable groundwater supplies have been identified from bores to be established as part of the early works, on the granted bore field Mineral Lease 20km north of the process plant on the Lucy Creek Pastoral Station. Approval to install and operate a pipeline along Road 194 is not expected to be withheld.

Early construction works will consist of access road formation, upgrading communication facilities, establishment of pumps and a water pipeline from the Lucy Creek bore field. The mine infrastructure area (**MIA**), that includes the processing plant, power station, fuel storage and other supporting facilities, is adjacent to the Reward open-cut, Reward underground, and the Marshall underground portal development. The solar array and camp accommodation are located to the south of the MIA. The proposed Project layout is shown in Figure 1-8.

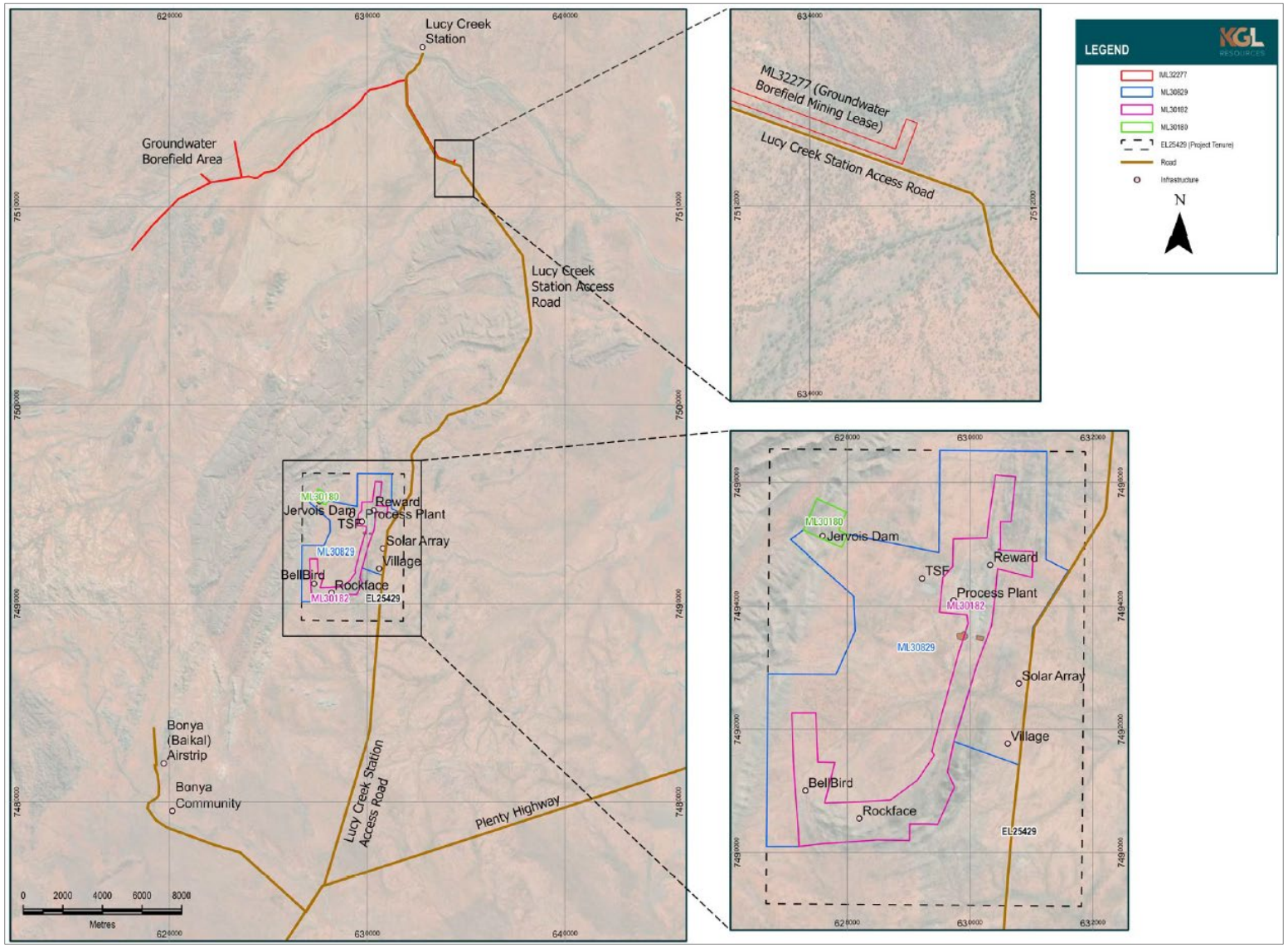


Figure 1-8 – Project Layout & Infrastructure

1.8 GEOLOGY AND MINERALISATION

The Project lies within the eastern part of the Arunta Region, which forms part of the North Australian Craton. Base metal mineralisation at the Project is hosted by a lower-to-middle amphibolite grade metasedimentary sequence of the Bonya Metamorphics.

The Project area lies on the south-eastern edge of the Jervois Range. The proposed mining activity is focused along the range of low hills and rises running approximately north to south through the middle of the Project area, forming a J-shape.

This distinctive J-shape of the Bonya Schist outcrop has been interpreted as the result of re-folding of pre-existing folds, and as a drag feature to a regional Jervois fault that lies to the west. The more resistant lithologies feature as a series of hills that prominently define the J-structure on aerial photographs and satellite images.

The mineralisation style is generally stratabound and contained within steeply dipping lenticular bodies (lodes). The mineralised sequence has a strike length of some 12km and a stratigraphic thickness up to about 600m.

Copper-gold-silver mineralisation mostly occurs as massive to semi-massive layers of sulphides. Sulphides also occur in associated quartz veins and as thin interlayers in meta-mudstone and calc-silicates.

1.9 MINERAL RESOURCE

The Mineral Resources considered for development for the Project comprise the Reward, Rockface and Bellbird deposits.

The total Mineral Resource estimate now stands at:

- 23.80 million tonnes at 2.02% copper, 25.3 g/t silver and 0.25 g/t gold, and
- containing 481.2 kt copper, 19.3 Moz silver and 189.6 koz of gold.

The Mineral Resource estimates for Reward, Rockface and Bellbird deposits were prepared by Mining Associates Pty Ltd (**Mining Associates**). An update to the Bellbird Mineral Resources and a restatement of the Reward and Rockface Mineral Resources were announced by KGL in an ASX release on 14 September 2022. These are presented below in Table 1-7.

The major aims of the drilling and resource estimation work for the Project since the release of the December 2020 prefeasibility study were to:

- upgrade the resource category of the existing Mineral Resources
- delineate additional Mineral Resources.

Exploration since the December 2020 PFS release has successfully increased the Cu-Ag-Au resources within the Project from 19.07 Mt (March 2020) to 23.80 Mt (September 2022). Measured and Indicated Cu-Ag-Au Resources have also increased by 27.7% over this same period.

Table 1-7 – Project Mineral Resources, September 2022

Resource			Mineralised Mass	Grade			Metal		
	Area	Category	(Mt)	Copper (%)	Silver (g/t)	Gold (g/t)	Copper (kt)	Silver (Moz)	Gold (koz)
Open Cut Potential > 0.5 % Cu*	Reward	Indicated	3.84	1.80	39.4	0.31	69.1	4.9	38.2
		Inferred	0.65	0.92	9.2	0.07	5.9	0.2	1.5
	Bellbird	Measured	1.23	2.53	15.1	0.14	31.2	0.6	5.6
		Indicated	1.26	1.45	9.1	0.17	18.2	0.4	6.8
		Inferred	1.02	1.24	10.6	0.12	12.7	0.3	4.0
	Sub Total		**8.00**	**1.71**	**24.8**	**0.22**	**137.1**	**6.4**	**56.1**
Underground Potential > 1 % Cu*	Reward	Indicated	4.78	2.12	42.6	0.45	101.6	6.6	69.2
		Inferred	4.32	1.56	19.6	0.20	67.3	2.7	27.8
	Bellbird	Indicated	0.33	2.33	19.8	0.14	7.8	0.2	1.5
		Inferred	2.84	2.09	12.3	0.11	59.1	1.1	9.7
	Rockface	Indicated	2.80	3.37	21.4	0.23	94.3	1.9	21.1
		Inferred	0.73	1.92	19.0	0.18	14.0	0.4	4.2
	Sub Total		**15.80**	**2.18**	**25.5**	**0.26**	**344.1**	**13.0**	**133.5**
Sub Totals		Measured	1.23	2.53	15.1	0.14	31.2	0.6	5.6
		Indicated	13.01	2.24	33.3	0.33	291.0	13.9	136.9
		Inferred	9.55	1.67	15.7	0.15	159.0	4.8	47.1
Total			**23.80**	**2.02**	**25.3**	**0.25**	**481.2**	**19.3**	**189.6**

** Due to rounding to appropriate significant figures, minor discrepancies may occur. Tonnages are dry metric tonnes. Mineral Resources are not Ore Reserves and do not have demonstrated economic viability. Inferred resources have less geological confidence than Measured or Indicated resources and should not have modifying factors applied to them. It is reasonable to expect that with further exploration most of the Inferred resources could be upgraded to Indicated resources. The Mineral Resources are reported as open-cut potential when above a depth of 200 metres RL at a 0.5% copper cut-off grade and as underground potential when below 200 metres RL at a 1.0% copper cut-off grade.*

1.10 MINING & ORE RESERVES

The Mineral Resources were used as the basis for the open-cut and underground stope optimisations. These optimisations identified the two open-cut and four underground mining areas, see Table 1-8 and Figure 1-9.

Key changes to the mine plan relative to the PFS (December 2020) included:

- Mineral Resource updates adding more material, mainly to the underground mining areas,
- Upgrade in Mineral Resource category levels (most notably the Bellbird open-cut).
- Open-cut optimisation processes were conducted on equivalent copper grades in the FS, instead of copper in isolation (as was conducted in the December 2020 PFS). The FS equivalent copper grade method of optimisation includes the value of gold and silver credits.

Table 1-8 – Mining Areas

Mineral Resource	Open-cut Mining	Underground Mining	Decline Access
Reward	Reward Open-cut	Marshall Underground	Dedicated Box cut
		Reward Underground	Portal within Reward Open-cut
Bellbird	Bellbird Open-cut	Bellbird Underground	Decline from Rockface Decline
Rockface	n/a	Rockface Underground	Portal within Bellbird Open-cut

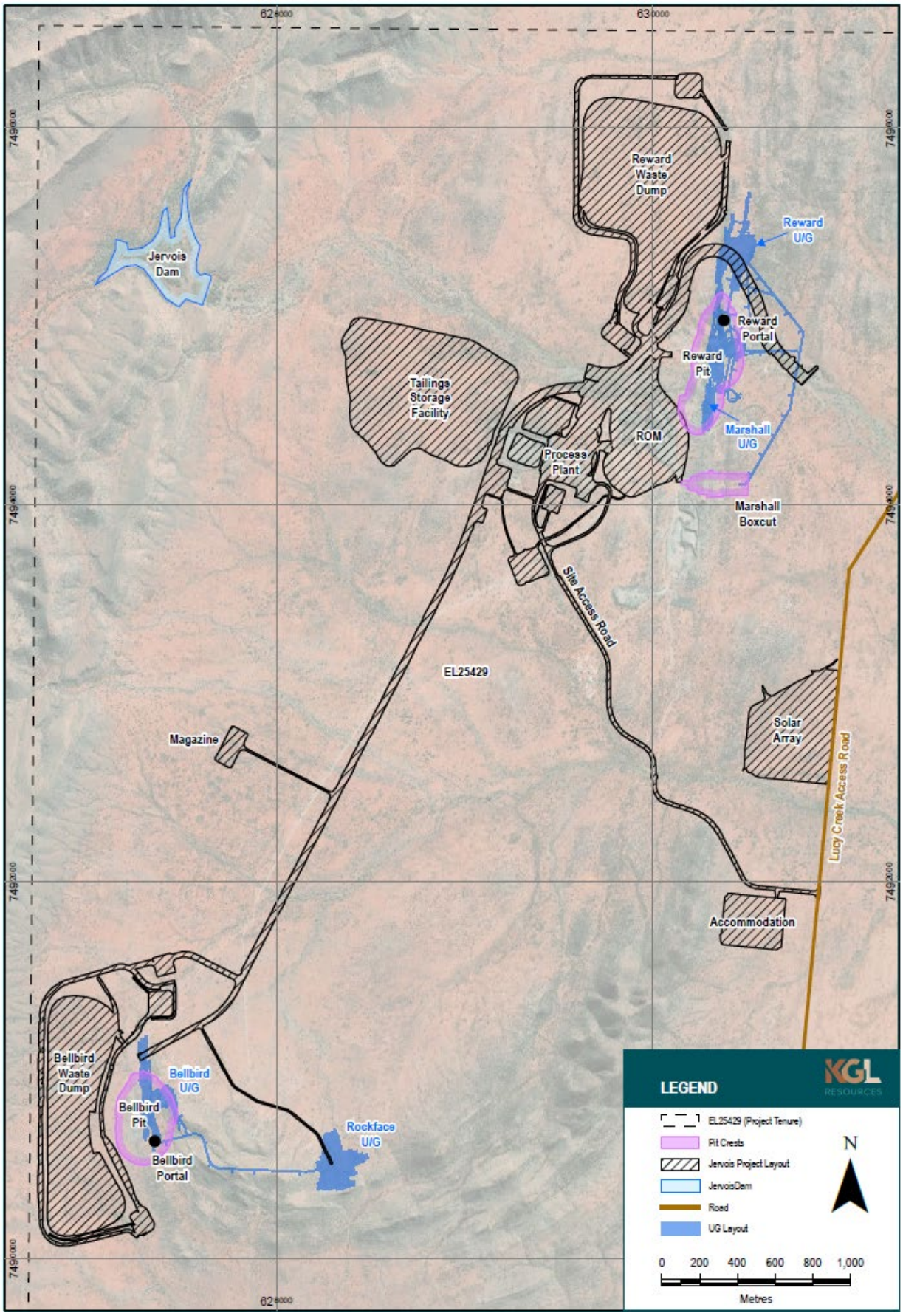


Figure 1-9 – Layout of Operations

1.10.1 Ore Reserve Estimation

Xenith have determined the Ore Reserves based on the Mineral Resource classified as Measured and Indicated Resources. The Ore Reserves includes consideration of all modifying factors such as legal, environmental, geological, geotechnical, mining, metallurgy, social, economic and financial aspects.

The Bellbird open-cut and Reward open-cut have a minimum mining width of 2.5 metres and 3.0 metres respectively. This is suitable for the small-scale mining equipment being utilised. The Bellbird open-cut dilution levels have been calculated to be 15% (based on 0.5 metre edge dilution) in the thinner ore lenses. Reward open-cut dilution levels have been calculated at 10% (based on 1.0 metre edge dilution) in the wider ore lens where a larger excavator will be used for ore mining. Ore loss in open-cut areas is assumed to be 5%. The cut-off grade for open-cut mining was 0.5% copper.

For underground stoping, a minimum mining thickness of 3.0 metres has been assumed, this is inclusive of a total of 1.0 metre of dilution (0.5 metres dilution width around each stope). This width is based on the minimum working width requirements for the equipment selected. Mining recovery of 90% was applied to all underground areas. The cut-off grade for underground stoping was 1.0% copper, while a lower cut-off grade of 0.5% copper was utilised for development drives given the need to extract this development material regardless of grade.

Further details on Ore Reserve process can be found in the Ore Reserve report provided by Xenith. See Table 1-9 for the 31 October 2022 Ore Reserves for the Project.

Table 1-9 – Ore Reserves for the Project as of 31 October 2022

	Ore (Mt)	Cu grade (%)	Cu (kt)	Au (g/t)	Au (koz)	Ag (g/t)	Ag (Moz)
Reward Open-cut							
Probable Reserve	2.34	1.73	40.6	0.34	25.7	38.5	2.9
Reward Underground							
Probable Reserve	1.82	2.30	41.9	0.64	37.6	30.2	1.8
Marshall Underground							
Probable Reserve	2.98	1.57	46.7	0.23	21.6	43.2	4.1
Bellbird Open-cut							
Proven Reserve	1.40	2.07	29.1	0.12	5.2	12.3	0.6
Probable Reserve	0.44	1.12	5.0	0.06	0.9	5.9	0.1
Reserves Total	**1.84**	**1.84**	**34.0**	**0.10**	**6.1**	**10.8**	**0.6**
Bellbird Underground							
Probable Reserve	0.43	1.77	7.7	0.09	1.2	14.2	0.2
Rockface Underground							
Probable Reserve	2.31	3.26	75.3	0.23	17.0	21.3	1.6
Proven Reserve	1.40	2.07	29.1	0.12	5.2	12.3	0.6
Probable Reserve	10.33	2.10	217.1	0.31	104.0	32.1	10.7
Reserves Total	**11.73**	**2.10**	**246.2**	**0.29**	**109.2**	**29.8**	**11.2**

Quantities and grades in the above table may not add exactly due to rounding or weighting.

1.10.2 Mining Sequence

The mining strategy is to initially mine the Bellbird and Reward open-cuts, whilst underground development is initiated at the Marshall underground. The Bellbird open-cut is commenced first due to the higher copper grades. Development of the Rockface underground mine then commences after Bellbird open-cut concludes in early 2026.

The Marshall underground mine decline will be established from a dedicated box cut in parallel with open-cut mining. Development will commence once the contractor has excavated and supported the box cut as part of early works. The Marshall decline commences in October 2024, three months after open-cut mining commences.

This approach simplifies the Project during the construction phase, deferring underground development capital and providing fast access to low-cost bulk fresh ore. Three years of open-cut mining provides sufficient time to develop the Marshall and Rockface underground mines so they can provide continuous ore supply to the processing plant after the Reward open-cut is completed.

The Reward underground mine development commences after the completion of the Reward open-cut, with entry via a portal within the open-cut. Subsequent development of the Bellbird underground mine in 2032 only occurs once the main development at Rockface underground mine is complete as they share a common decline access (from Bellbird Portal). Bellbird underground development and stoping operations are timed to coincide with the depletion of the Rockface underground mine.

This mining sequence provides a staged ramp-up in personnel levels for the Project. This approach provides more stable resourcing requirements throughout the Project mine life; see Figure 1-10 and Figure 1-24.

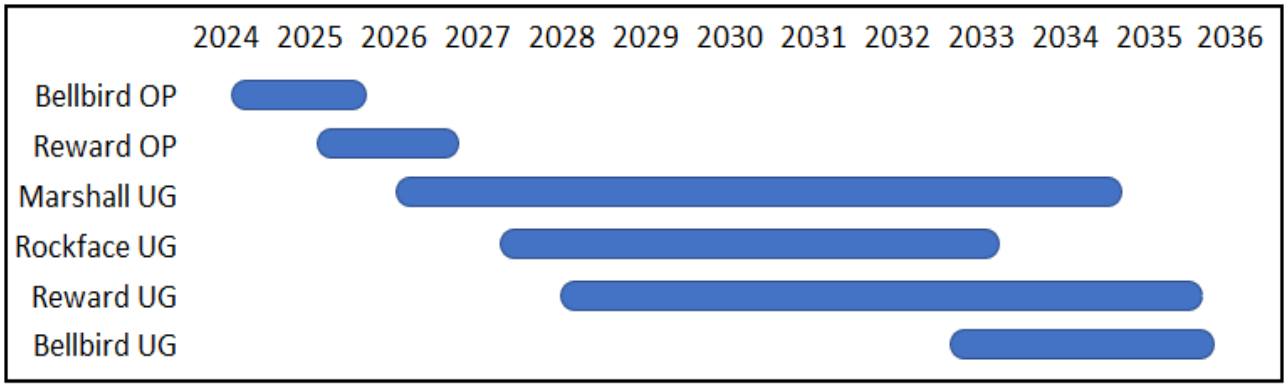


Figure 1-10 – Ore Mining by Mine Area

The mine development sequence provides fresh ore for plant commissioning and ramp-up, together with ore stocks to sustain operations through the transition from open-cut to underground ore production.

The FS processes a total of 16.67Mt of material which is sourced from open-cut (4.20Mt) and underground (12.47Mt). This processed material is sourced from Proven and Probable Reserves of 11.73Mt and 4.94Mt of Inferred Resources (29.6%). The split of Ore Reserve category and Inferred Resources recovered in the mine schedule are shown in Table 1-10 and Figure 1-11.

Table 1-10 - Ore Reserves and Inferred Resources within the Mine Schedule

	Proven Reserves (Mt)	Probable Reserves (Mt)	Total Ore Reserves (Mt)	Inferred Resources in Schedule (Mt)	Recovered Material in Schedule (Mt)	% Inferred Resources in Mine Schedule
Reward OP	-	2.34	2.34	-	2.34	0.0%
Bellbird OP	1.40	0.44	1.84	0.01	1.86	0.7%
Sub-total OP	**1.40**	**2.79**	**4.19**	**0.01**	**4.20**	**0.3%**
Rockface UG	-	2.31	2.31	1.26	3.57	35.2%
Marshall UG	-	2.98	2.98	1.41	4.39	32.1%
Reward UG	-	1.82	1.82	1.32	3.15	42.1%
Bellbird UG	-	0.43	0.43	0.93	1.36	68.3%
Sub Total UG	**-**	**7.55**	**7.55**	**4.92**	**12.47**	**39.5%**
Total	**1.40**	**10.33**	**11.73**	**4.94**	**16.67**	**29.6%**

Quantities and grades in the above table may not add exactly due to rounding or weighting.

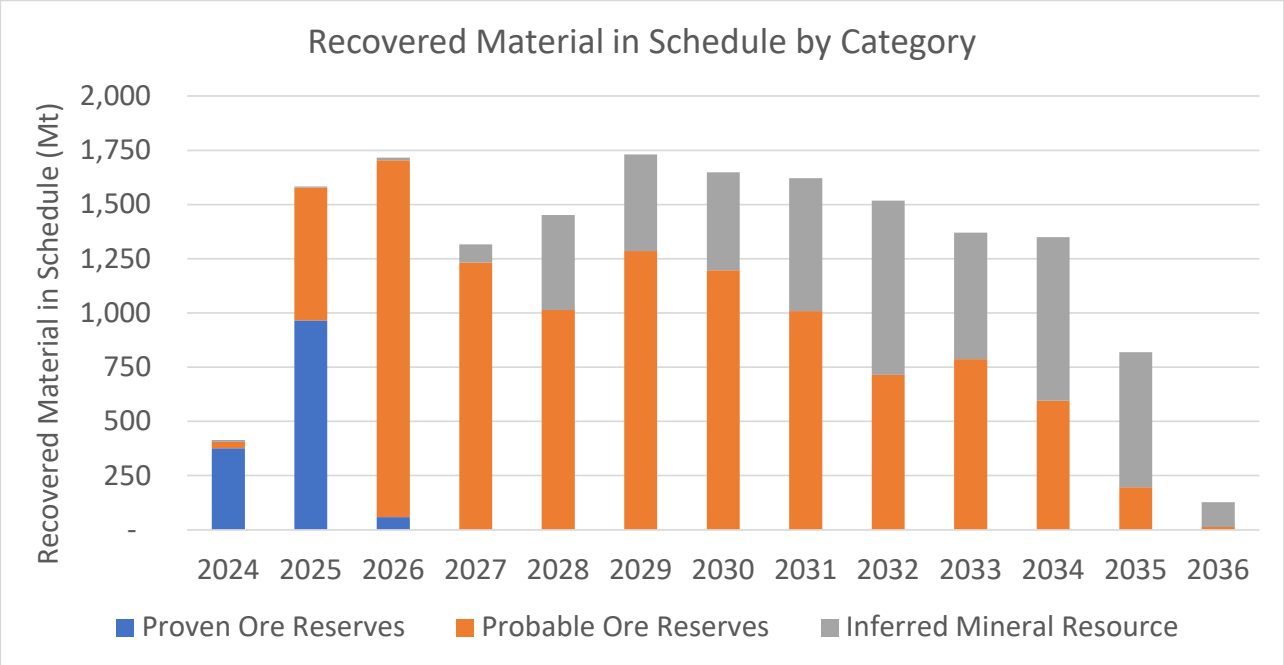


Figure 1-11 - Recovered Material in Schedule By Category – Annual (Calendar Year) Basis

The 4.94Mt of Inferred Resources in the schedule accounts for about half of the Inferred Resources identified in the Mineral Resource statement (September 2022). It is reasonable to expect that with further exploration most of the Inferred Resources could be upgraded to Indicated Resources.

The ongoing exploration program aims to continue infill drilling to progressively upgrade the Inferred Resource associated with these underground mining areas in advance of mining. However, there is a low level of geological confidence associated with the Inferred Resources and there is no certainty that further exploration work will result in the determination of Indicated Resources or that the production schedule using Inferred Resources will be realised.

1.10.3 Open-Cut Mining

Open-cut operations will utilise conventional drill, blast, load and haul methods with all operations undertaken by a mining contractor. Open-cut equipment is sized to be suitable for thin vein mining as outlined in Table 1-11. The smaller 120 tonne class excavator will primarily focus on mining the thinner mineralised lodes, while the larger 260 tonne class excavator will primarily focus on waste mining and the wider mineralised lodes. It has been modelled that the mining contractor will supply, manage, operate, and maintain all equipment required to drill, blast, load, haul and dump ore and waste.

Table 1-11 – Open-cut Mining Equipment

	2024				2025				2026				2027			
Quarter	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
Excavator (260t Class)	-	-	1	1	1	1	1	1	1	1	1	1	1	1	-	-
Excavator (120t Class)	-	-	-	1	1	1	1	1	1	1	1	-	-	-	-	-
Trucks (90t Class)	-	-	6	9	9	9	9	9	9	9	9	8	8	8	-	-

The open-cut plans showing adjacent, short haul waste dumps for both Bellbird and Reward are shown in Figure 1-12 and Figure 1-13 respectively. All open-cut haulage is conducted with 90 tonne class rear dump trucks.

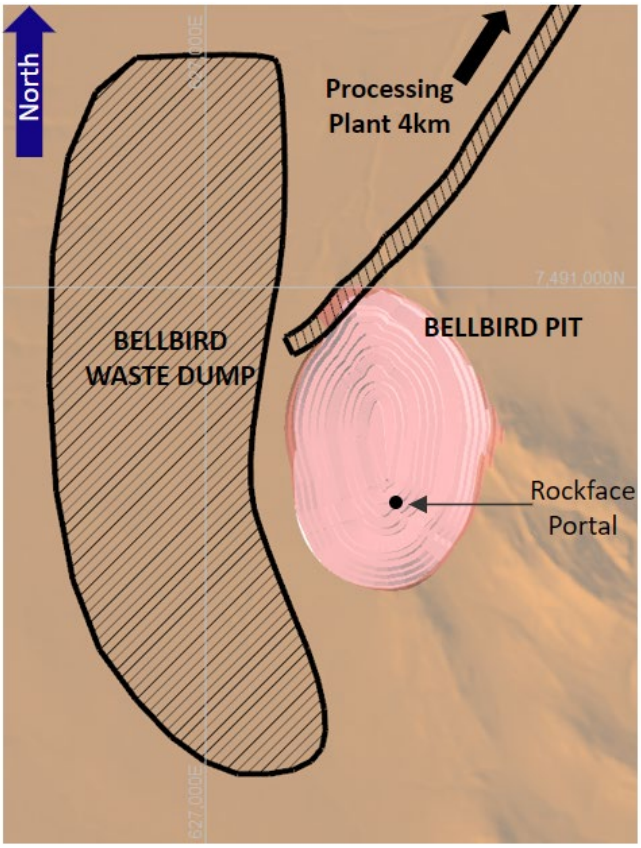


Figure 1-12 – Bellbird Open-cut Layout

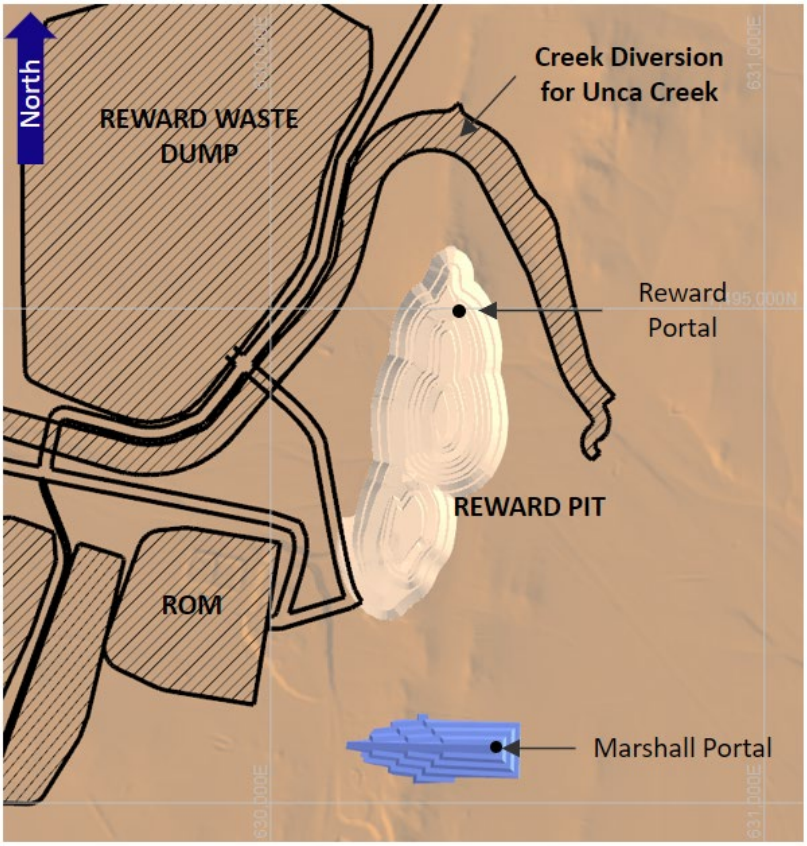


Figure 1-13 – Reward Open-cut Layout

1.10.4 Underground Mining

Underground mining operations are based on a conventional approach that involves decline development and sub-level open stoping with fill (both rock and cemented rock fill).

30 metre level spacings are planned at Rockface, Reward and Marshall underground areas, whilst 20 metre spacings are planned for the Bellbird underground. This approach is well suited to the narrow, generally steeply dipping orebodies at the Project.

The layout of the underground mining operations is shown in cross section in Figure 1-14 and Figure 1-15.

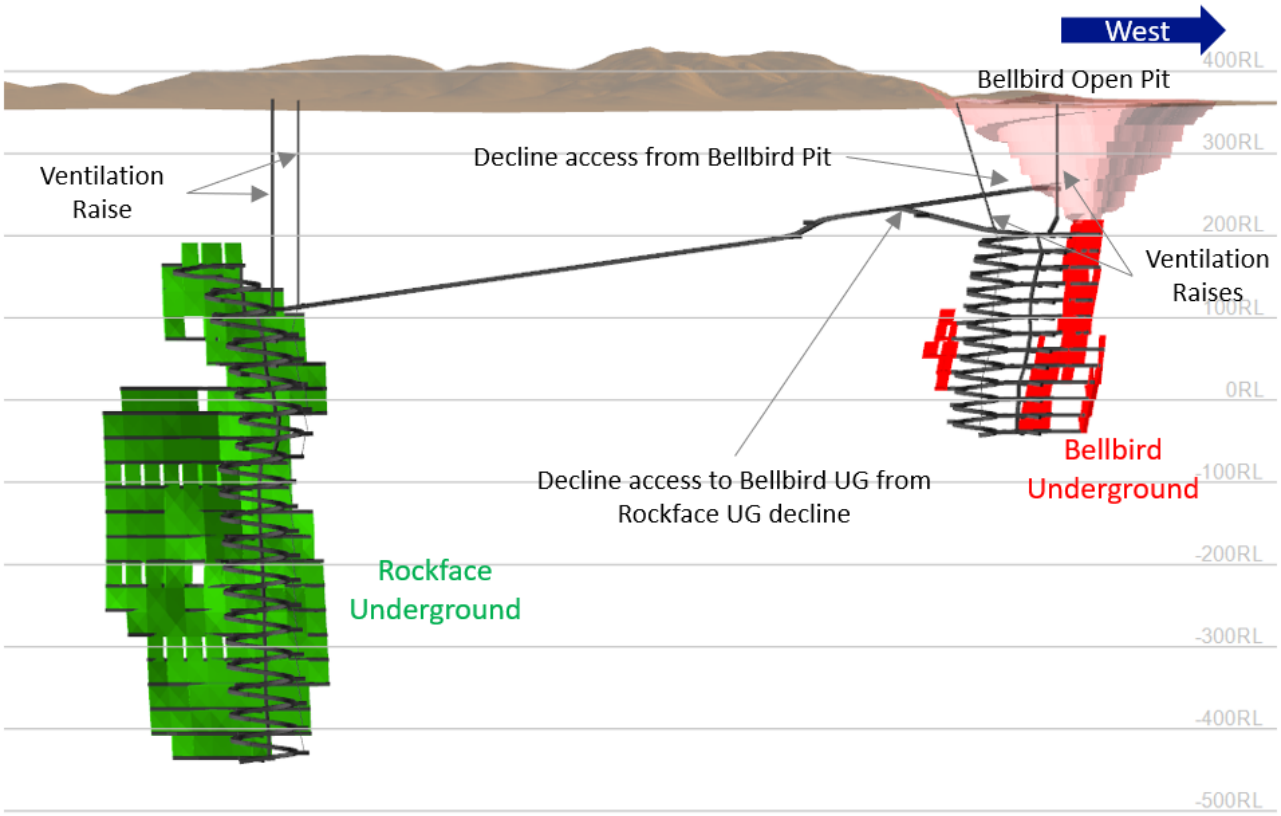


Figure 1-14 – Bellbird Open-cut, Rockface Underground & Bellbird Underground Mine Layout – Looking South

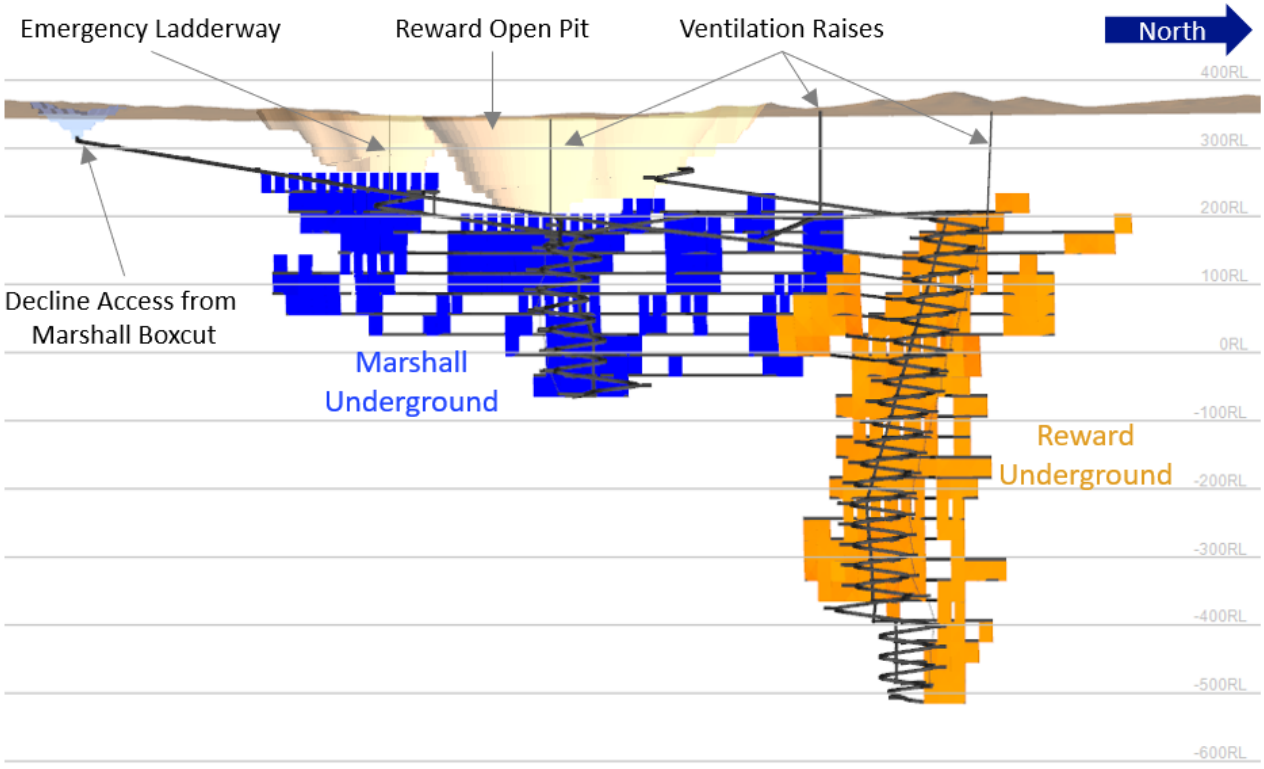


Figure 1-15 – Reward Open-cut, Marshall Underground and Reward Underground Layout – Looking West

A mining contractor will manage all aspects of the underground mining operations and will operate all underground equipment including the development jumbos, longhole drill rigs, and Load Haul Dump (**LHD**) units. All haulage from the underground mines will be done with haul trucks.

Primary underground infrastructure for items such as primary ventilation, refuge chambers, power supply, water supply, and compressed air supply have been considered in the development of the FS. Each underground mine has a secondary egress ladderway via a fresh air raise.

Primary mining infrastructure, such as mains power and water, will be provided to the mining contractor, by KGL's other contractors.

The mining equipment and development requirements for the underground operations are outlined in Table 1-12.

Table 1-12 – Underground Development & Equipment

Calendar year	24	25	26	27	28	29	30	31	32	33	34	35	36
Development Jumbos	1	1	2	3	3	3	2	2	2	1	1	1	-
LHDs	1	1	3	6	9	10	10	10	9	8	6	4	2
Underground Haul Trucks	1	1	2	4	6	6	7	7	6	5	4	3	2
Production Drill	-	-	1	3	3	3	3	3	3	3	2	1	1

1.10.5 Production Schedule

The overall production schedule combines the open-cut and underground production schedules that are shown in Table 1-13 and Table 1-14 respectively. The combined mined ore tonnages and copper grades are presented in Figure 1-16. This shows ore production commencing from the open-cut areas (Bellbird and Reward) whilst development of the underground areas (Marshall, Rockface, Reward and Bellbird), are staged, following the completion of open-cut mining.

Table 1-13 - Open-cut Production Schedules - Annual (calendar year) basis

Category		2024	2025	2026	2027	Total
Waste Tonnes (kt)	Bellbird OP	6,296	10,584	343	-	17,223
	Reward OP	-	5,660	13,764	2,456	21,880
	Total Waste	**6,296**	**16,244**	**14,107**	**2,456**	**39,103**
Ore Tonnes (kt)	Bellbird OP	414	1,311	133	-	1,858
	Reward OP	-	272	1,325	745	2,342
	Total Ore	**414**	**1,583**	**1,458**	**745**	**4,200**
Ore Grade (Cu %)	Bellbird OP	1.91	1.78	2.23	-	1.84
	Reward OP	-	2.90	1.55	1.63	1.73
	Open-cut Average	**1.91**	**1.97**	**1.61**	**1.63**	**1.78**
Total Open-cut Mining (kt)		**6,709**	**17,827**	**15,565**	**3,201**	**43,302**

Table 1-14 - Underground Production Schedules - Annual (calendar year) basis

Category		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	Total
Development Metres (m)	Marshall	544	2,571	3,568	3,469	3,610	2,605	170	-	-	21	-	-	-	16,558
	Rockface	-	-	1,708	3,499	3,449	3,558	3,477	3,216	973	-	-	-	-	19,878
	Reward	-	-	-	1,593	3,482	3,690	3,289	3,428	2,503	-	-	-	-	17,984
	Bellbird	-	-	-	-	-	-	-	-	2,458	3,439	3,576	3,591	883	13,947
	Total	**544**	**2,571**	**5,276**	**8,561**	**10,540**	**9,852**	**6,936**	**6,644**	**5,934**	**3,460**	**3,576**	**3,591**	**883**	**68,368**
Development Ore Tonnes ('000 t)	Marshall	-	-	92	130	94	124	12	-	-	2	-	-	-	454
	Rockface	-	-	-	35	123	106	80	68	32	-	-	-	-	444
	Reward	-	-	-	1	78	105	103	94	31	-	-	-	-	411
	Bellbird	-	-	-	-	-	-	-	-	52	107	141	50	-	350
	Total	**-**	**-**	**92**	**166**	**295**	**334**	**195**	**162**	**115**	**108**	**141**	**50**	**-**	**1,658**
Stope Ore Tonnes ('000 t)	Marshall	-	-	167	360	520	504	502	501	501	504	372	5	-	3,937
	Rockface	-	-	-	44	468	669	616	623	566	136	-	-	-	3,123
	Reward	-	-	-	-	169	224	336	336	336	336	540	447	12	2,736
	Bellbird	-	-	-	-	-	-	-	-	-	286	296	318	115	1,015
	Total	**-**	**-**	**167**	**404**	**1,157**	**1,397**	**1,454**	**1,460**	**1,403**	**1,262**	**1,208**	**770**	**128**	**10,810**
All Ore Tonnes ('000t)	Marshall	-	-	259	491	614	628	514	501	501	506	372	5	-	4,390
	Rockface	-	-	-	79	591	775	696	691	599	136	-	-	-	3,566
	Reward	-	-	-	1	247	329	439	430	367	336	540	447	12	3,147
	Bellbird	-	-	-	-	-	-	-	-	52	392	437	368	115	1,365
	Total	**-**	**-**	**259**	**571**	**1,452**	**1,731**	**1,649**	**1,622**	**1,519**	**1,370**	**1,349**	**820**	**128**	**12,468**
All Ore Grade (Cu %)	Marshall	-	-	1.30	1.33	1.35	1.33	1.54	1.35	1.41	1.39	1.35	1.25	-	1.37
	Rockface	-	-	-	2.43	2.09	2.50	2.47	2.60	2.38	1.77	-	-	-	2.40
	Reward	-	-	-	0.55	1.40	1.77	1.86	1.88	1.61	1.82	1.91	2.12	3.12	1.83
	Bellbird	-	-	-	-	-	-	-	-	2.06	1.54	1.64	1.80	1.57	1.67
	Total	**-**	**-**	**1.30**	**1.48**	**1.66**	**1.94**	**2.02**	**2.02**	**1.86**	**1.57**	**1.67**	**1.97**	**1.73**	**1.81**

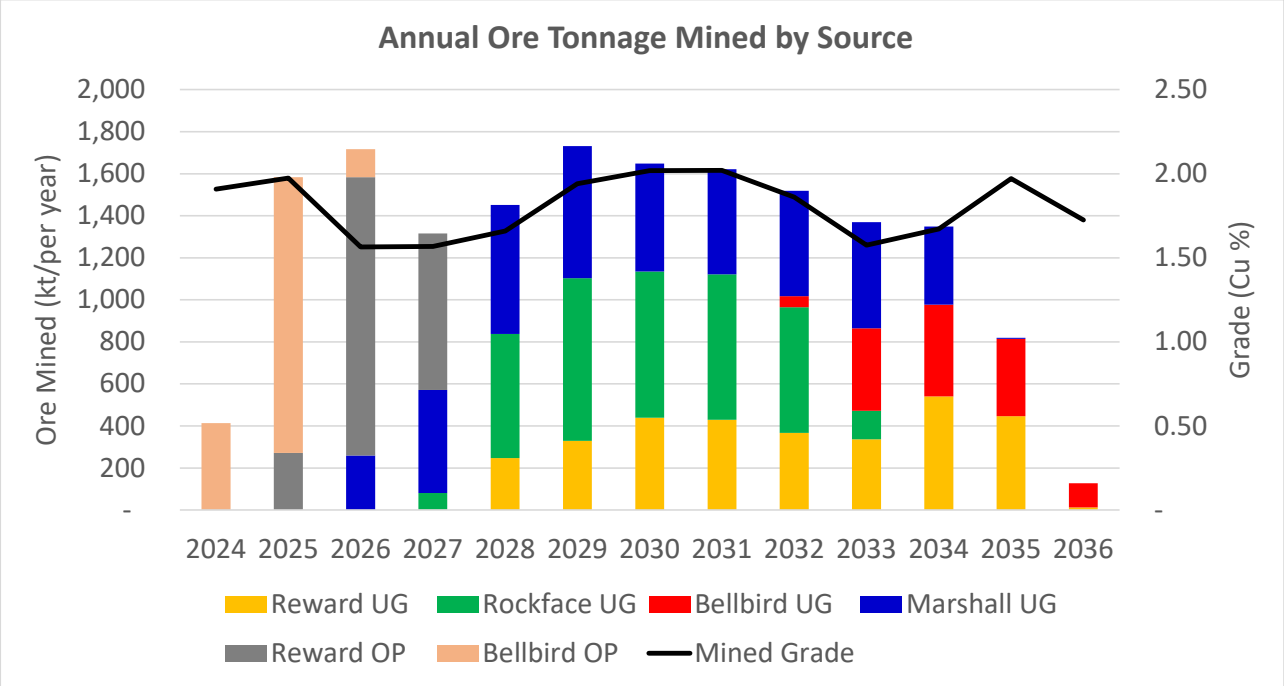


Figure 1-16 – Ore Tonnage Mined by Source – Annual (calendar year) basis

Fresh sulphide ore mined will generally be direct feed from the mine to the crushing facility leaving sulphide ore and oxide ore from the open-cut, excess to plant capacity needs, to be stockpiled and rehandled to the crusher later, to maintain the plant design throughput capacity as shown in Figure 1-17.

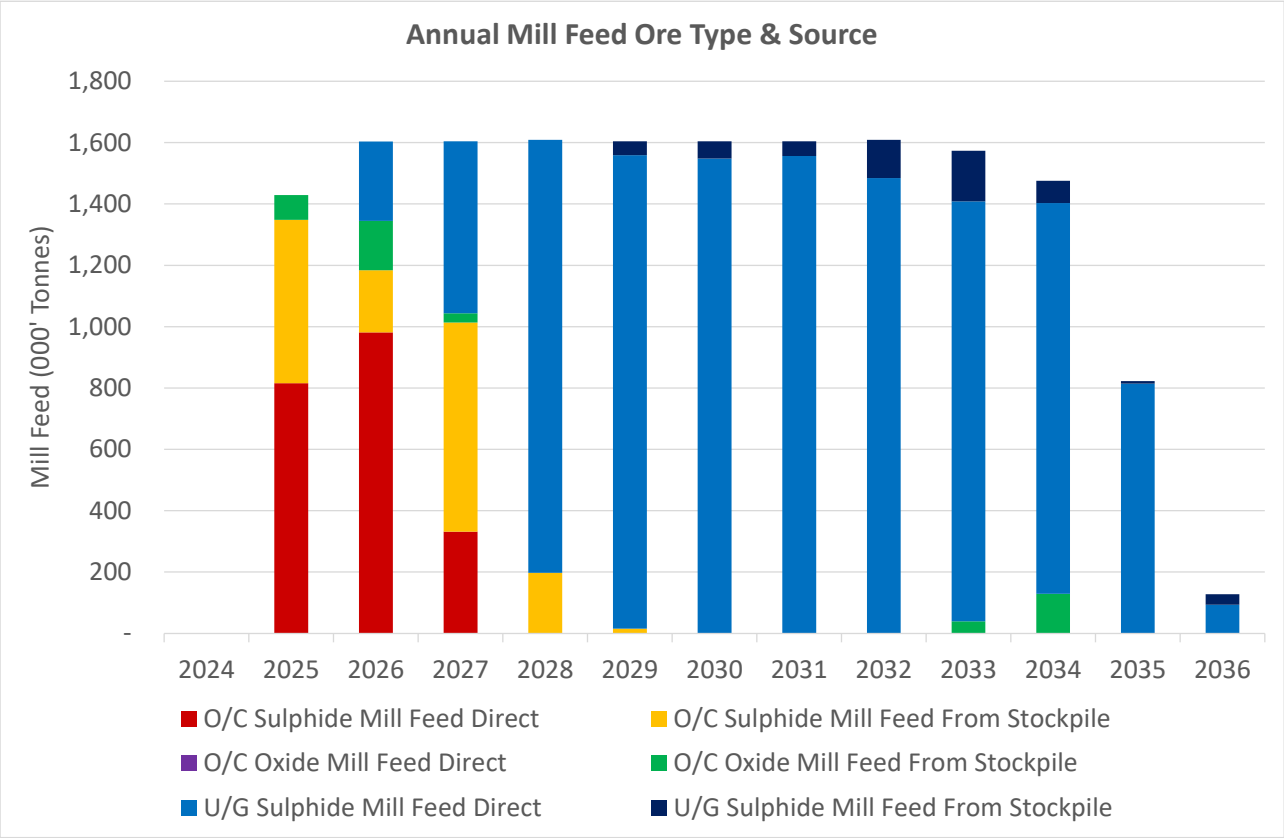


Figure 1-17 - Mill Feed by Ore Type & Source – Annual (calendar year) basis

There is a planned increase in ore stocks over the first 3 years of mining (see Figure 1-18). This planned outcome reduces the risk of ore supply to process plant in the first 3 years of operations and provides for the transition to full underground supply during 2028.

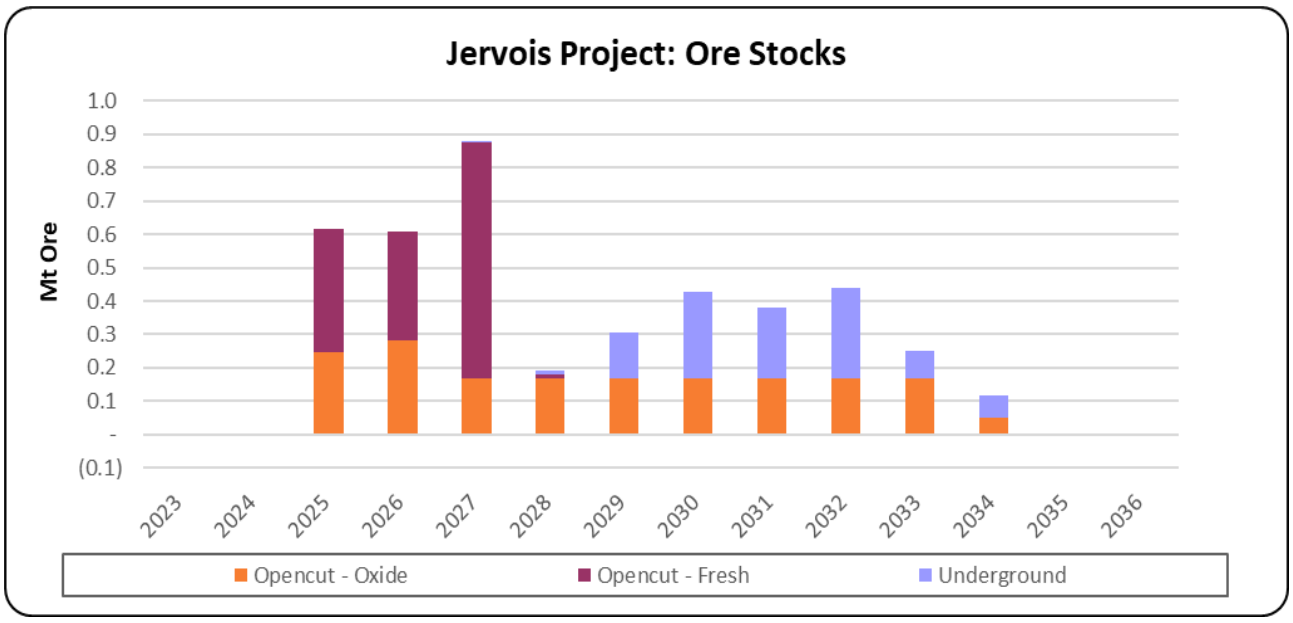


Figure 1-18 – Ore Stocks Balance at Financial Year End (30 June)

1.11 METALLURGICAL EVALUATION

Extensive metallurgical test work has been undertaken on the Project since 2012. Samples have been tested by ALS AMMTEC, Dunstan Metallurgical Services, Auralia Metallurgy, Sedgman and Core Resources. Sedgman oversaw the most recent laboratory test program undertaken by Core Resources to inform the process plant design.

Metallurgical testing of samples generated from the Jervois exploration program has been conducted over the last 10 years. These include numerous individual samples, blended samples and bulk composites. Each year's program followed a review of previous metallurgical test programs to focus on either confirmation and extension of knowledge, fine tuning process conditions and for the development metallurgical algorithms.

These metallurgical test programs using samples and cores extracted during exploration drilling have included;

- Comminution test work

  Comminution test work has been carried out in 2012, 2015 and 2021 at ALS Metallurgy in Perth. A comprehensive range of parameters was tested including Unconfined Compressive Strength (UCS), Crusher Work Index (CWi), Bond Ball Mill Work Index (BBWi), Bond Rod Mill Work Index (BRWi), SAG Mill Comminution (SMC) and Abrasion Work Index (Ai) tests. Further comminution test work is planned for 2023.

- Bulk sample preparation

  A bulk sample was produced in order to generate:

  - Rougher concentrate for IsaMill and HIG Mill signature plots and a Metso Jar test for tower mill sizing
  - Final concentrate for thickener and filtration test work
  - Final concentrate for transportable moisture limit, self-heating, corrosiveness and toxicology testing
  - Final tailings for thickener, geochemical and geotechnical test work

- Primary Grind Optimisation

  At the conclusion of the variability and bulk test work, further work was conducted to determine whether the primary grind size could be coarsened further. Primary grind P80 sizes of 125µm (baseline), 150µm and 180µm were tested using the Flowsheet Confirmation Composite.

- Regrind Optimisation

  Following the primary grind size optimisation, the coarser primary grind size was used in regrind optimisation test work. This test work was conducted to determine whether further uranium or bismuth rejection could be achieved.

  Rougher concentrate from the bulk flotation tests was tested at the University of Queensland using the M4 IsaMill, and also dispatched to Metso Outotec for HIGmill and Jar mill testing.

- Thickener test work

  Wet solid samples of tailings and final concentrate from the bulk test work were sent to Metso Outotec for thickener testing. Concentrate filtration test work was conducted by both Metso Outotec and Matec. Metso Outotec tested both its Outotec Larox Pressure Filtration (PF) and the Outotec Larox Fast acting Filter Press (FFP) units.

  Mineralogical assessment was performed using QEMScan PMA on a combined sample of final concentrate from the 2018 ALS programme, produced from the locked-cycle testing on the Bulk composite.

- Contaminant Reduction

  A program was conducted to assess the deportment of contaminants such as uranium, fluorine and bismuth minerals and the options available for rejection.

- Deposit composites

  Deposit composites were blended into a bulk composite to represent the life of mine blend, in order to:

  - Investigate a coarser primary grind size target
  - Investigate finer regrind sizes
  - Investigate a rougher concentrate bypass
  - Conduct a rougher scalper Jameson cell simulation
  - Conduct a rougher and cleaner Jameson cell simulation
  - Investigate the impact of site water on recoveries and reagent usage

Sedgman was engaged in 2022 to collate all recent and historical results into a single comprehensive report. Metallurgical performance predictions were then developed by Sedgman taking into consideration all test work results since 2012. Data has been sourced from over a dozen metallurgical programs.

2021 / 2022 focussed on locked-cycle testing to update and improve these metallurgical algorithms. The metal recovery algorithms developed by Sedgman, combined with the production schedule, forecast an average metal process recovery of 92.2% for copper, 71.3% for silver and 51.2% for gold.

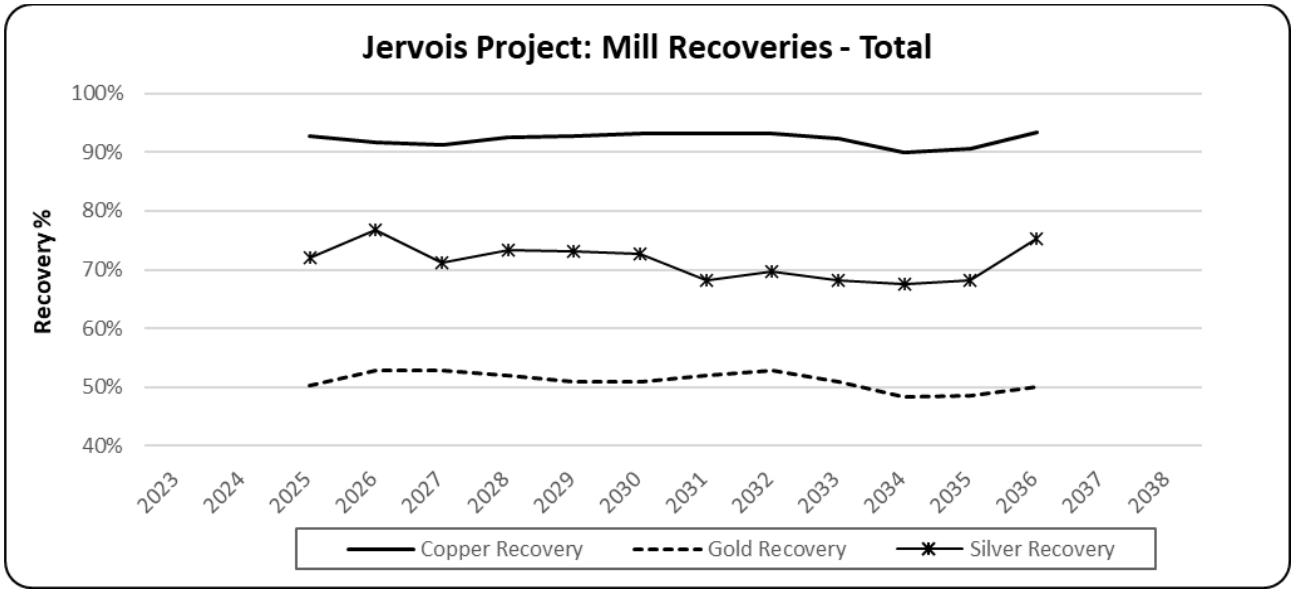


Figure 1-19 – Metallurgical Recoveries – Annual (Financial Year) Basis

1.12 PROCESS PLANT

The process plant design is a conventional concentrator for copper with gold and silver by-products. The design consists of mobile jaw crushing, semi autogenous and ball mill grinding, rougher flotation, regrinding and cleaner flotation followed by concentrate thickening and dewatering by filter press. Product concentrate is stockpiled within a purpose-built covered concentrate holding facility prior to being loaded into side tipping bulk carrier road trains for delivery to Mt Isa. The plant design is based on a 200t/hr throughput rate for 1.6Mtpa processing capacity.

The summary flowsheet developed for the plant is shown in Figure 1-20.

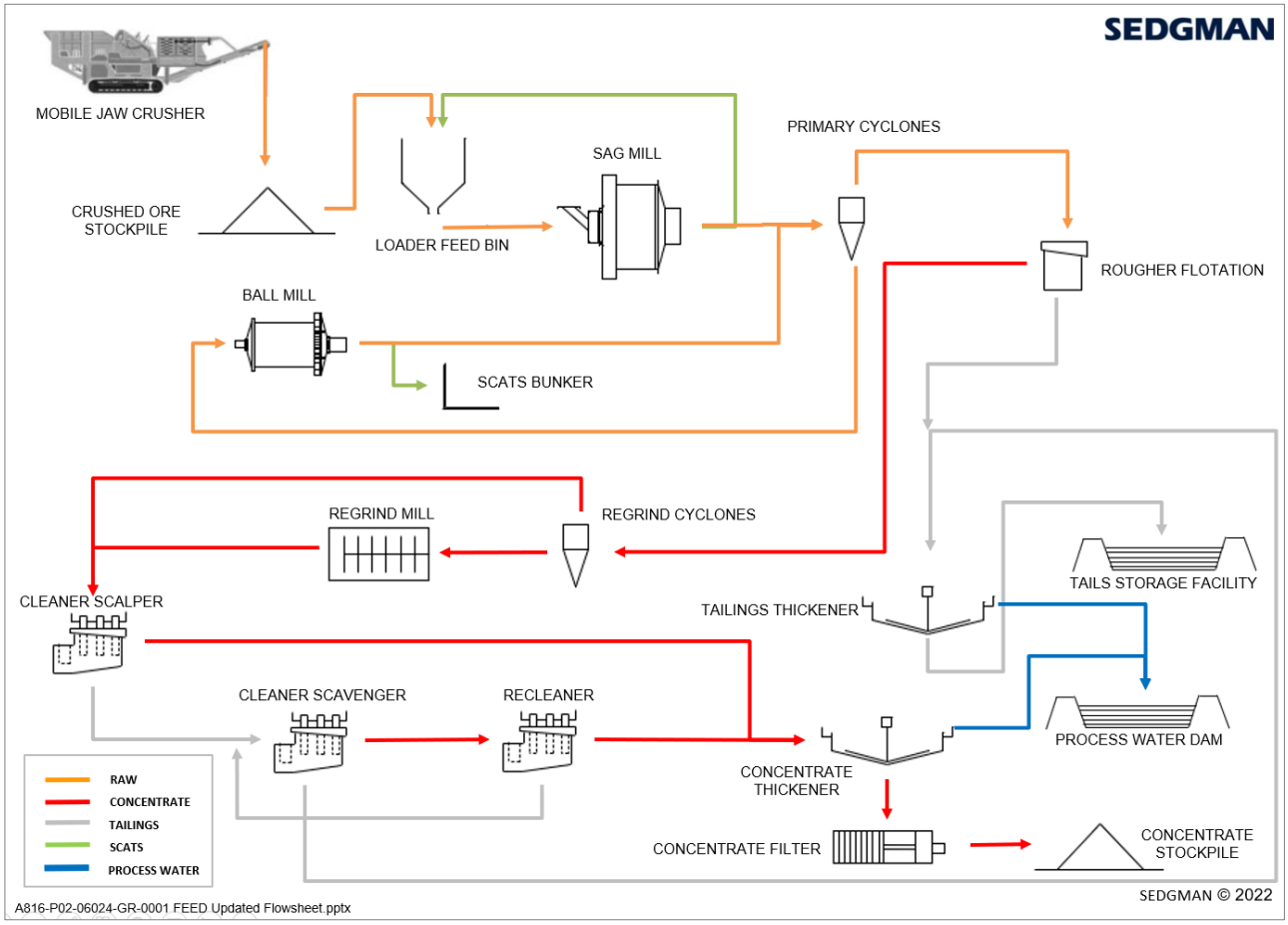


Figure 1-20 – Flowsheet for Process Plant

The process plant design, delivery schedule and cost estimate have been updated and refined based on independent peer review. Furthermore, multiple iterations of the mine plan have been completed, with Sedgman honing the process plant design to provide incremental improvements in Project value.

The processing plant will be operated under an operating contract that includes providing the management, operating labour and plant maintenance. The operating contract will include key performance measures targeting plant throughput, metallurgical performance and concentrate quality and despatch performance.

The copper concentrate produced over the life of the operations (1,029 dry kmt) contains, on average, 27% copper (278Kt Cu), 284g/t silver (9,394koz Ag) and 2.1g/t gold (67.6koz Au).

Life of mine average Bismuth concentration, in concentrate, is forecast to average 2,886ppm (0.29%). Bismuth is the only element in the concentrate that is forecast to be penalised above a threshold limit contained in the Glencore offtake contract. The financial penalty applied equates to approximately 1% of the gross copper revenue.

A 3D view of the plant arrangement is provided in Figure 1-21.

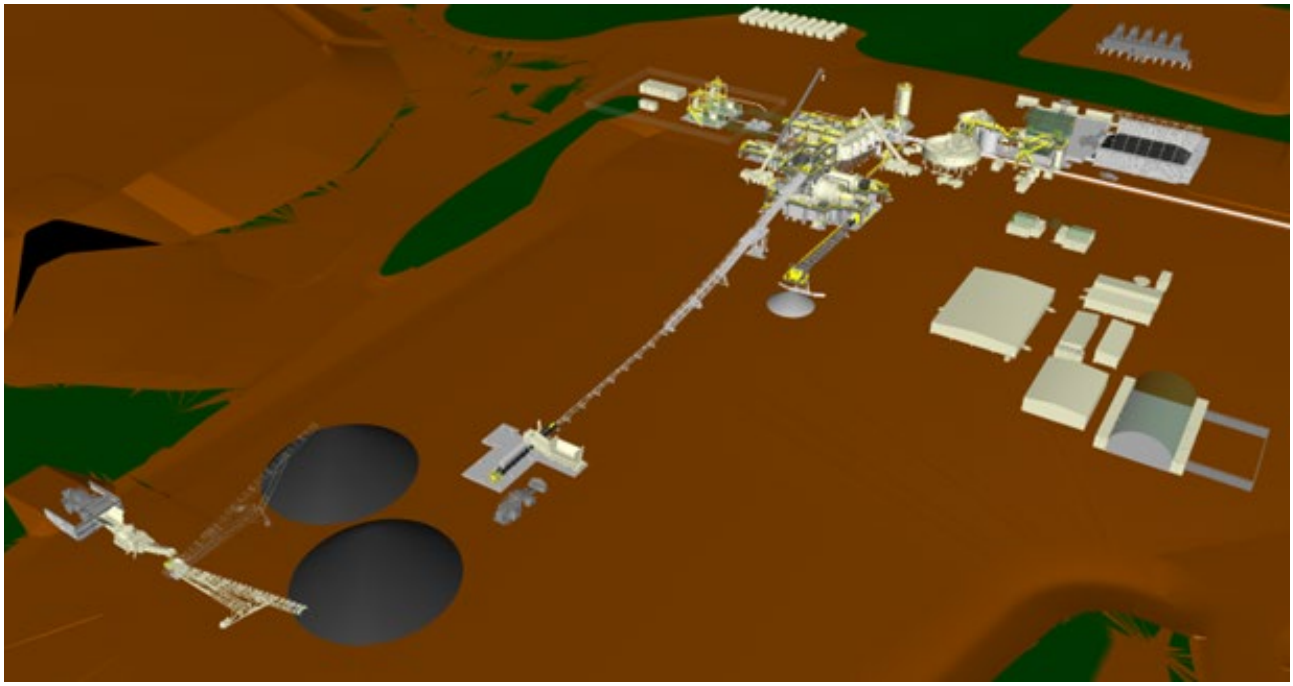


Figure 1-21 – Process Plant Layout

1.13 CONCENTRATE OFFTAKE AND HAULAGE

Copper concentrate (which includes recovered copper, gold and silver) will be sold to the Glencore International AG (**Glencore**) smelter in Mt Isa. A high-level outline of the key aspects of the agreement is as follows:

- The agreement is for the sale of all concentrate produced from the Project for a minimum term of five full calendar years after commencement of commercial production. The sale agreement is evergreen and will continue beyond the minimum term until either party terminates it by giving two years' prior notice.
- The sale price for the copper concentrate is tonnage based and calculated by reference to the LME cash settlement price for copper, with silver and gold credits (subject to minimum 'payable' limits). The sale price includes adjustments for treatment, refining and treatment charges, penalties associated with impurities above agreed threshold values, and other adjustments.
- By-product credits for the gold and silver in the concentrate will be paid (within certain contractual limits) in addition to payable copper.
- A number of penalty elements are identified in the agreement that include bismuth, fluorine and uranium. There are no rejection criteria included in the agreement. Bismuth is the only element foreseen to exceed defined threshold levels and be penalised.
- The agreement is subject to other customary terms and conditions, including processes for assaying, weighing, sampling and moisture determination in relation to the concentrate, and contains relevant force majeure clauses.
- The details of the Glencore agreement are commercially confidential.

Copper concentrate will be transported from the Project to Mt Isa in conventional, covered bulk haulage trailers in road train configuration (approximately 100 tonne payload). Annual concentrate haulage planned is around 80,000 – 120,000 (wet) tonnes, see Figure 1-22.

Truck haulage from site is currently approved for up to 150,000 tonnes per annum via the Plenty Highway. Modification to this approval to haul east is to be processed. Haulage from the Northern Territory / Queensland border to Mt Isa is to be progressed in consultation with Glencore, affected parties and the Queensland Government.

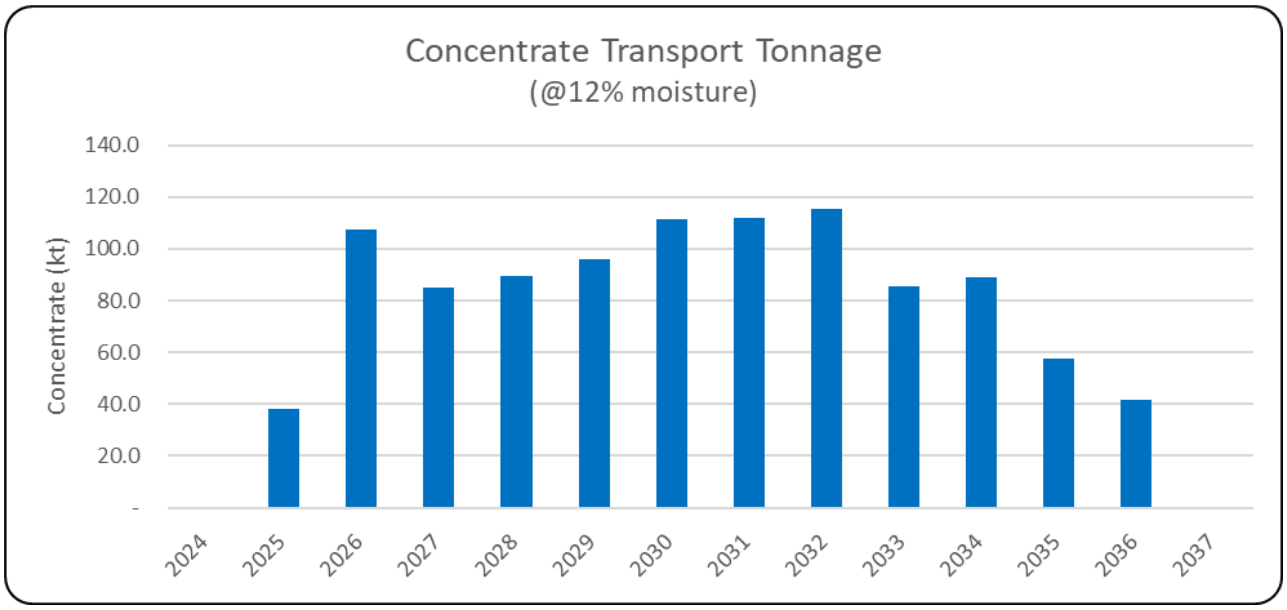


Figure 1-22 – Concentrate Deliveries to Glencore - Annual (Financial Year) basis

The 488km concentrate haulage route between the Project and Mt Isa is shown in Figure 1-23 below and consists of 213km along the Plenty Highway, planned to be sealed as part of the Outback Way initiative, a 187km unsealed section between the Plenty Highway and National Road 83 (Bourke Developmental Road) which is sealed for 88km through to Mt Isa.

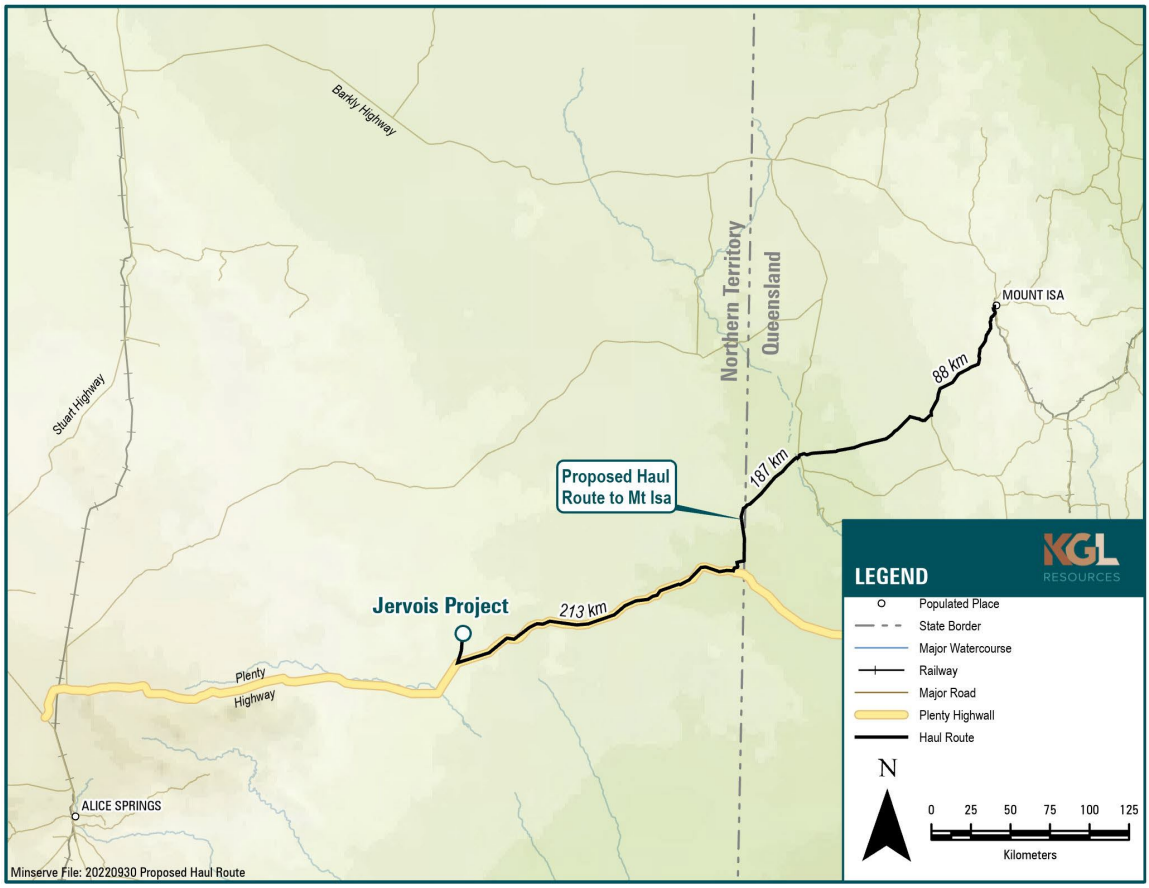


Figure 1-23 – Haulage Route to Mt Isa Smelter

1.14 TAILINGS MANAGEMENT

The tailings storage facility (**TSF**) will consist of one cell and will be constructed during the initial project development and then raised in stages as capacity is required. TSF construction will utilise mine waste sourced from portal development, mining pre-strip, diversion drain excavation and locally borrowed soil materials. The TSF design is sufficient to contain all tailings for the life of the Project. The TSF basin area will have a compacted soil liner overlain by high density polyethylene (HDPE) to achieve an appropriate level of seepage control and an underdrainage layer to capture potential seepage which will be returned to the TSF or the process water dam.

Tailings will be discharged into the facility onto an active beach at regular intervals from the external embankment. This will locate the pond in the TSF such that water can be removed via a decant tower extraction system. This water will be pumped to the process water dam for re-use in processing.

The TSF has been designed in accordance with design criteria applicable to 'High C' category drawn from the Australian National Committee on Large Dams (ANCOLD) guidelines.

An Acid Mine Drainage Management Plan has been developed for the Project and includes strategies for the management of potential acidic forming waste rock. Potentially low pH water from the underground and open-cut dewatering operations will be contained on site in the process water dam. The Acid Mine Drainage Management Plan will continue to be refined with additional sulfur block and geochemical modelling.

1.15 POWER SUPPLY

A dedicated hybrid power supply will be delivered by an independent power producer (**IPP**) under a build, own, operate and maintain (**BOOM**) contract. The hybrid power station has been sized to provide sufficient capacity for underground, processing plant and support services. Peak power demand for the operating phase has been modelled at 13MW from mid-2033 when all 4 underground mines are operating concurrently. The hybrid power generation facility includes:

- an 8MW solar PV array
- an 18MW wind farm
- a 10MW (5MWHr) battery energy storage system (BESS)
- 13 x 1MW containerised diesel-powered power plants

The BOOM contract with the IPP will also include the requirement to deliver the switch-rooms, control systems and transformers. Project wide power distribution and step-down transformers will be delivered under a separate contract.

Engagement with IPP candidates has supported the assumption that power will be purchased via a Power Purchase Agreement arrangement under an agreed tariff per kilowatt-hour with no upfront capital charge to KGL (upfront capital costs are recovered by the IPP through the tariff). The IPP tariff will be inclusive of diesel costs provided by KGL. The low marginal power cost (post installation) of the wind and solar generators encourages use of renewable power and as a result, both the IPP and KGL commercial drivers aim at minimising power generation carbon emissions.

It is projected that most of the Project's electricity consumption will be provided by the renewable wind and solar sources, minimising diesel consumption for power generation.

1.16 WATER SUPPLY

Site water demands include those for the process plant, dust suppression, underground mining equipment demands, potable water and for general use. Process plant water will recycle through the Process Water Dam (**PWD**) which will also accept incoming water from mine dewatering and other water nodes such as sediment ponds. The 50ML PWD is located between the process facility and the TSF. Captured rainfall on the Project area or water from dewatering pits and underground workings will be collected in sediment ponds and reused to reduce raw water usage.

Raw water requirements are to be sourced predominantly from the Lucy Creek bore field approximately 20km to the north of the main Project site. The Lucy Creek bore field has regulatory approvals in place up to a maximum extraction rate of 1,594 ML per annum. Potable water will also be sourced from the Jervois Dam to the west of the MIA, which will also serve as a raw water source.

Peak water demand on site is expected to be 3.5ML per day, while water approvals from the Lucy Creek bore field and the Jervois Dam equate to 4.6ML per day. This provides approximately 25% excess capacity.

1.17 AIRSTRIP & CAMP

Construction and operational personnel will fly between the Project and Alice Springs commercial airport that is serviced by several commercial airlines from all major Australian capital cities.

Air transport is available directly between Alice Springs and the gravel surfaced Bonya aerodrome which is located approximately 17km from the Project site. The Bonya aerodrome will be upgraded to include a turning bay and a hold down apron such that suitably sized aircraft can be accommodated. The apron will be constructed using materials available locally to the airstrip and suited to turbo-prop aircraft. The upgraded aerodrome will be shared with other stakeholders.

Personnel numbers fluctuate through construction into operation. Accommodation requirements are based around the peak personnel requirements (approximately 200 personnel) during Project development. The existing exploration camp will be upgraded to accommodate 60 personnel while a new permanent camp consisting of 200 rooms will be constructed.

A contractor will be engaged to design, construct and install all site accommodation including the supporting infrastructure. This will include the exploration camp upgrade and permanent camp. Development of the camp has been included in the Project pre-production capital.

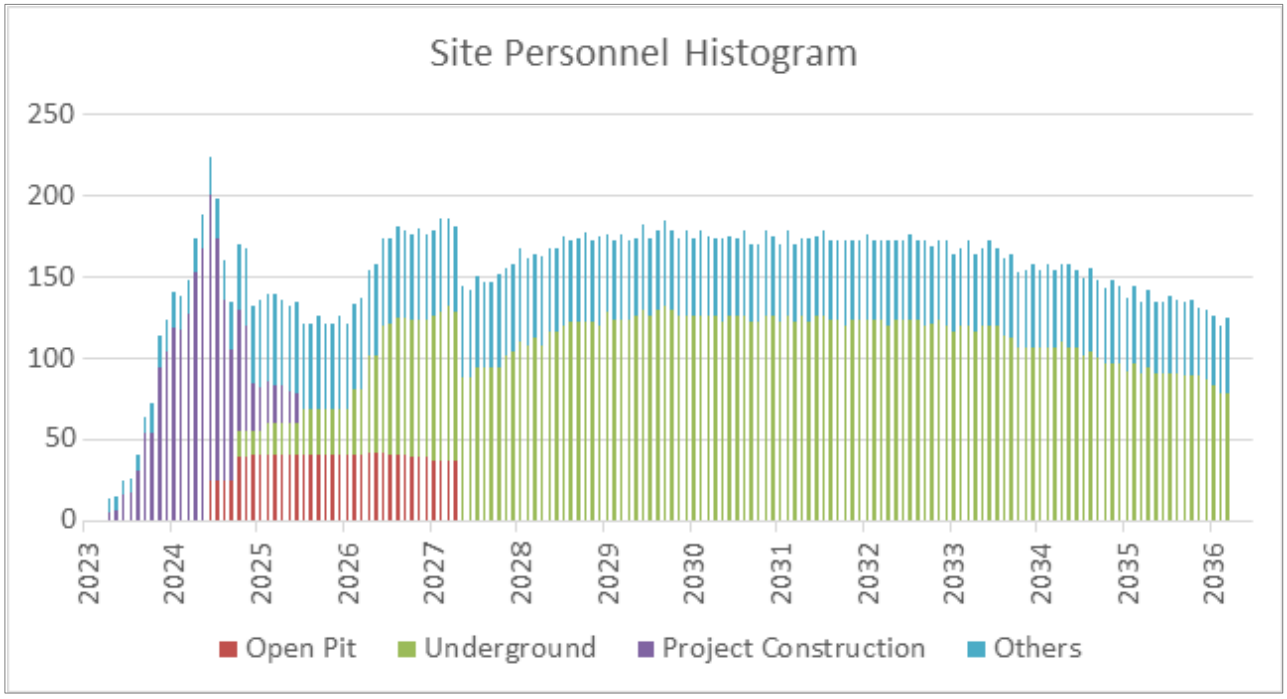


Figure 1-24 – Monthly camp occupancy (number of people)

1.18 FORWARD WORK PLAN

KGL is prioritising the establishment of a project management team to support the delivery of the Project, primarily via major contract packages. The KGL team will be supported by engineering and project management capability from a project management contractor.

The immediate task for the project management team will be to deliver a package of executable contracts for site construction and operation that will underpin project financing arrangements. KGL expects to have the contracts and funding arrangements ready to inform a Final Investment Decision (**FID**).

Key activities for the major contracts prior to FID are competitive tendering of work packages to optimise costs and the setting of contract terms that will support financing and ongoing operations:

- EPC delivery and commissioning of the process plant
- Ongoing operations of the process plant
- Concentrate haulage
- Open-cut mining contract
- Underground development contract
- Infrastructure early works contracts (power supply, water supply infrastructure, camp and civil works)

KGL will be undertaking an exploration program of 40 holes with the express aim of upgrading the classification of Mineral Resources in the Reward open-cut and Marshall underground areas. The objective will be to increase the proportion of Proven and Probable Reserves in the first 3 – 5 years of the Project life, and also reduce the Inferred Resources within the overall mine schedule.

Figure 1-25 below shows the construction project timeline to first concentrate production.

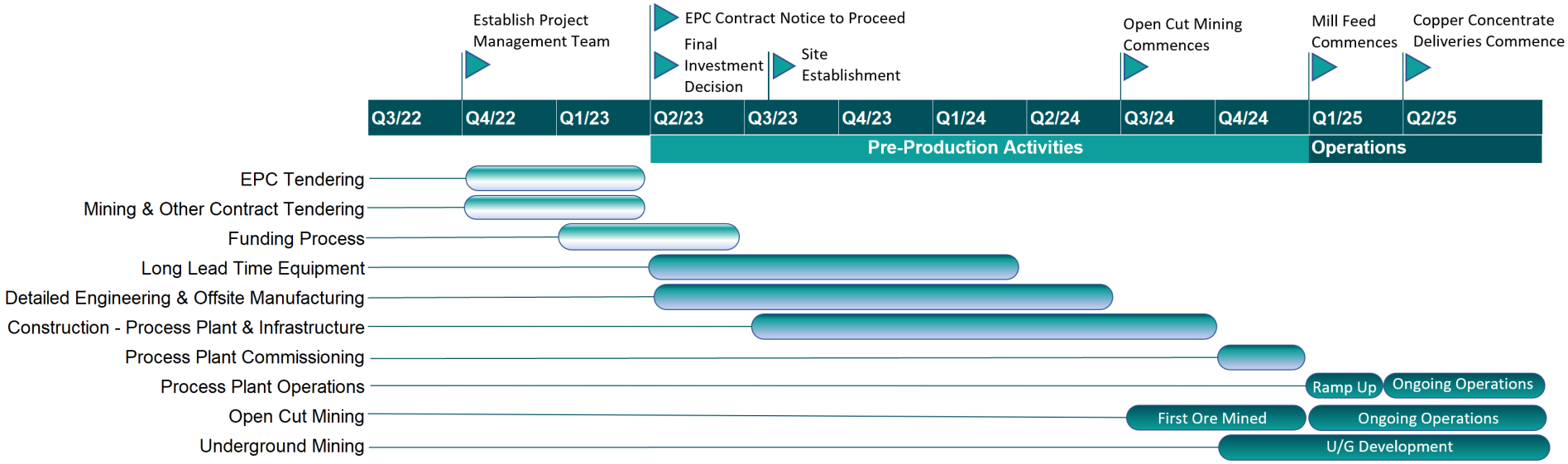


Figure 1-25 – Project Timeline

1.19 PROJECT FUNDING

The availability of funding to support the capital requirement for the development of the Project has been assumed in the FS. The costs associated with project financing are not considered in the Project base case model, which is ungeared.

The total financing requirements for the Project will be approximately $387 million (excluding interest and fees payable). This funding is to cover; Project construction capital; operating costs incurred during the construction and commissioning period, and working capital requirements.

Funding is proposed via a mix of equity, circa $150 - $200 million (40 – 50%) with the remainder via secured Project debt. The equity portion of funding will be raised first, as a condition precedent to raising the Project debt financing.

The financial modelling indicates that a debt sizing of $200 - $250 million (50-60%) should be achievable for the Project. The debt would likely be funded through secured debt with a syndicate of banks, private or government lenders with tenors of between 4 and 8 years. Fees payable will include equity capital raising costs, financier due diligence and legal costs, and facility, draw down, and commitment fees.

1.20 RISKS

KGL has developed a comprehensive risk register for the Project to identify and address reasonably foreseeable risk aspects (actual or potential) relevant to KGL's corporate entities and the Project's development and ongoing operations.

This framework aligns with the requirements of AS ISO 31000:2018 and enables the integration of risk management into business activities and key decision-making processes.

The following key risks have been identified to deliver the Project on time and within budget.

Financing not available – Although it has been assumed that Project funding will be available to support Project development, there is a chance that this will not eventuate. The robust Project financial returns exhibited in this FS are a key mitigation to the risk of not securing Project finance, as are the tendering activities with the express intent of tailoring key contract terms to suit Project financing requirements.

Adverse cost escalation – The current high inflation environment represents a risk to Project cost escalation. Key mitigation activities include tendering key contracts prior to FID and providing sufficient pre-production capital contingency. Additionally, commencing operations with open-cut mining simplifies Project development and reduces the risk of cost escalation through scope changes and/or Project delays.

Skill shortage during construction – The low Australian unemployment rate and national skills shortage creates the risk of KGL's contractors being unable to attract and retain skills to develop and operate the Project. The key mitigation is the selection of suitable contractors with existing capability and capacity to develop and operate the Project.

The following are business-wide risks have been identified as having the potential to affect delivery of the Project.

Fluctuations in Copper Price and Australian Dollar Exchange Rate – The copper mining industry is competitive. There can be no assurance that copper, silver and gold prices will be such that KGL can mine its deposits at a profit. Copper, silver and gold prices fluctuate due to a variety of factors including supply and demand fundamentals, international economic and political trends, expectations of inflation, currency exchange fluctuations, interest rates, global or regional consumption patterns and speculative activities. These fluctuations were exacerbated by the worldwide spread of the COVID-19 virus. Similarly, demand and supply of capital and currencies, forward trading activities, relative interest rates and exchange rates and relative economic conditions can impact exchange rates.

Macro-Economic Risks – In 2022, the world continues to recover from the pandemic phase of COVID-19, with global supply chains, labour and equipment shortages still being materially affected, and a global recession for 2023 is predicted by many central banks and market analysts. Inflationary pressures for appropriately skilled labour, oil and capital items are being seen across many industries, including the mining industry. The continuing conflict between Ukraine and Russia may also continue to adversely affect capital markets and cause spikes in materials prices, particularly diesel prices, in the short term.

Regulatory Risk – KGL's operations are subject to various Commonwealth, State and local laws and plans, including those relating to mining, prospecting, development permit and licence requirements, industrial relations, environment, land use, royalties, water, native title and cultural heritage, mine safety and occupational health. Approvals, licences, and permits required to comply with such rules are subject to the discretion of the applicable government officials. No assurance can be given that KGL will be successful in obtaining or maintaining such approvals, licences and permits in full force and effect without modification or revocation. To the extent such approvals, licences and permits are required and not retained or obtained in a timely manner or at all, KGL may be curtailed or prohibited from continuing or proceeding with production and exploration. KGL's business and results of operations could be adversely affected if applications lodged for exploration licences are not granted.

Mining and exploration tenements are subject to periodic renewal. The renewal of the term of a granted tenement is also subject to the discretion of the relevant Minister. Renewal conditions may include increased expenditure and work commitments or compulsory relinquishment of areas of the tenements comprising KGL's projects. The imposition of new conditions or the inability to meet those conditions may adversely affect the operations, financial position and/or performance of KGL. It is also possible that, in relation to tenements which KGL has an interest in or will in the future acquire such an interest in, there may be areas over which legitimate common law native title rights of Aboriginal Australians exist. If native title rights do exist, the ability of KGL to gain access to tenements (through obtaining consent of any relevant landowner), or to progress from the exploration phase to the development and mining phases of operations, may be affected. KGL has a registered Indigenous Land Use Agreement with the traditional owners for its Jervois Copper Project.

A key mitigation strategy is the monitoring of compliance with these obligations that KGL has, to ensure it is across and complies with all its legal and moral obligations in regard to its licenses and agreements.

Environmental and Climate Change Risk – The operations and activities of KGL are subject to the environmental laws and regulations of Australia. As with most exploration projects and mining operations, KGL's operations and activities are expected to have an

impact on the environment, particularly if advanced exploration or mine development proceeds. KGL attempts to conduct its operations and activities to the highest standard of environmental obligation, including compliance with all environmental laws and regulations. KGL is unable to predict the effect of additional environmental laws and regulations which may come into effect in the future, including whether any such laws or regulations would materially increase KGL's cost of doing business or affect its operations in any area. However, there can be no assurances that new environmental laws, regulations, or stricter enforcement policies, once implemented, will not oblige KGL to incur significant expenses and undertake significant investments, which could have a material adverse effect on KGL's business, financial condition and performance.

The operations and activities of KGL are subject to changes to local or international compliance regulations related to climate change mitigation efforts, specific taxation or penalties for carbon emissions or environmental damage, and other possible restraints on industry that may further impact KGL and its profitability. While KGL will endeavour to manage these risks and limit any consequential impacts, there can be no guarantee that KGL will not be impacted by these occurrences. Climate change may also cause certain physical and environmental risks that cannot be predicted by KGL, including events such as increased severity of weather patterns, incidence of extreme weather events and longer-term physical risks such as shifting climate patterns. All these risks associated with climate change may significantly change the industry in which KGL operates.

Other material business risk exposures associated with holding an investment in KGL's securities are disclosed in the 30 June 2022 Director's Report, which forms part of KGL's latest annual report for the period ended 30 June 2022.

1.21 VALUE IMPROVEMENT OPPORTUNITIES

There have been a number of opportunities identified that will continue to be progressed prior to and after FID. These value improvement opportunities, which are not included in the FS, have the potential to significantly improve the value of the Project.

Competitive Tendering of major contracts: The forward work plan leading to FID is to competitively tender the major service and supply contracts with an expectation of gains against the input assumptions for the FS. The preferred construction and mining contracts are targeted to those companies that can further mitigate the delivery risks, and provide safe management at competitive costs.

Unit cost improvement via optimising underground mining thickness: Underground operations have been planned around standardised equipment sizing, which results in a minimum mining thickness slightly larger than the resource thickness, in some orebodies. This causes higher dilution and higher operating costs which can be reduced by alternate equipment selection that will be resolved during detailed contract negotiations with the preferred underground mining contractor. This potential upside from reduced dilution has not been included in the Project FS modelling.

Offsite transport cost reductions: The cost to transport concentrate from the Project, or consumable to the Project, can be reduced via efficiency gains as a result of planned and budgeted road upgrades and surfacing.

In addition, sourcing some consumables under a back-haul arrangement from Mt Isa is likely to reduce the cost of deliveries, currently costed from Darwin.

It is also intended to pursue the use of PBS super quad road trains for concentrate haulage to increase payload from 100 tonnes per truck to 112.5 tonnes per truck. This could potentially improve concentrate transport cost by up to 10%.

Capital efficiency improvement via exploration to extend mineral resources: All Mineral Resources (Bellbird, Reward and Rockface) included in the FS remain open at depth, while Reward remains open along strike. Further exploration drilling could result in additional Mineral Resources has the potential to extend the mine life and provide significant upside to the Project.

Margin improvement via polymetallic recovery of lead and zinc: Previous studies on the Project have investigated the extraction of Lead and Zinc mineralisation. Lead and Zinc mineralisation has continued to be identified in recent exploration analysis. Further work is planned to characterise the potential for economic polymetallic recovery.

1.22 ESG

KGL's financial and operational success in developing the Project will be underpinned by effective Environmental, Social and Governance (**ESG**) practices. Accordingly, KGL has been focussed on putting in place management systems and governance processes throughout 2021 and 2022.

KGL recognises that the United Nations' Sustainable Development Goals (**SDGs**) provide a meaningful foundation upon which to strive towards sustainable development. KGL has identified which SDGs most closely align to the KGL values, strategic objectives and operational activities.

Figure 1-26 - SDGs Most Important to KGL and Project Stakeholders

By supplying responsibly produced copper, KGL will be a positive contributor to the world well beyond the operational boundaries of the Project. Part of responsible production means purposefully and deliberately contributing to relevant SDGs within the host communities and across the value

chains. This will be done while seeking to mitigate potential impediments to their realisation created by the development of the Project.

Further information about KGL's approach to sustainably developing and operating the Project can be found in the 2021 KGL Sustainability Report (see www.kglresources.com.au).

1.23 COMMUNITY

The traditional custodians of the land in the southern NT are represented by the Central Land Council (**CLC**). The CLC is one of four land councils in the NT. The Project is located in the Eastern Plenty sub-region of the CLC.

In August 2016, formalisation of cooperation with the CLC was achieved and documented in an Indigenous Land Use Agreement (ILUA) between Jinka Minerals Ltd, Kentor Minerals (NT) Pty Ltd (KGL's operating company; the company name was subsequently changed to Jervois Operations Pty Ltd) and the CLC. This ILUA has been registered with the National Native Title Tribunal since May 2017.

The Project is specifically located within the Jervois Pastoral Lease owned by Jervois Pastoral Company Pty Ltd. The Jervois homestead is located approximately 35 km south of the Project, while the Lucy Creek property homestead is approximately 24 km north of the Project.

There are two Aboriginal communities within 20 km of the Project. The Bonya Community is approximately 17 km to the south-west and the Maperte Community is approximately 16 km to the north-east. Bonya currently has accommodation for approximately 80 people. The Maperte Community consists of only two currently unoccupied houses. Other regional community centres include the Atitjere Community, also known as Harts Range, which is located along the Plenty Highway approximately 160 km west of the Project, and the Gemtree Caravan Park, which is located along the sealed section of the Plenty Highway.

Since acquiring the Project in 2011, KGL has formed and maintained a good working relationship with the Bonya community through regular and open communication. KGL also keeps in regular contact with the pastoral leaseholders from Lucy Creek and Jervois.

The Project will provide employment opportunities and increased business opportunities for local suppliers and service providers. Flow-on effects are expected to include the return of people to local communities, education and upskilling of local residents, improved community infrastructure and community benefits through the distribution of sponsorship funds and royalties. Overall, feedback on the Project from stakeholders has been mostly optimistic due to the positive benefits it could bring to central Australia.

KGL considers environmental stewardship an integral part of its business. It is committed to minimising potential environmental impacts and risks associated with its activities at every stage of the Project, from planning through exploration, development, production and ultimately mine closure.

KGL recognises the strong cultural links of local communities to the surrounding environment and acknowledges the community role in KGL's environmental responsibilities.

1.24 REGULATORY APPROVALS

The Project has successfully progressed through numerous regulatory approvals and, most significantly, the authorisation under the *Mining Management Act 2001* (NT).

As part of the Project approvals process, KGL completed numerous environmental assessments and field surveys over several years on key aspects including flora and fauna, archaeology, surface water, groundwater, social impacts and geochemistry. These investigations were used to inform the draft Environmental Impact Statement and associated Supplement Report which ultimately led to the NT Environmental Protection Agency issuing its Assessment Report in September 2019. Subsequently, the NT Minister for Mining and Industry granted Authorisation 1061-01 for the approval of the Project and associated Mining Management Plan (**MMP**) in January 2021.

The Project was self-assessed and referred to the Federal Department of Environment in November 2013. In November 2014 the Project was found not to be a controlled action and no Federal involvement was required in the assessment process.

In accordance with the conditions in Authorisation 1061-01, KGL must comply with, develop and operate the Project in accordance with environmental commitments and safeguards identified and recommended in the Project EIS, the NT EPA Assessment Report 90 and the approved MMP for the Project.

The approved MMP for the Project contains numerous strategies and environmental management plans which have been specifically designed to address and monitor all commitments and recommendations which form part of the Project authorisation. The MMP will be updated and amended as required to reflect changes in Project activities which result in a change to the level of environmental impact or when environmental management strategies are revised. KGL has the personnel and systems in place to achieve commitments to ensure they are met within the required timeframes. Significant progress towards meeting pre-construction requirements has already been made.

KGL has lodged plans for water infrastructure to be installed within existing state gazetted roadways and is waiting for approval of these plans from the NT Department of Infrastructure Planning and Logistics. It is not thought the approval will be unreasonably withheld.

During the early stage of Project construction and prior to first ore processing, approvals for concentrate haulage eastward to Mt Isa will be required.

1.25 RELIANCE ON INDEPENDENT EXPERTS

The Project FS relies upon numerous external consultants and experts for its outputs. Table 1-15 outlines the consultants and contractors engaged by KGL in the development of the FS.

Table 1-15 – Consultants and contractors engaged by KGL for the FS

External Contributor	Study Area
ATCO	Camp supply and installation
Blackcat Civil, RSA Contractors, CMC Group	Civil works cost estimate
Butler Partners	Tailings storage facility, geotechnical investigation, and recommendations
Chartair	Charter air transport
Enernet Global	Build own operate maintain power supply
Entech	Mine geotechnical evaluation
Environmental Geochemistry International	Material geochemical characterisation
Ezyquip Hire	Open-cut mining equipment operating cost estimates
Finalyse	Financial modelling
Flagstaff Consulting Group	Project electrical reticulation and review, logistics and project management, owners team estimates and risk assessment
Kalari, Qube	Concentrate haulage
Macmahon Contractors	Open-cut & underground mining capital and operating cost estimates
Metallurgical testing: Core Resources, ALS AMMTEC, Dunstan Metallurgical Services, Auralia Metallurgy, University of Queensland, Metso Outotec	Metallurgical testing and process plant design data
Mining Associates	Mineral Resources evaluation
Precision Water Resources Engineers	Water supply system
Sedgman	Process plant design, capital and operating cost estimates, civil designs
Xenith Consulting	Open-cut & underground optimisation, design, scheduling, underground ventilation Mining Reserves evaluation

This announcement has been approved by the directors of KGL Resources Limited.

For further information, please contact:

Phone: (07) 3071 9003

Email: info@kglresources.com.au

Competent Person Statement

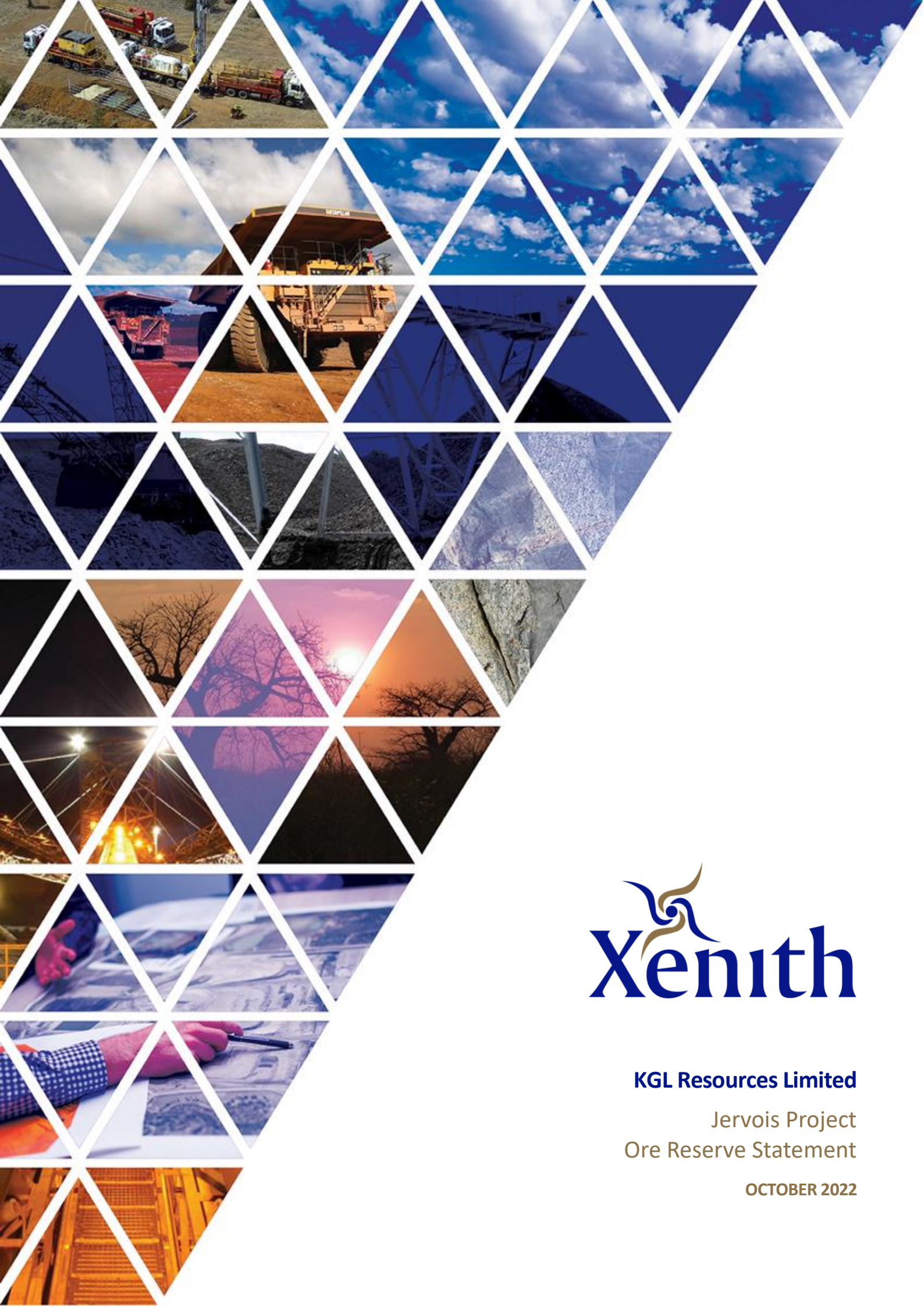
The Jervois Resources information were first released to the market on 14/09/2022 and complies with JORC 2012. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement 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 announcement.

The information in this announcement that relates to Ore Reserves Estimates is based on data compiled by Iain Ross BSc (Hons) Mining, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Ross is a consultant working for Xenith Consulting Pty Ltd who were engaged by the Company to carry out the ore reserve estimate. Mr Ross 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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Ross consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Forward Looking statements

This release includes certain forward-looking statements. The words "forecast", "estimate", "like", "anticipate", "project", "opinion", "should", "could", "may", "target" and other similar expressions are intended to identify forward looking statements. All statements, other than statements of historical fact, included herein, including without limitation, statements regarding forecast cash flows and potential mineralisation, resources and reserves, exploration results and future expansion plans and development objectives of KGL are forward-looking statements that involve various risks and uncertainties. Although every effort has been made to verify such forward-looking statements, there can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. You should therefore not place undue reliance on such forward-looking statements.

Statements regarding plans with respect to the Company's mineral properties may contain forward looking statements. Statements in relation to future matters can only be made where the Company has a reasonable basis for making those statements.



KGL Resources Limited

Jervois Project
Ore Reserve Statement

OCTOBER 2022

COMPETENT PERSON CONSENT FORM

Statement

I, Iain Ross

(Insert full name(s)

confirm that I am the Competent Person for the Ore Reserve Estimate contained in this Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code, 2012 Edition, having more than five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility.
- I am a Member of *The Australasian Institute of Mining and Metallurgy* or the ~~*Australian Institute of Geoscientists*~~ or a ~~'Recognised Professional Organisation' (RPO)~~ included in a list promulgated by ASX from time to time.
- I have reviewed the Report to which this Consent Statement applies.

I am a consultant working for:

Xenith Consulting Pty Ltd

(Insert company name)

- and have been engaged by:

KGL Resources Ltd

(Insert company name)

- to prepare the documentation for:

Jervois Project

(Insert deposit name)

- on which the Report is based, for the period ended:

31st October 2022

(Insert date of Resource Estimate/Reserve Statement)

I confirm that I do not have any relationship with the reporting company that could be perceived by investors as a conflict of interest. I do not have any holdings in KGL Resources Ltd.

I verify that the Report is based on, and both fairly and accurately reflects, in the form and context in which it appears, the information in my supporting documentation relating to the reporting of the Ore Reserves.

Signed_____

EXECUTIVE SUMMARY

Open pit and underground stope optimisations were initially carried out by Xenith Consulting in early 2022 on the Mineral Resource reported for the Jervois Project as issued in November 2020 by Mr Ian Taylor of Mining Associates. Further validations and re-optimisations were undertaken by Xenith Consulting using the most recent Mineral Resource Estimate for the Jervois Project, dated 31st August 2022, again by Mr Ian Taylor of Mining Associates.

A set of open cut and underground mine designs for the Project were developed, and an Ore Reserve Estimate for each open pit and underground mine has been prepared. The Life of Mine schedule physicals were fed into an in-house financial model (prepared by KGL Resources) for costing and analysis purposes. The Life of Mine schedule and associated costings are integral components of the Jervois Project Feasibility Study. The Feasibility Study is the primary source for the Jervois Project Ore Reserve Statement.

The Ore Reserves as of 31st October 2022 are shown in Table ES.1 below:

Table ES.1 – Jervois Project Ore Reserve Statement (31st October 2022)

Open Pit And Underground	Ore Tonnes	Copper Grade	Copper Metal	Gold Grade	Gold Metal	Silver Grade	Silver Metal
Ore Reserves	Mt	%Cu	kt Cu	g/t Au	koz Au	g/t Ag	Moz Ag
Reward Open Pit							
Probable Reserve	2.34	1.73	40.6	0.34	25.7	38.5	2.9
Bellbird Open Pit							
Proven Reserve	1.40	2.07	29.1	0.12	5.2	12.3	0.6
Probable Reserve	0.44	1.12	5.0	0.06	0.9	5.9	0.1
Total Reserves*	**1.84**	**1.84**	**34.0**	**0.10**	**6.1**	**10.8**	**0.6**
Rockface Underground							
Probable Reserve	2.31	3.26	75.3	0.23	17.0	21.3	1.6
Reward Underground							
Probable Reserve	1.82	2.30	41.9	0.64	37.6	30.2	1.8
Marshall Underground							
Probable Reserve	2.98	1.57	46.7	0.23	21.6	43.2	4.1
Bellbird Underground							
Probable Reserve	0.43	1.77	7.7	0.09	1.2	14.2	0.2
Total Reserves	**11.73**	**2.10**	**246.2**	**0.29**	**109.2**	**29.8**	**11.2**

* Bellbird open pit design includes an Inferred tonnage (0.01 Mt) which is included in the Life of Mine schedule. Metal tonnage and grade, but any associated metal content (1.28% Cu, 0.02 g/t Au and 11.1 g/t Ag) associated with the Inferred portion of the orebody has been removed from the stated Ore Reserves for the Bellbird open pit.

Notes:

- **Quantities and grades in all tables may not add exactly due to rounding or weighting.**
- Underground designs include Inferred tonnage which is included in the Life of Mine schedule. Inferred tonnages and associated metal content has been removed from the stated underground Ore Reserves.
- The Ore Reserve (including Inferred tonnes) was fully cost examined against expected revenue from the Measured and Indicated tonnages only, based on recovery assumptions, for all open cut and underground mines proposed, as validation for inclusion in the entirety of the Jervois Project Ore Reserves. This ensures that Inferred tonnage contained within the designs can be extracted profitably, even if no value is ascribed to the Inferred material. This eliminates the need to revise mine designs for reporting purposes.
- Commodity Price and Exchange Rate assumptions used for the Reserves (as provided by KGL Resources) are shown in Table ES.2 – Ore Reserve Estimation Metal Price Assumptions, below.

Table ES.2 – Ore Reserve Estimation Metal Price Assumptions

	US$
Copper (t)	8,818
Gold (Oz)	1,850
Silver (Oz)	22.80
Exchange Rate (US$/AU$)	0.70

All dollar figures in this report refer to Australian Dollars unless specifically indicated otherwise (e.g. US$).

Commodity prices used in the estimation of the Ore Reserves were provided by KGL Resources and are considered in line with reputable studies and consensus long term pricing (as sourced in mid-2022). Details can be reviewed in the Jervois Project Feasibility Study.

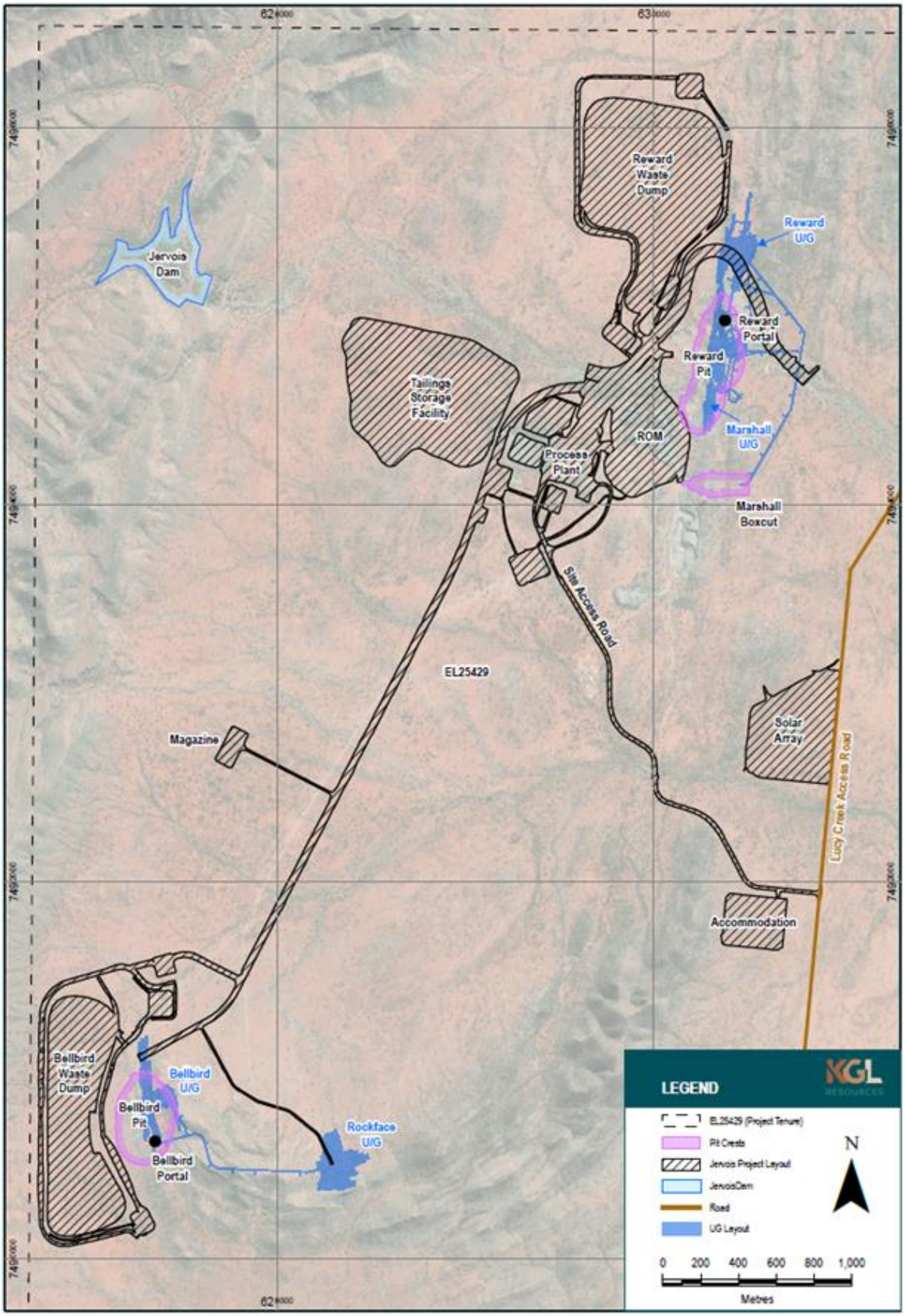
The assumptions used are those proposed within the Jervois Project Feasibility Study. There are opportunities for further optimisation following completion of the Feasibility Study as the project progresses to the Execution Phase, as more data becomes available - with the finalisation of the Feasibility Study and with ongoing drilling of the Jervois resources (resource definition, project development and near mine exploration).

Of the Mineral Resource (23.8 Mt @ 2.02 %Cu containing 481.2 kt Cu), approximately half has been converted to Ore Reserves (11.7 Mt @ 2.10 %Cu containing 246.2 kt Cu).

A total of 51% of the copper metal reported in the Mineral Resource is contained within the Proven and Probable Reserves. A total of 49% of the total tonnage reported in the Mineral Resource is converted to Proven and Probable Reserves.

A total of 4.9 Mt at 1.1%Cu of Inferred material (with 0.14 g/t Au and 12.3 g/t Ag) is included in the Life of Mine underground designs, which is expected to be converted to Proven or Probable Ore Reserves with stope definition drilling prior to production.

Figure ES.1 – Relative Location of Deposits – Jervois Project



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DOCUMENT ISSUE APPROVAL

Project & Document No:	Date:
2461KGLR_221027 – KGL Resources – Jervois Project – Ore Reserve Statement	28/10/2022
Title	**Revision No:**
Jervois Project – Ore Reserve Statement	0
Client:	**Status:**
KGL Resources Limited	Draft

	Name	Position	Signature	Date
Prepared by:	Iain Ross	Project Manager & CP		31/10/2022
Reviewed by:	Mark Perquin	Manager (Brisbane)		31/10/2022
Approved by:	Iain Ross	Project Manager & CP		31/10/2022

DISTRIBUTION

Organisation	Attention	No of hard copies	No of electronic copies	Actioned

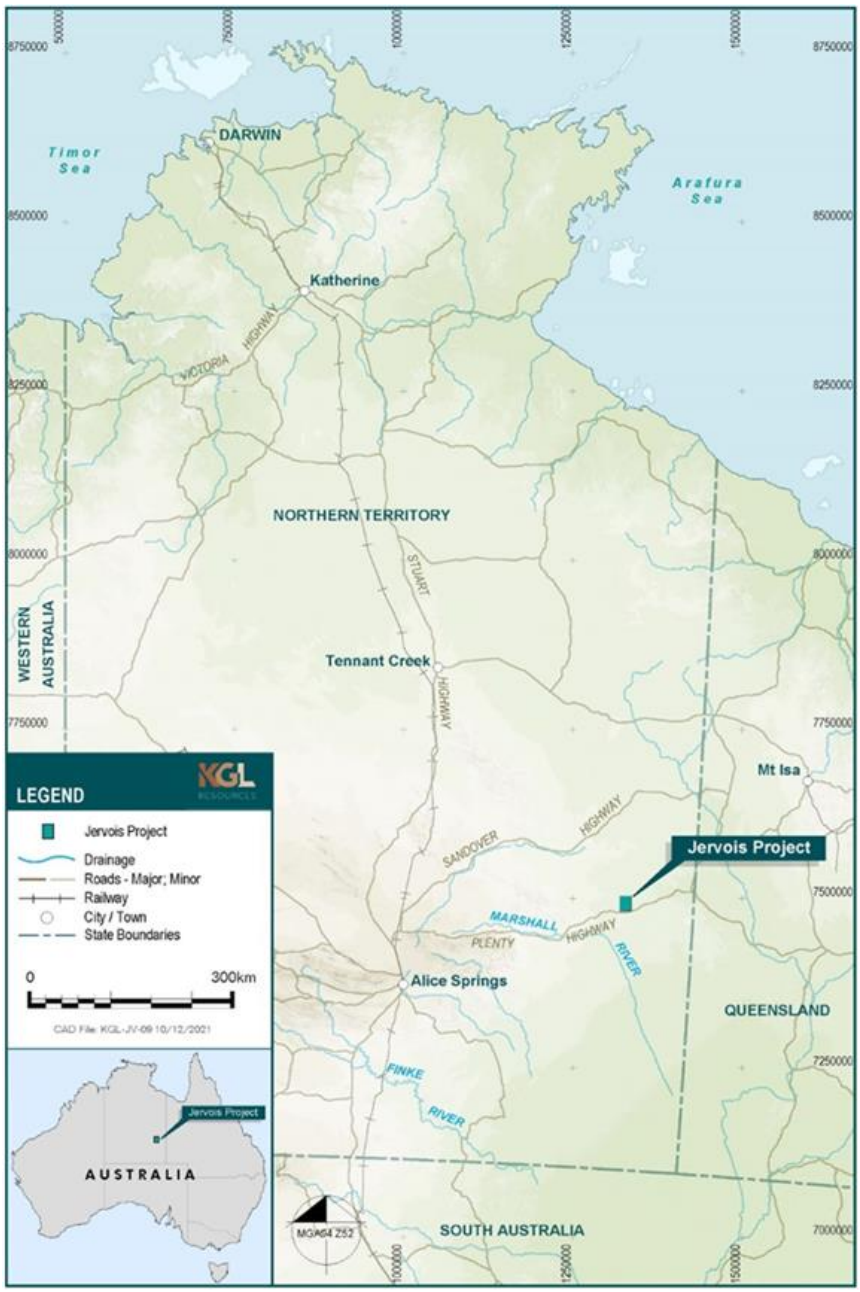
To be initialled and dated by the person who actions the issue of the documents.

1 INTRODUCTION

1.1 Project Description

The Jervois project ('the project') is located in the south-eastern part of the Northern Territory (NT) of Australia, approximately 275 km linearly ENE of Alice Springs (Figure 1.1 below) which is approximately 380 km by road. The project is approximately centred on 22.65°S and 136.27°E. The project is located on the Jervois Pastoral Lease owned by the Jervois Pastoral Company Pty Ltd. (JPC).

Figure 1.1 – Jervois Project Location



KGL Resources Ltd. ('KGL') will develop the project on the basis of extraction of existing and expanded base metal resources primarily targeting **copper** ore within the project area. The project contains significant high-grade copper resources, as well as **silver**, and **gold** mineralisation across the various deposits proposed for mining.

The Jervois project will produce approximately 100,000 tonnes of copper concentrate per year. The copper concentrate will be trucked from the mine site, 488 kilometres by road via the Plenty Highway and National Road 83 (Bourke Developmental Road) to Mt Isa where it will be refined. The Copper concentrate will contain silver and gold by-products that will be extracted during the refining process and credited to KGL under a contract with Glencore International AG.

1.2 Project Tenements

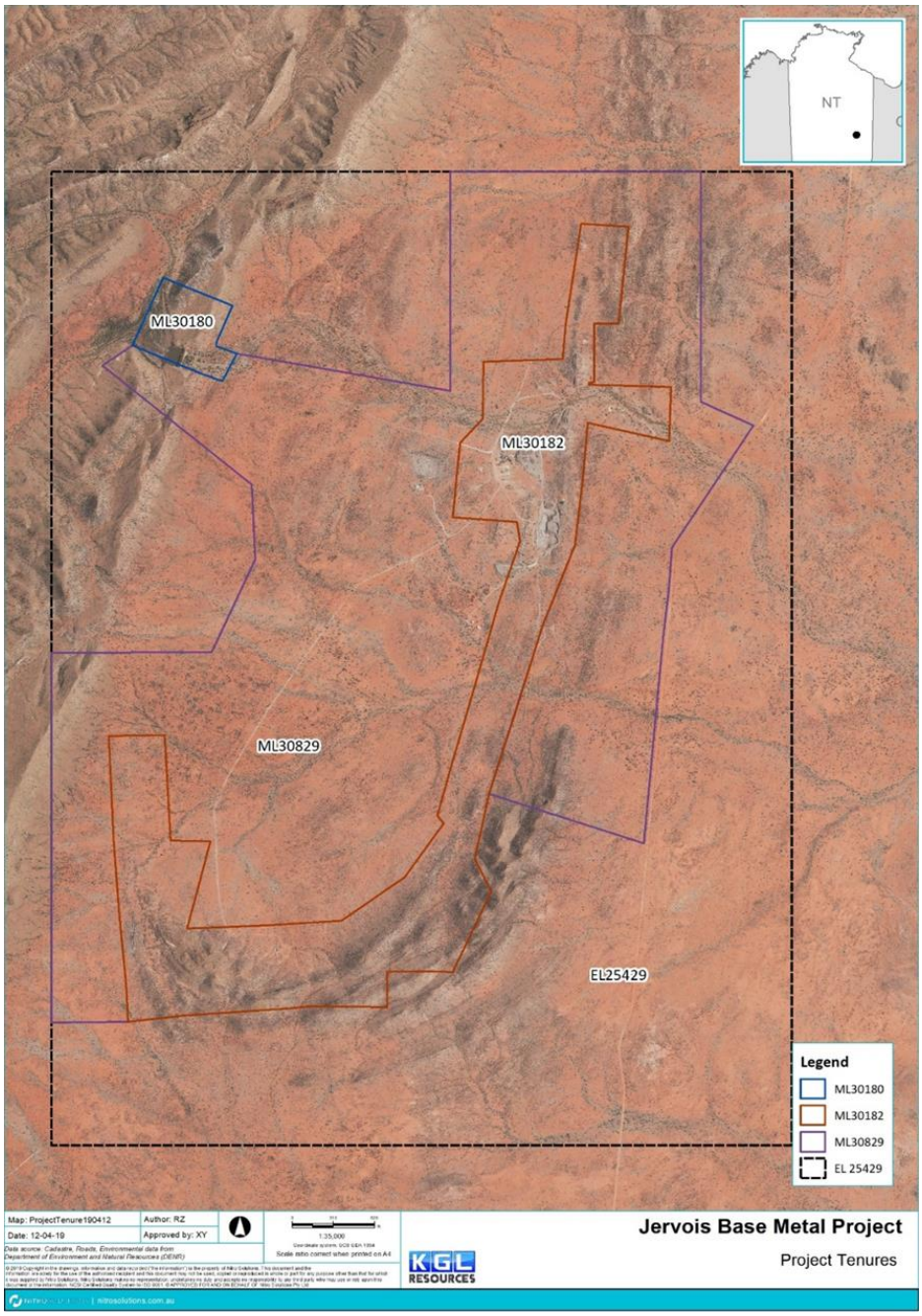
The 3 Mineral Leases (ML30180, ML30182 and ML30829) cover the area containing the current Mineral Resources is shown in Table 1.1 – Details of the Jervois Project Tenure. A fourth Mineral Lease, ML32277 bounds the project's proposed groundwater borefield. The Mineral Leases cover the planned mining/processing infrastructure, along with the proposed location for the accommodation camp.

The Exploration lease EL25429 allows potential for further drilling/discoveries close to the Mineral Leases. No issues with renewals of any of the required leases are evident. All tenements are 100% owned by KGL subsidiary Jinka Minerals Limited (JML).

Table 1.1 – Details of the Jervois Project Tenure

Title ID	Status	Granted Date	Expiry Date	Holder	Holding	Area Units	Area Measure
EL 25429	Granted	02/02/2007	1/02/2023	Jinka Minerals	100%	12	Blocks
ML 30180	Granted	28/01/2014	27/01/2034	Jinka Minerals	100%	33.21	Hectares
ML 30182	Granted	26/03/2014	25/03/2034	Jinka Minerals	100%	481.7	Hectares
ML 30829	Granted	18/08/2017	17/08/2032	Jinka Minerals	100%	1438	Hectares
ML 32277	Granted	27/07/2021	17/08/2032	Jinka Minerals	100%	124.1	Hectares

Figure 1.2 – Jervois Project – Current Tenements

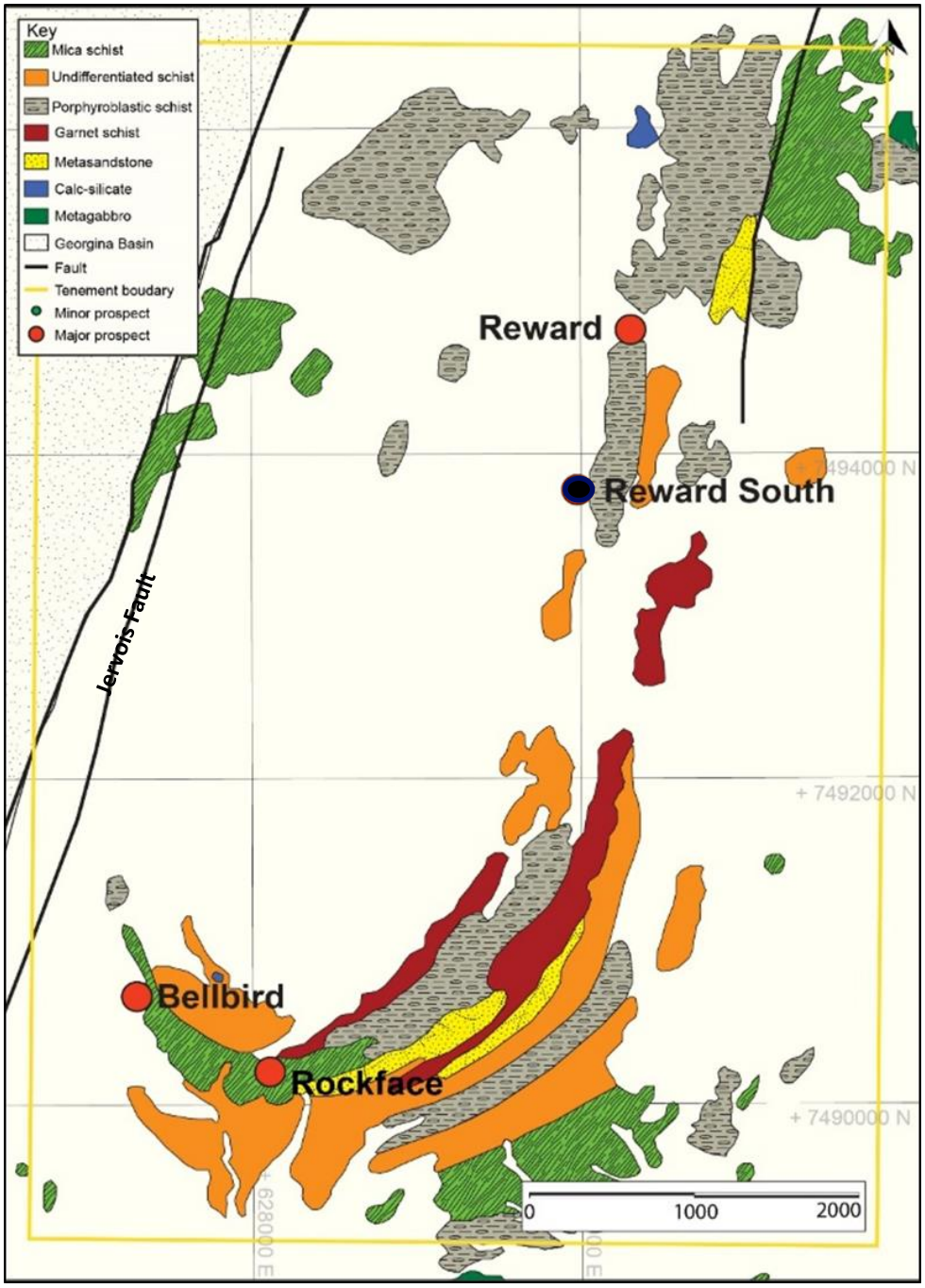


1.3 Geology

The major mineral deposits in the Jervois Project area – Reward, Bellbird and Rockface – are generally sub-vertical strata-bound lodes hosted within the rocks that form a distinctive, kilometre-scale, J-fold. The J-fold of the deposits forming the project is illustrated, with simplified geology, in Figure 1.3 below.

The geology, mineralisation and mineral resources contained within the Mineral Resources Report and the Feasibility Study ('FS') are focused on the copper-gold-silver (Cu-Au-Ag) Reward, Bellbird and Rockface deposits. Lead-zinc (Pb-Zn) mineralisation such as the Reward South deposit are not developed within the document sources noted above. At all three Cu-Au-Ag deposits, the mineralization is broadly similar, although each deposit differs in its detail, especially with respect to geological structure.

Figure 1.3 – Project Geology



1.3.1 Geological Setting

The geological setting and mineralisation are described by Taylor (Mining Associates) in the "*Mineral Resource Estimate, Reward, Bellbird and Rockface Deposits, Jervois Project, Northern Territory, Australia*" (MA2218-2-2 Jervois Resource Report, dated 31 August 2022).

Geologically, the project is located on the northern margin of the Paleoproterozoic Aileron Province, adjacent to its faulted contact with late Neoproterozoic-Cambrian aged sedimentary rocks of the Georgina Basin. The Aileron Province of the eastern Arunta region, forms part of the North Australian Craton. The base metal mineralization is hosted by metasedimentary rocks of the Bonya Metamorphics formation which is a unit of lower-middle amphibolite grade meta-sediments.

The Bonya formation is complexly folded with the deformation giving rise to the characteristic J-shape associated with the Jervois ranges (Figures 1.2 and 1.3).

Three main structural deformations are recognised in the area (Schmid, Schaubs & Otto, 2018):

1. Layer-parallel foliation and rare isoclinal folds
2. Isoclinal folding of bedding and foliation producing dominant structures
3. Folding of structures, late dextral transpression leading to a formation of map-scale J-fold as a drag fold.

1.3.2 Mineralisation

Mineralisation is hosted by various units of the Bonya Metamorphics, mostly occurring as massive to semi-massive layers of sulphides. Sulphides also occur as associated quartz veins and as thin interlayers in meta-mudstone and calc-silicates. The mineralisation typically consists of chalcopyrite and pyrite. Alteration zones are always associated with mineralisation and magnetite forms part of the alteration assemblage and is ubiquitous in the mineralized areas of Reward and Rockface, but less so at Bellbird. Sulphide textures vary from finely disseminated to stringers and veinlets to semi-massive.

The thickness of the mineralised zone varies extensively, from less than a meter to in excess of twenty meters (~1 m – 20 m).

Two main styles of mineralisation and alteration/metamorphic mineral assemblages are recognised:

1. Lower grade, primary syn-depositional or stratabound sulphides, and
2. higher grade, structurally controlled shoots, representing both remobilised stratabound syngenetic mineralisation, and a possible late tectonic intrusion-related mineralising event.

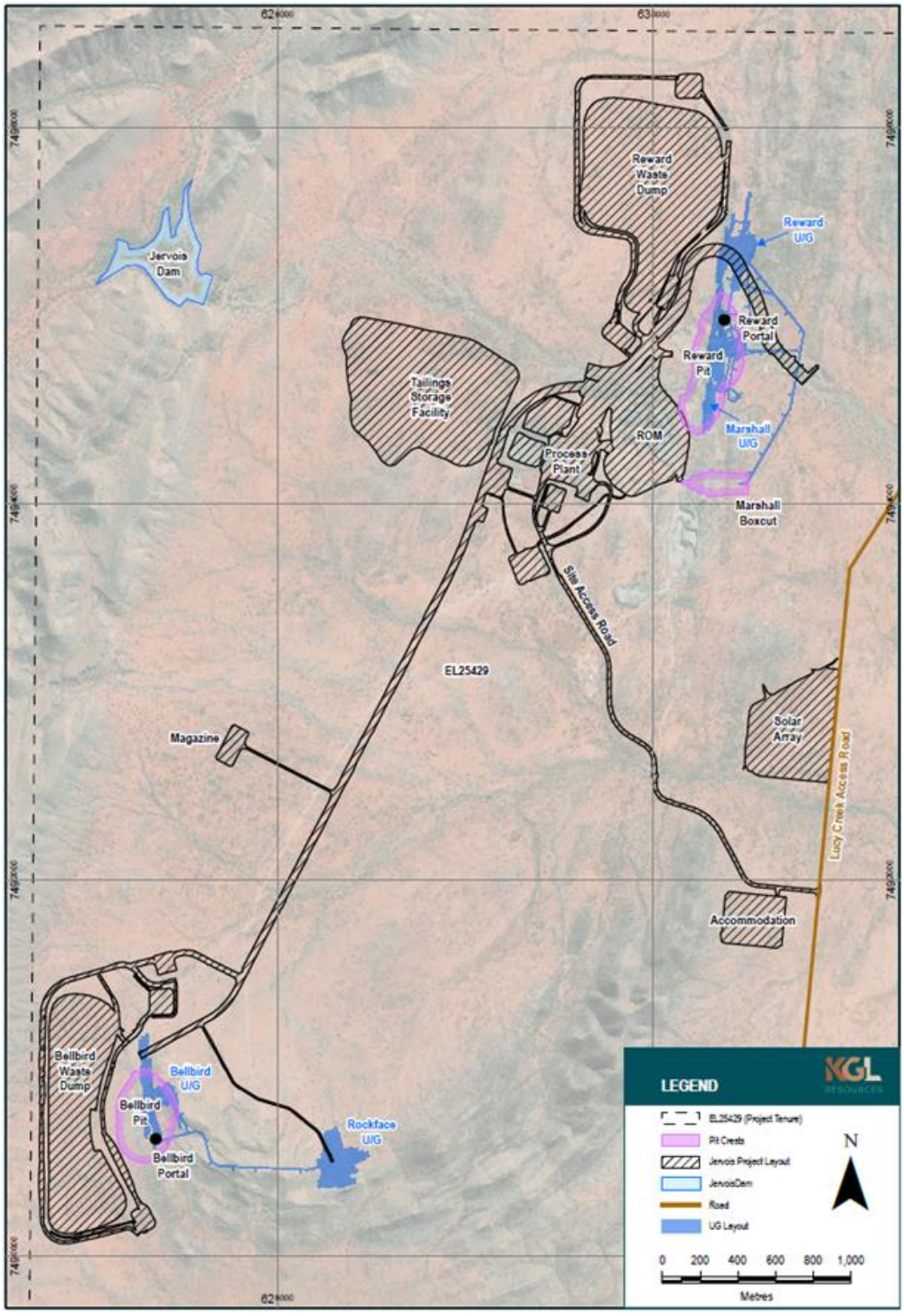
Structurally controlled shoots are the result of structurally reworked and remobilised primary strata-bound base metal mineralisation, during and after peak metamorphism, by granite intrusions. The shoots are observed as massive or semi-massive sulphide-magnetite veins and chalcopyrite-rich brecciated veins.

Oxidation due to surface weathering effects is relatively limited, with the oxidised zone being transitional from surface to base of oxidation (approximately 10-15m below surface). No significant zone of complete oxidation can be delineated in the mineralisation.

1.4 Site Layout

The Jervois Project is designed as a remote standalone facility and comprises all components for operations. A general site layout is shown in Figure 1.4 below.

Figure 1.4 – Plan of Site Facilities



2 MINERAL RESOURCES

2.1 Mineral Resource Estimate

The contributing Resources for the Jervois Project as listed in the August 2022 Resource Estimate are:

- Reward
  - Reward open pit
  - Reward underground
  - Marshall underground.
- Bellbird
  - Bellbird open pit, and
  - Bellbird underground.
- Rockface
  - Rockface underground.

The total Cu-Au-Ag Resources for the Jervois Project are shown in Table 2.1 below.

Table 2.1 – Jervois Project Mineral Resources

	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Reward Open Pit							
Measured	-	-	-	-	-	-	-
Indicated	3.84	1.80	69.1	0.31	38.2	39.4	4.86
Inferred	0.65	0.92	5.9	0.07	1.50	9.2	0.19
Sub-total	**4.48**	**1.67**	**75.0**	**0.28**	**39.7**	**35.0**	**5.04**
Reward UG							
Measured	-	-	-	-	-	-	-
Indicated	4.78	2.12	101.6	0.45	69.2	42.6	6.55
Inferred	4.32	1.56	67.3	0.20	27.8	19.6	2.72
Sub-total	**9.10**	**1.86**	**168.9**	**0.33**	**96.6**	**31.7**	**9.28**
Bellbird Open Pit							
Measured	1.23	2.53	31.2	0.14	5.6	15.1	0.60
Indicated	1.26	1.45	18.2	0.17	6.8	9.1	0.37
Inferred	1.02	1.24	12.7	0.12	4.0	10.6	0.35
Sub-total	**3.52**	**1.77**	**62.1**	**0.15**	**16.4**	**11.7**	**1.32**

	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Bellbird Underground							
Measured	-	-	-	-	-	-	-
Indicated	0.33	2.33	7.8	0.14	1.5	19.80	0.21
Inferred	2.84	2.09	59.1	0.11	9.7	12.30	1.12
Sub-total	**3.17**	**2.11**	**66.9**	**0.11**	**11.2**	**13.10**	**1.33**
Rockface Underground							
Measured	-	-	-	-	-	-	-
Indicated	2.80	3.37	94.3	0.23	21.1	21.40	1.93
Inferred	0.73	1.92	14.0	0.18	4.2	19.00	0.45
Sub-total	**3.53**	**3.07**	**108.3**	**0.22**	**25.3**	**20.90**	**2.38**
All Resources							
Measured	1.23	2.54	31.2	0.14	5.6	15.17	0.60
Indicated	13.01	2.24	291.0	0.33	136.8	33.28	13.92
Inferred	9.56	1.66	159.0	0.15	47.2	15.71	4.83
Total Resources	**23.80**	**2.02**	**481.2**	**0.25**	**189.6**	**25.29**	**19.35**
Resources (Sep. 2020)	*19.10*	*2.15*	*410.4*	*0.29*	*174.9*	*28.6*	*16.90*

The bottom row of Table 2.1 – Jervois Project Mineral Resources, displays the previous Mineral Resource total from 7th September 2020, which was used for the Pre-Feasibility Study (PFS).

The Mineral Resources are inclusive of Ore Reserves. The Mineral Resources excludes the Reward South mineralisation.

There is an old historical pit at Reward South (see Figure 1.3 for location). Some exploration has been carried out in this area, and a Lead Zinc Resource was estimated in 2015. This resource may be revisited in the future, but the October 2022 Reserve Statement is only evaluating and reporting Ore Reserves using the Cu-Au-Ag Mineral Resources as reported in August 2022.

The Jervois Project Mineral Resources were estimated in March 2022 and an update for the Bellbird Mineral Resource was completed in August 2022 by Mr Ian Taylor of Mining Associates and reflects the most recent drilling results and geological interpretation relating to the Bellbird Resources. His combined and latest Mineral Resources Estimate is effective 31 August 2022 and is documented in the MA2218-2-2 Jervois Resource Report.

2.2 Mineral Resource Cut-off Grades & Assumptions

For the purposes of allocating open pit and underground extents for the Mineral Resource the Mineral Resource Estimate uses two different cut-off grades (CoG) which were applied as:

1. Open Pit extent - above the 200 mRL - using a 0.5%Cu cut-off, and
2. Underground extent - below the 200 mRL - using a 1.0%Cu cut-off.

Although the selection of the 200 mRL for the change in CoG is somewhat arbitrary, it is a reasonable assumption. This assumes that mining above 200m RL will be by open pit methods and below that level will be mined by underground methods. Note that 200 m RL is approximately 150 m below the surface and is considered the depth limit for potential open pit mining. No other mining assumptions were used in the estimation of the Mineral Resource.

The 0.5% Cu cut-off has been shown to cover direct open pit mining and processing unit costs (allowing for metallurgical recovery). The 1.0% Cu cut-off has been shown to compensate for the higher unit mining costs incurred, applying basic underground methods.

Table 2.4 – Cut-off Grades and Contributions below demonstrates these approximate indications of the potential contribution for a tonne of material at the cut-off grades considering direct mining costs (after metallurgical recovery has been applied).

Metallurgical recoveries are considered when determining "reasonable prospects" for eventual economic extraction.

Table 2.2 – Optimisation Payabilities

Metal	Concentrate Grade Requirement	Payabilities
Copper	27%	95.5%
Gold	>1.0 g/t Au	90.0%
Silver	>30.0 g/t Ag	90.0%

Table 2.3 – Optimisation Cut-off Recoveries

Weathering Profile	Cu Cut-off Grade	Cu Head Grade	Recovery
Open Pit			
Oxide	Cu >= 0.5%	1.71%	59%
Sulphides	Cu >= 0.5%	1.71%	93%
Underground			
Sulphides	Cu >= 1.0%	2.18%	93%

Table 2.4 – Cut-off Grades and Contributions

Item	Open Cut	Underground
Cut-off (% Cu)	**0.5%**	**1.0%**
Recovery	89%	91%
Copper Value ($/t)		
USD	$ 39.24	$ 80.24
AUD	$ 56.06	$ 114.63
Cost (t)		
Mining	$ 20.00	$ 60.00
Processing	$ 25.00	$ 25.00
Total	$ 45.00	$ 85.00
Contribution (AU$/t)	$ 11.06	$ 29.63

3 MINE PLAN

3.1 Project Mining Areas

The mine plan is based upon two (2) open pits and four (4) underground mines pertaining to the Mineral Resources as shown in Table 3.1.

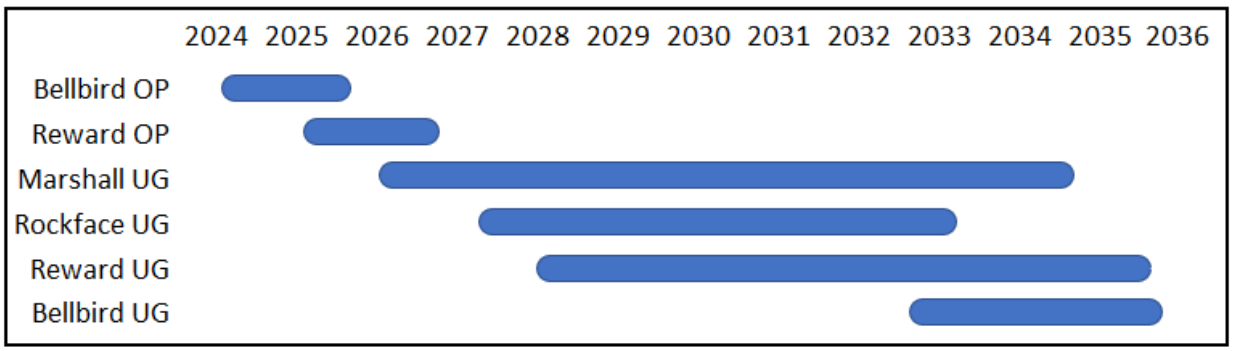
Table 3.1 – Mining Areas

Mineral Resource	Open Pit Mining	Underground Mining	Decline Access
Reward	Reward Open Pit	Marshall Underground	Dedicated Boxcut
		Reward Underground	Portal within Reward Open Pit
Bellbird	Bellbird Open Pit	Bellbird Underground	Decline developed off Rockface Decline
Rockface	-	Rockface Underground	Portal within Bellbird Open Pit

3.2 Project Mining Sequence

The mining strategy for Jervois Project Life of Mine is shown in Figure 3.1 below:

Figure 3.1 – Mining Sequence (LoM Schedule)



1. Mining of the Bellbird and Reward open cuts, commencing with the Bellbird open pit due to the higher copper grades available. Completion of these open pits provides access positions for the Rockface and Reward portals and declines to be established.
2. The development of the Marshall Underground using a surface box-cut is commenced at the same time as the start of open pit mining.
3. With the conclusion of mining of the Bellbird open pit, the Rockface underground mine then commences with entry via a portal near at the base of the completed open pit.
4. The Reward underground mine development commences after the completion of the Reward open pit, with entry via a portal within the as-mined open pit.

5. Development of the Bellbird underground mine only commences once the main development at Rockface underground mine is near complete as they share a common decline access (from the Bellbird Pit Portal).
6. Operations continue until depletion of all underground reserves and open pit stockpiles.

4 COMMODITY PRICES, MINING ASSUMPTIONS & METALLURGICAL RECOVERIES

4.1 Commodity Prices

The commodity prices indicated in Table 4.1 were used for:

- Mineral Resource estimation (Mining Associates)
- Mine Optimisation (Xenith)
- Reserve Validation (Xenith)
- Initial Financial analysis (KGL).

KGL has subsequently undertaken additional analysis on the Jervois project based on updated market consensus pricing from October 2022.

Table 4.1 – Commodity Price Assumptions

	Reserves
Revenue	**US$**
Copper (t)	8,818
Gold (Oz)	1850
Silver (Oz)	22.80
US$/AU$	0.70

Optimisations for the two open pits, have utilised revenue from the copper, gold and silver contained in the models. Optimisations for the four underground deposits are based on stopes meeting the 1.0 %Cu cut-off (Cu only). For underground development drives a 0.5 %Cu was utilised, this gives consideration to the need to extract development material regardless of grade.

Revenue from both gold (Au) and silver (Ag) typically contribute up to around 10-15% of the potential revenue (combined).

Revenue from the copper, gold and silver components of the concentrate (after metallurgical recovery has been applied) are used in the Ore Reserve estimation process as per the 'Financial Test of Design' sections for each mine.

4.2 Mining Assumptions

Mining assumptions are outlined for open pit and underground mining with reference to each deposit in the following sections.

4.2.1 Dilution Assumptions for Open Pit Optimisations

Mining dilution for the Bellbird open pit was calculated using a minimum mining width (MMW) and 0.25m of dilution at the start and end of each ore block. This allows for dilution on each individual copper vein to be calculated and built into a global average dilution.

Bellbird often has multiple lenses across a flitch and this method allows for the dilution of each lens to be accounted for when mining using a 120t class excavator.

For the Reward open pit, the larger orebody geometry permits mining by a larger 250t class excavator. Consequently, 0.5m dilution at the ends of each block was applied. This was to account for the bucket size and lower digging selectivity with the selected larger excavator.

Bellbird has a 2.5m MMW and Reward has a 3m MMW. Reward is allocated a lower percentage dilution (10%) as it is mostly in 1 large lens compared to the 4 thinner lenses that make up the Bellbird orebody (15% dilution).

4.2.2 Dilution Assumptions for Underground Mine Stope Optimisation

Reward and Marshall both tend to have larger (wider) stopes. Consequently, a 3m MMW has been applied, as well as 0.5m of hangingwall (HW) and footwall (FW) dilution, resulting in a total dilution of 1.0m.

Rockface and Bellbird have some thinner sections of the deposit (as splays) and so uses a 2m MMW with 0.5m dilution on both the HW and FW applied.

Mining assumptions also include:

- An additional 1% of dilution (fill) applied for stopes mined against filled stope boundaries,
- A mining recovery has been limited to:
  - 90% in Cemented Rock Fill (CRF) stopes, and
  - 50% in open stoping areas beneath a CRF Pillar.

4.3 Metallurgical Recoveries

Multiple phases of test work and analysis have been carried out since 2012 commencing with Dunstan Metallurgical Services, AMEC, ALS Metallurgy, Minelogix and Sedgman engaged. In 2021 Core Metallurgy undertook test work and supervision for process test work to support the Jervois Project Feasibility Study. The Core Metallurgy test work confirmed the primary grind, the regrind size targets and the requirement for two stages of cleaner flotation. The Feasibility Study metallurgical test work program with test work results and interpretations are reported in the Core Metallurgy metallurgical report (refer to the FS documentation, Chapter 8). Sedgman supervised the 2019 PFS and oversaw the Core Metallurgy program for the Feasibility Study. During 2022 Sedgman oversaw the reassignment of new metallurgical domains, re-interpretation of results and collation of all recent and historical results into a comprehensive report with metallurgical performance and recovery predictions inclusive of new and preceding test work results (that conducted since 2012) for the Jervois Project Feasibility Study.

The formulae, as developed by Sedgman, is used to estimate metal recovery for various grades within the oxide and sulphide ore streams. These are shown in Table 4.2 below.

Table 4.2 – Sedgman Recovery Algorithms

Domain Type	Metal Performance	Prediction Range	Predictive Algorithm
Sulphides			
	Copper Recovery		Cu Rec = 1.0485 x ((CuHG%)^0.0325)
	Gold Recovery		Au Rec = 0.691 x ((Bi Rec)^0.723)
	Silver Recovery		Ag Rec = (0.88 x Bi Rec) + 0.043
	Bismuth Recovery		Bi Rec = 0.2469 x LN(Pb Rec%) + 0.8204
	Bismuth Recovery (secondary)		Bi Rec = 0.093 x LN(BiHG ppm) + 0.0321
	Uranium Recovery		U Rec = 1E-08 x e^(17.484*(Cu Rec%))
	Fluorine Recovery		F Rec = 0.24% (Constant)
	Lead Conc. Grade		Pb Concentrate Grade = (0.085 x Pb Feed Grade) – 0.0004
	Zinc Conc. Grade		Zn Concentrate Grade = (0.09 x Zn Feed Grade) – 0.0002
Oxides/Transition			
	Oxide Copper Recovery		Cu Rec = (34.675 x CuHG%) - 0.0646
	Trans. Copper Recovery	≤ 1.0% Cu:	Cu Rec = (129.88 x CuHG%) - 54.06
		>1.0% Cu:	Cu Rec = (0.0557 x LN(CuHG%)) + 1.0147
	Gold Recovery		Au Rec = (0.685 x Bi Rec) + 0.126
	Silver Recovery		Ag Rec = (1.326 x Bi Rec) - 0.0295
	Bismuth Recovery		Bi Rec = (0.873 x Cu Rec) - 0.174
	Trans. Uranium Recovery		U Rec = 1E-08 x e^(17.484*(Cu Rec%))
	Fluorine Recovery		F Rec = 2.52% (Constant)
	Trans. Lead Conc. Grade		Pb Concentrate Grade = (0.085 x Pb Feed Grade) – 0.0004
	Trans. Zinc Conc. Grade		Zn Concentrate Grade = (0.09 x Zn Feed Grade) – 0.0002

Key observations about the relationships and algorithms are:

- Sulphide copper recoveries are consistently high for all copper feed grades for both open pit and underground ore sources.
- Oxide copper recovery decreases rapidly at < 1.5% Cu feed grade. Ore feed grades below 1.5% Cu are not expected to be economically recoverable.
- Gold and silver recoveries are heavily associated with bismuth recoveries.
- Lead and zinc feed grades in flotation feed should be controlled to ≤ 0.5% Pb or Zn. If not controlled effectively through selective mining or blending of ores, then lead and zinc grades > 3% will be seen in the copper concentrate (displacing copper sulphides) which could lead to lower smelting/refining recoveries and lower payabilities.

The table below shows calculated recoveries for cut-off grades, average Mineral Resource grade and average Ore Reserve grade. Higher recoveries are generally obtained with higher grade feed material.

Table 4.3 – Calculated Recoveries

	Open Pit	Underground
Cut-off (%Cu)	0.50	1.00
Cut-off Recovery	81.8%	91.0%
Mineral Resource (Average %Cu)	1.71	2.18
Mineral Resource Recovery	92.6%	93.3%
Ore Reserve (Average %Cu)	1.78	2.10
Ore Reserve Recovery	92.7%	93.2%

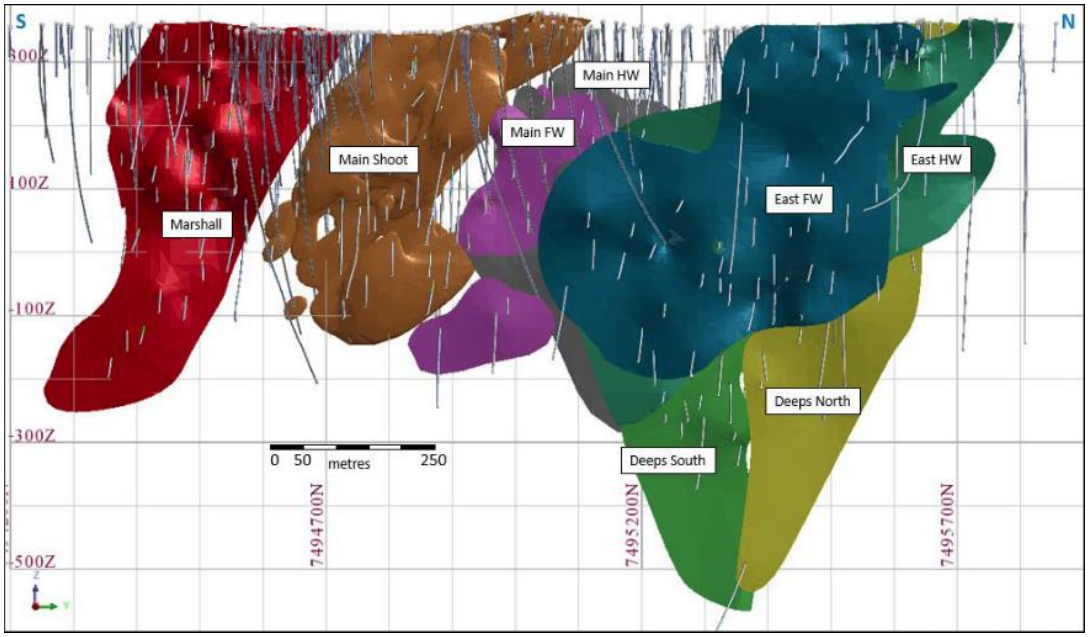
5 MINERAL RESOURCES & ORE RESERVES

5.1 Reward Open Pit

5.1.1 Reward Open Pit Resources

The Reward resource is a significant part of the mineralisation identified at the project. It has been relatively well drilled and there are multiple mineralised zones. Mineralisation strikes some 1.4km with the known mineral resource extending to depths of 950m below surface. A long section showing principal lodes of the Reward deposit is shown in Figure 5.1 below.

Figure 5.1 – Long Section at Reward



The August 2022 Mineral Resources for the Reward deposit above 200 mRL (150m depth - open pit extent) are shown in Table 5.1 below.

Table 5.1 – Reward Mineral Resources Above 200 mRL

Category	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Measured	-	-	-	-	-	-	-
Indicated	3.84	1.80	69.1	0.31	38.2	39.4	4.86
Inferred	0.65	0.92	5.9	0.07	1.5	9.2	0.19
Total	4.48	1.67	75.0	0.28	39.7	35.0	5.04

5.1.2 Reward Open Pit Optimisation Inputs

The commodity prices and dilution assumptions used in the open pit optimisation are provided in Chapter 4.

Reward open pit slope design criteria, ramp design parameters and mining factors are shown in

Table 5.2, Table 5.3 and Table 5.4 respectively, below:

Table 5.2 – Reward Pit Slope Design Parameters

Weathering Profile	Overall Slope Angle (°)	Pit Batter Angle (°)	Bench Height (m)	Berm Width (m)
Oxide	48	55	10	5
Transition	48	55	10	5
Fresh	48	80	20	9

Table 5.3 – Reward Pit Ramp Design Parameters

Ramp Parameters	Ramp Width (m)	Ramp Grade (%)
Dual Lane Ramp	27	10
Single Lane Ramp	18	10

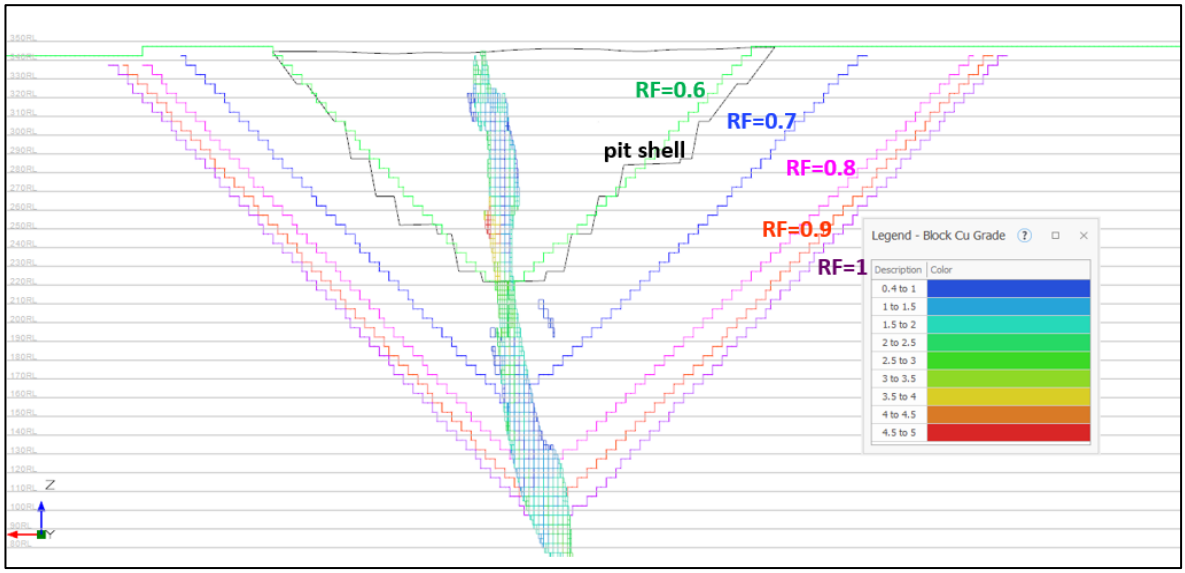
Table 5.4 – Reward Pit Mining Factors

Applied Factors	Factor (%)
Mining Recovery	95
Mining Dilution factor	10

5.1.3 Reward Open Pit Optimisation Results

Based on the above inputs the Deswik Pseudoflow Optimiser produced the following pit shells:

Figure 5.2 – Reward Optimised Pit Shells E-W section



The Revenue Factor 0.6 shell was selected as the basis for design. This pit shell is very similar to that selected for the PFS. Larger pit shells require significant waste cutbacks, causing significant ore scheduling issues in the LoM mill feed requirements. This is a conservative approach suitable for a high inflationary environment. There may be opportunities for later cutbacks for further recovery of ore reserves if KGL benefit from sustained improvement in copper price or a lower exchange rate.

5.1.4 Reward Open Pit Ore Reserves

There is no Inferred material within the Reward Open Pit. The mined mineral resource is purely indicated material which is the basis for the Probable Ore Reserve.

Table 5.5 – Reward Open Pit Ore Reserves

Category	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Proven							
Probable	2.34	1.73	40.6	0.34	25.7	38.5	2.9
Total	**2.34**	**1.73**	**40.6**	**0.34**	**25.7**	**38.5**	**2.9**

The value of the recoverable metal in this Reserve is approximately $566M (based on commodity pricing). Copper represents 76%, gold 10% and silver 14%.

The Ore Reserves below the proposed open cut can be readily accessed from underground via the Marshall decline. The decline has been designed such that the larger pit options will not compromise the decline, should they be deemed more appropriate if conditions dictate.

5.1.4.1 Reward Open Pit Financial Test of Design

The Reward Pit design was tested with fully allocated costs, including direct mining, processing, treatment and refining costs ('TCRCs') and overheads (based on the financial model) with commodity pricing. Recovery factors were applied for the oxide and fresh split of the ore reserves. The value of recovered metal in the Probable Ore Reserve exceeds the total (mining, processing, TCRCs and overheads) costs by $309M.

The Reward open pit has been designed with 3 stages.

- Stage 1 is required to remove the oxide material, and establish the top of the pit ramp and mine the southern part of the Reward Pit (higher grade area)
- Reward stage 2 pit prepares the Northern side of the pit and also provides both oxide and fresh mill-feed.
- Stage 3 provides both direct mill feed, with surplus being stockpiled. It allows efficient use of equipment on site.

The Reward open pit stages 1, 2 and 3 are shown in

Figure 5.3, Figure 5.4 and Figure 5.5, respectively.

Figure 5.3 – Reward Stage 1 Pit

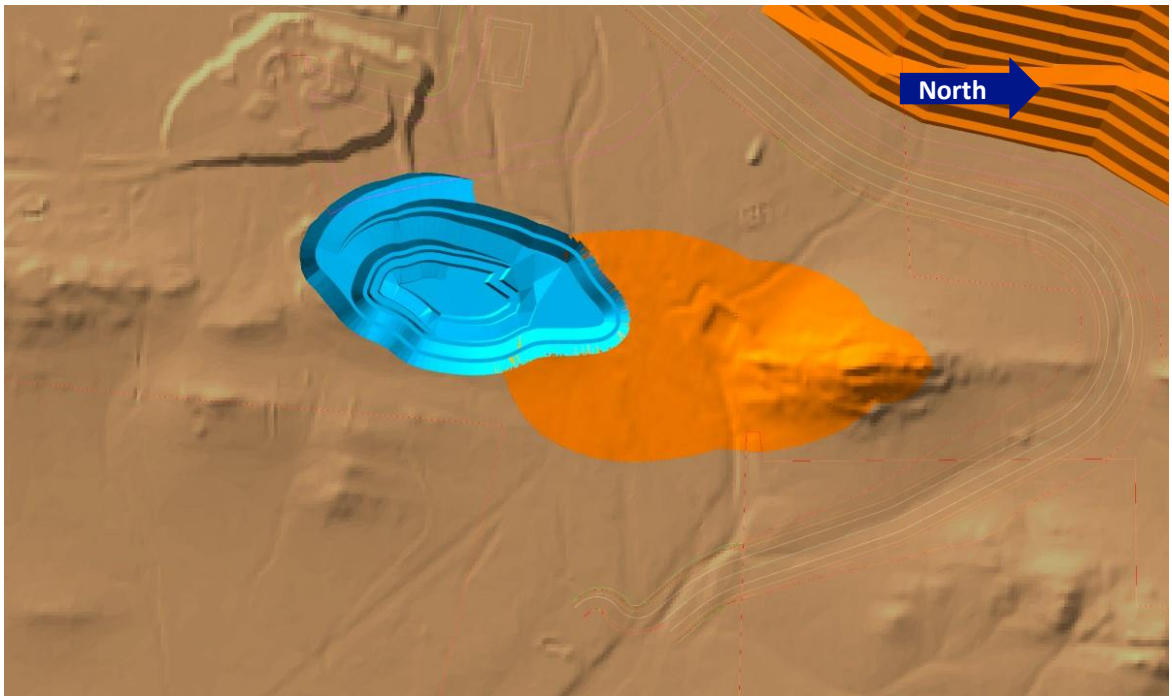


Figure 5.4 – Reward Stage 2 Pit

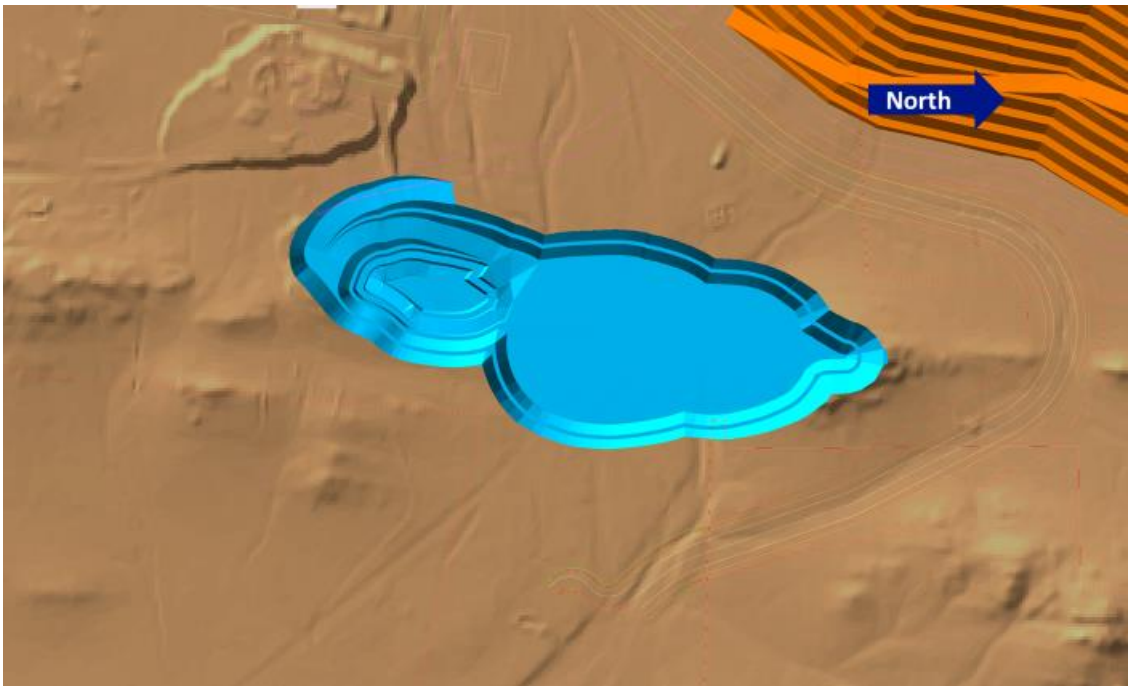
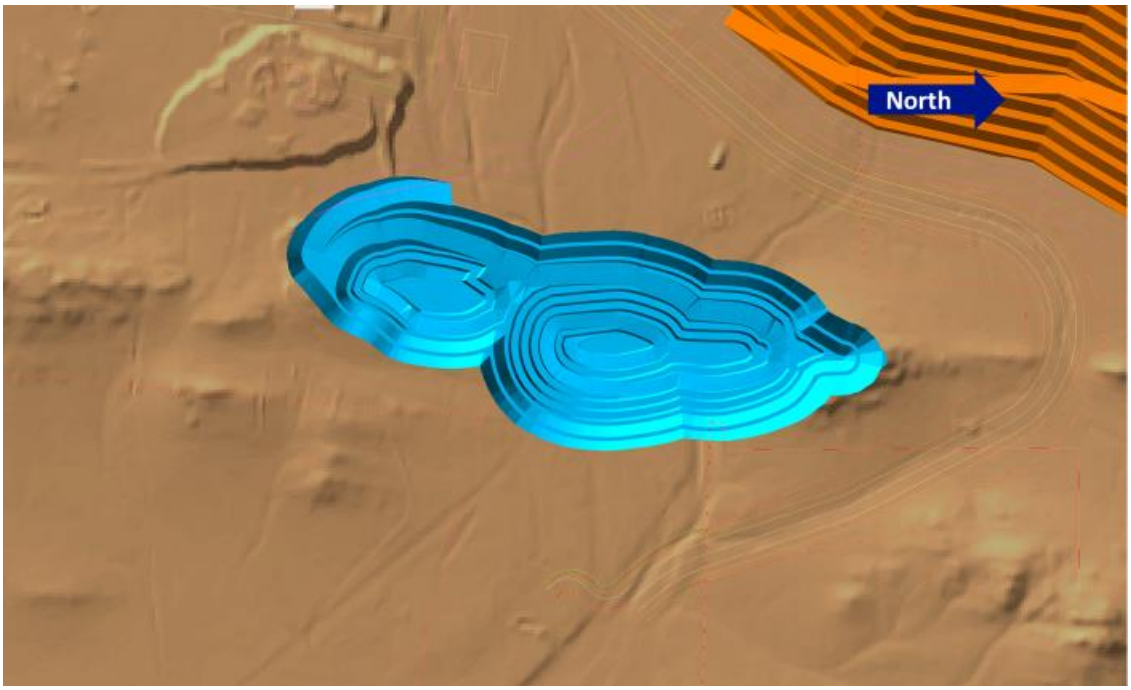


Figure 5.5 – Reward Stage 3 Pit

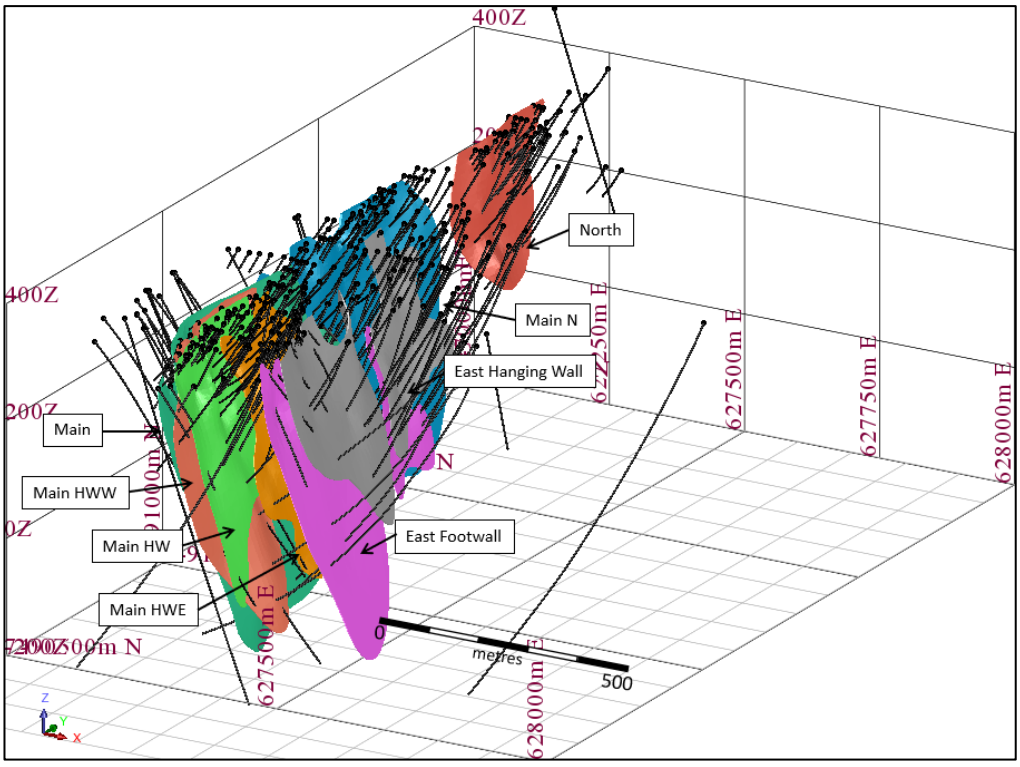


5.2 Bellbird Open Pit

5.2.1 Bellbird Open Pit Resources

The Bellbird mineralisation is the most Westerly located resource in the complex, (see Figure 1.3 – Project Geology). Mineralisation strikes some 1.5 km with the known mineral resource extending to depths of 550 m below surface. An isometric long section is shown in Figure 5.6 below (open pit and underground).

Figure 5.6 – Bellbird Mineralised Zones



The August 2022 Mineral Resources for the Bellbird above the 200 mRL (above 150m depth – open pit extent) are shown in Table 5.6 – Bellbird Mineral Resources below.

Table 5.6 – Bellbird Mineral Resources Above 200 mRL

Category	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Measured	1.23	2.53	31.2	0.14	5.6	15.1	0.60
Indicated	1.26	1.45	18.2	0.17	6.8	9.1	0.37
Inferred	1.02	1.24	12.7	0.12	4.0	10.6	0.35
Total	**3.52**	**1.77**	**62.1**	**0.15**	**16.4**	**11.7**	**1.32**

5.2.2 Bellbird Open Pit Optimisation Inputs

The commodity prices and dilution assumptions used in the optimisation are given in Chapter 4.

Slope design parameters, ramp design parameters and mining factors are shown in Table 5.7, Table 5.8 and Table 5.9 below.

Table 5.7 – Bellbird Pit Slope Design Parameters

Weathering Profile	Overall Slope Angle (°)	Pit Batter Angle (°)	Bench Height (m)	Berm Width (m)
Oxide	47	55	10	5
Transition	47	55	10	5
Fresh	47	80	20	9

Table 5.8 – Bellbird Pit Ramp Design Parameters

Ramp Parameters	Ramp Width (m)	Ramp Grade (%)
Dual Lane Ramp	27	10
Single Lane Ramp	18	10

Table 5.9 – Bellbird Pit Mining Factors

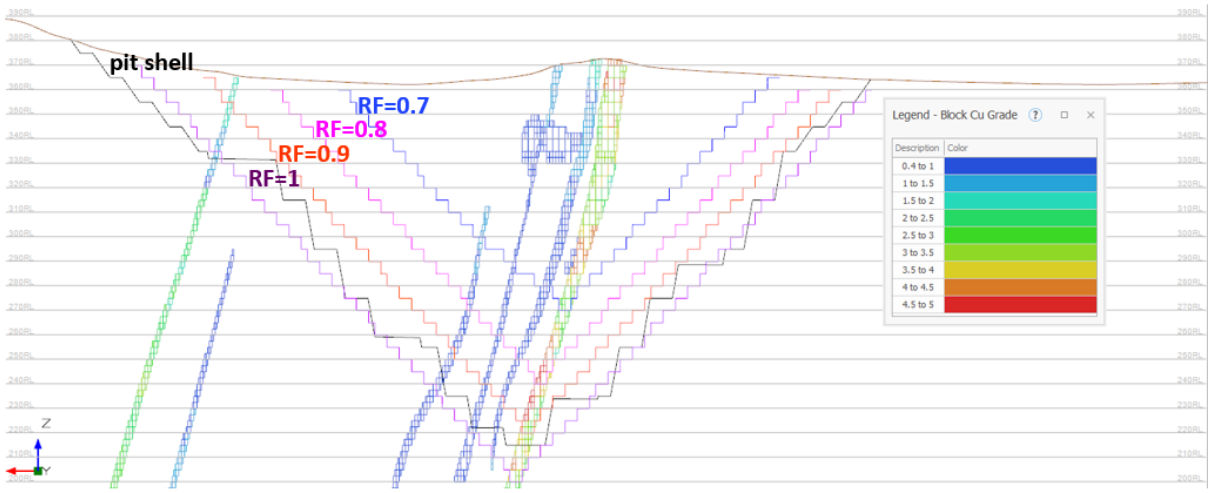
Applied Factors	Factor (%)
Mining Recovery	95
Mining Dilution	15

Narrower lenses (four in total) within the Bellbird open pit warrant greater dilution (15%) than attributed to the Reward open pit.

5.2.3 Bellbird Open Pit Optimisation Results

Based on the above inputs the Deswik Pseudoflow Optimiser produced the following pit shells:

Figure 5.7 – Bellbird Optimised Pit Shells E-W Section



Pit shell RF1 (purple) was selected as the basis for the Bellbird open pit design. This was chosen to maximise the amount of early Open Pit production available from the first pit mined (at the highest grade).

5.2.4 Bellbird Open Pit Ore Reserves

There is only a small amount of Inferred material within the Bellbird Open Pit design. The majority of ore is measured and indicated material which make up the Proven and Probable Ore Reserves.

Table 5.10 – Bellbird Open Pit Ore Reserves

Category	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Proven	1.40	2.07	29.1	0.12	5.2	12.3	0.6
Probable	0.44	1.12	5.0	0.06	0.9	5.9	0.1
Total	1.84	1.84	34.0	0.10	6.1	10.8	0.6
Inferred	0.01	1.28	0.2	0.02	0.0	11.1	0.0

The approximate value of the recoverable metal in this Ore Reserve is $402M (based on commodity pricing). Copper represents 92%, gold 3% and silver 4%.

5.2.4.1 Bellbird Open Pit Financial Test of Design

The design was tested with fully allocated costs, including direct mining, processing, TCRCs and overheads (based on the Site Financial Model) with Reserve Pricing. Recovery factors were also applied using a split of oxide and fresh within the reserves. The value of recoverable metal from the Probable Ore Reserve tonnage exceeded the total (mining, processing, TCRCs and overhead) costs by $173M.

The Bellbird open pit has also been designed with 3 stages.

- Stage 1 is required to excavate oxide material and establish the pit access ramp.
- Bellbird stage 2 establishes the pit limits and also removes oxide material.
- Stage 3 provides both direct mill feed and the deeper ore is mined relatively slowly to avoid short-lived spikes in trucking requirements.

The Bellbird open pit stages 1, 2 and 3 are shown below in Figure 5.8, Figure 5.9 and Figure 5.10 respectively.

Figure 5.8 – Bellbird Pit - Stage 1

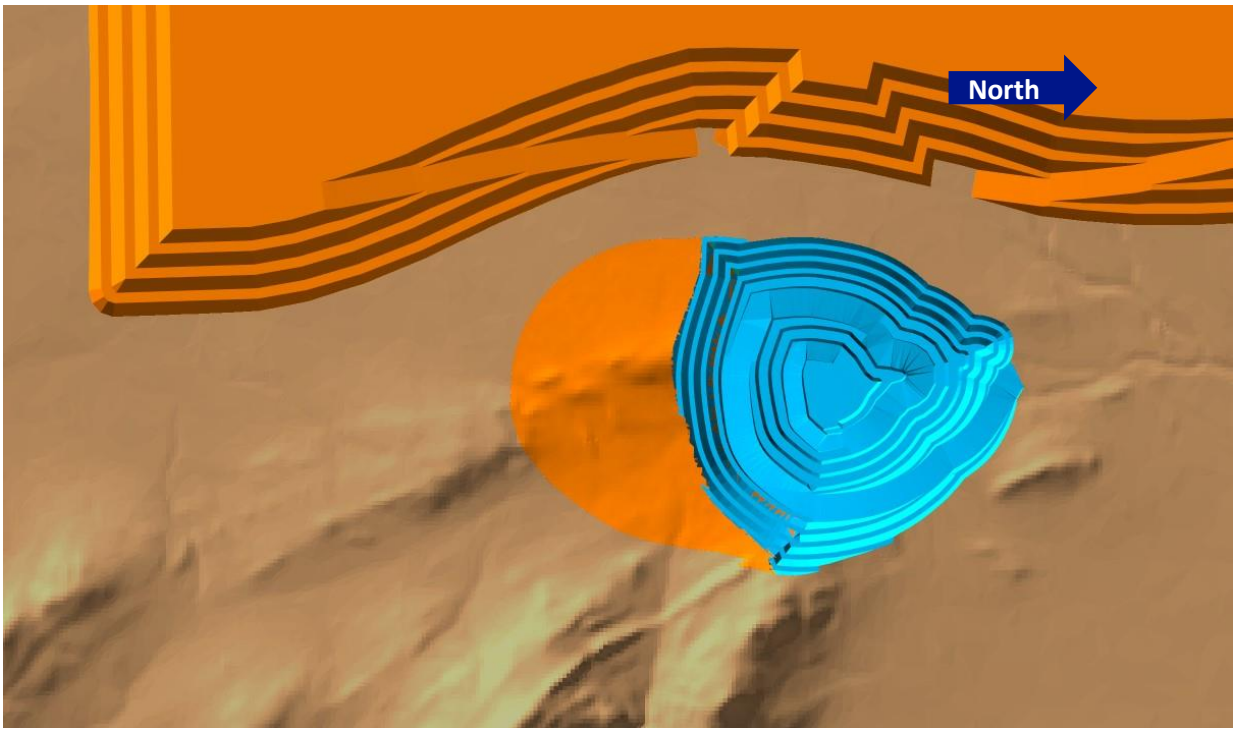


Figure 5.9 – Bellbird Pit - Stage 2

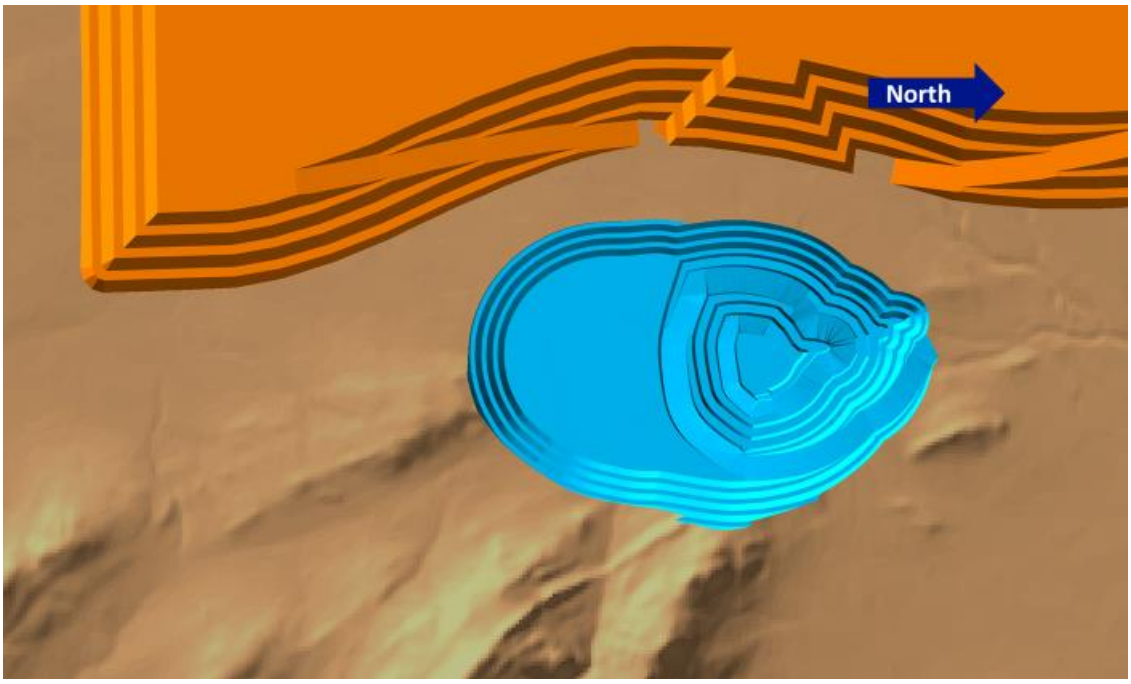
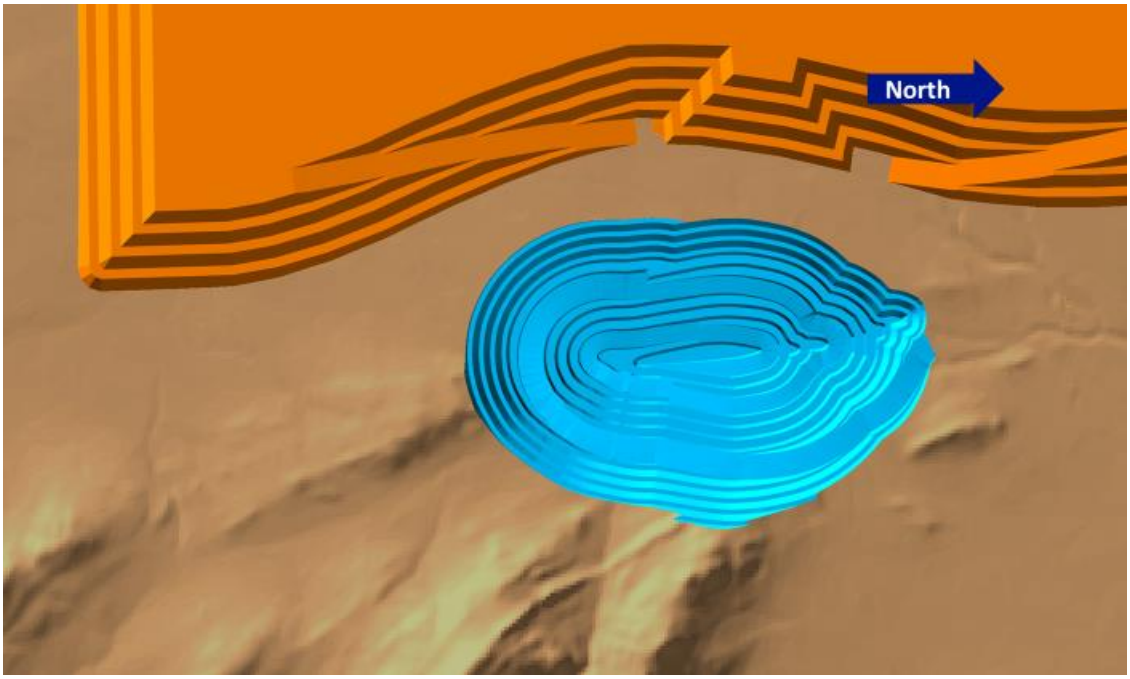


Figure 5.10 – Bellbird Pit - Stage 3



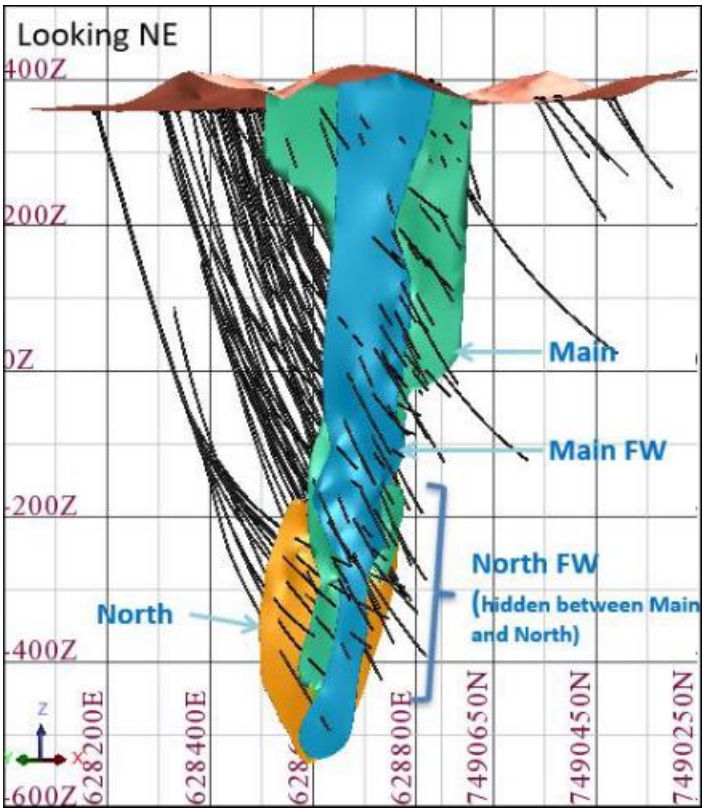
5.3 Rockface Underground

Rockface is the most southerly Resource, which extends to 900m below surface based on current drilling. There does not appear to be an economic open pit Resource at Rockface. The Rockface underground mine will be accessed via a decline which will commence in fresh rock after the completion of the Bellbird stage 3 pit. The underground access is indicated in Figure 5.12.

5.3.1 Rockface Underground Mineral Resource

There are 4 separate lodes at Rockface as can be seen in Figure 5.11 below.

Figure 5.11 – Rockface Underground Main and North Lodes



All four lodes are steeply dipping at around 80 degrees. The Main lode is the largest component of the resource followed by the Main FW lode, North lode and the much smaller North FW lode.

Table 5.11 – Rockface Mineral Resources

Category	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Indicated	2.80	3.37	94.3	0.23	21.1	21.4	1.93
Inferred	0.73	1.92	14.0	0.18	4.2	19.0	0.45

Category	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Total	**3.53**	**3.07**	**108.3**	**0.22**	**25.3**	**20.9**	**2.38**

5.3.2 Rockface Underground Optimisation Inputs

The commodity prices, costs and dilution assumptions used in the optimisation are given in Chapter 4.

Table 5.12 – Rockface Underground – Stope Optimisation Parameters

Rockface Underground	
Level Interval	30m
Stope Strike Length	25m
Stope Dilution	10%
Mining Recovery	90%

The Rockface mine design is shown in Figure 5.12. The decline starts from the Bellbird Open Pit and heads down to the Rockface lodes at a gradient of 1 in 7 (14.3%).

Mining methods applied include:

- bottom up, long-hole stoping with cemented rock fill (CRF),
- top down, long-hole stoping with cemented rock fill (CRF), and
- open stoping of sill pillars (mining 90%).

Geotechnical guidelines indicated that strengths of CRF should require between 3-8% cement.

5.3.3 Rockface Underground Stope Optimisation Results

Stope Optimiser (Deswik.SO) runs on cut-off grades of 1% Cu grades were completed. Shapes are expanded for the 10% dilution.

The final stope inventory was selected on a basis of cut-off grade (CoG) and overall Cu grade.

The design includes development of the access decline, development required on each level to access the orebody, decline development to access the sub-levels along with horizontal and vertical development for fresh air intakes and return/exhaust airways. Stopes are designed with the minimum mining width of 3.0m which includes the 0.5m hangingwall and footwall dilution.

5.3.4 Rockface Underground Ore Reserves

Inferred material in the underground design has been excluded from the Ore Reserves.

Table 5.13 – Rockface Underground Ore Reserves

Category	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Proven							
Probable	2.31	3.26	75.3	0.23	17.0	21.3	1.6
Total	**2.31**	**3.26**	**75.3**	**0.23**	**17.0**	**21.3**	**1.6**
Inferred	*1.26*	*0.81*	*10.2*	*0.09*	*3.7*	*9.33*	*0.4*

Further definition drilling will be carried out and the results of that drilling in conjunction with level development will inform stope design. There is confidence that the stopes will be designed to optimise grade and recovery, reducing the amount of non-contributing material reporting to the mill.

Over 80% of the Indicated Mineral Resource material has been converted to the Probable Ore Reserve estimate.

5.3.4.1 Rockface Underground Financial Test of Mine Design

The underground Ore Reserves are based on the Indicated Resource tonnage within the mine design only. The mine design (and the LoM schedule) includes Inferred material (1.26 Mt). The value of the recoverable metal within the Probable Ore Reserve is approximately $937M. Copper represents 91%, gold 4% and silver 5%.

The design was tested with allocated costs, including direct mining and processing costs (based on the Site Financial Model) with Ore Reserve Pricing. Recovery factors were also applied. The value of recovered metal in the 2.3 Mt of Probable Ore Reserve exceeded the total (mining & processing) costs for the entire 3.57 Mt mine design tonnage, by $419M.

The value of mining the Probable Ore Reserve can carry the operating costs for the Inferred tonnage in the mine design, ignoring any value from that Inferred material.

Development design and stoping blocks for the Rockface Underground are shown in Figure 5.12 and Figure 5.13 below.

Figure 5.12 – Rockface and Bellbird Underground Mine Designs – Looking South

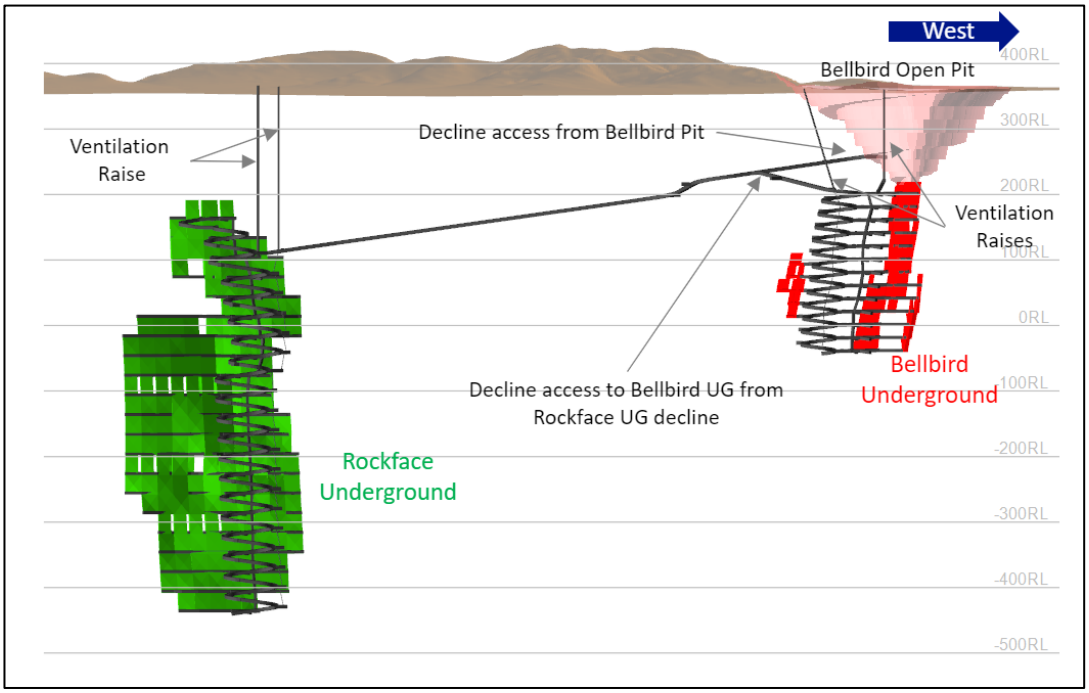
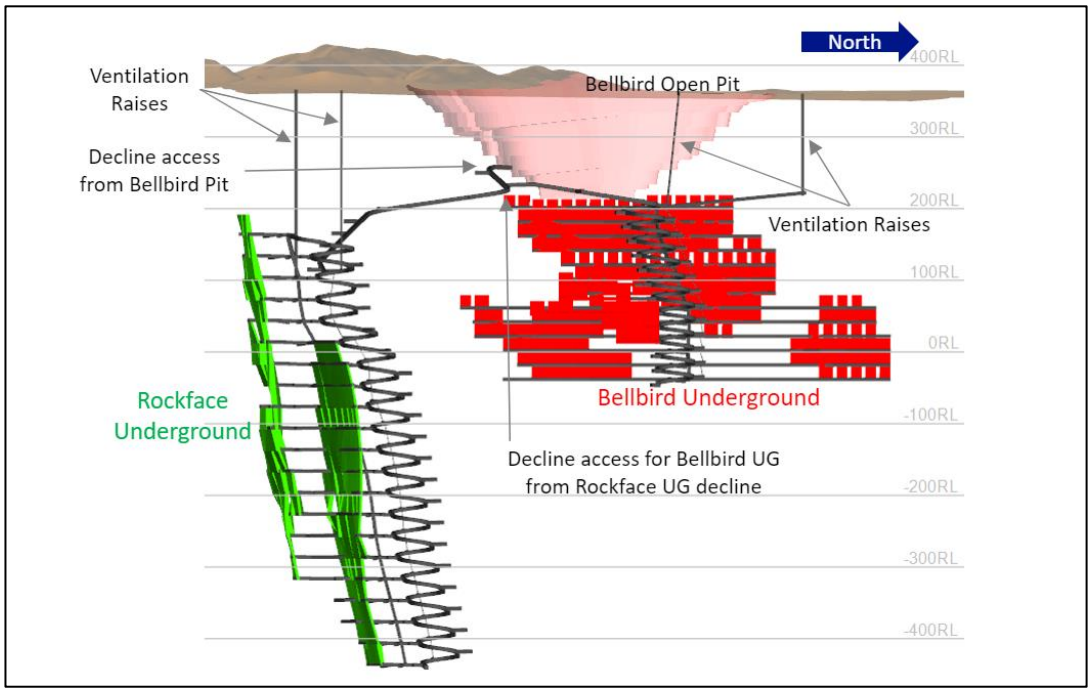


Figure 5.13 – Rockface and Bellbird Underground Mine Designs – Looking West



5.4 Bellbird Underground

The Bellbird underground will be developed from the Rockface Decline (which starts from the Bellbird pit). It is timed such that the Rockface development is essentially complete before the Bellbird UG development commences. Development continues until Q1 2035 and stoping continues until the mill shuts down in March 2036.

5.4.1 Bellbird Underground Mineral Resources

The mineralised envelopes (open pit and underground) are shown in Figure 5.6 – Bellbird Mineralised Zones, above.

Table 5.14 – Bellbird Mineral Resources Below 200 mRL

Category	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Measured							
Indicated	0.33	2.33	7.8	0.14	1.5	19.8	0.21
Inferred	2.84	2.09	59.1	0.11	9.7	12.3	1.12
Total	**3.17**	**2.11**	**66.9**	**0.11**	**11.2**	**13.1**	**1.33**

5.4.2 Bellbird Underground Stope Optimisation Inputs

The commodity prices, and dilution assumptions used in the optimisation are given in Chapter 4.

Table 5.15 – Bellbird Underground – Stope Optimisation Parameters

Bellbird Underground	
Level Interval	20m
Stope Strike Length	20m
Stope Dilution	10%
Mining Recovery	90%

Due to the narrower nature of the bellbird deposit and geotechnical recommendations, a minimum mining width of 3.0m (inclusive of edge dilution) was used in conjunction with a reduced level spacing of 20 m. This is consistent with smaller, narrow stopes that rely on better drilling accuracy (over shorter distances) to reduce dilution.

Mining method is bottom up, long-hole open stoping with cemented rock fill (CRF). Pillars have been allowed for in the mine design (see Figure 5.13).

5.4.3 Bellbird Underground Stope Optimisation Results

Stope Optimiser (Deswik.SO) runs on cut-off grades of 1% Cu grades were completed. Shapes are expanded for the 10% dilution.

The design includes development of the access decline, development required on each level to access the orebody, decline development to access the sub-levels along with horizontal and vertical development for fresh air intakes and return/exhaust airways. Stopes are designed with the minimum mining width of 3.0m which includes the 0.5m hangingwall and footwall dilution.

5.4.4 Bellbird Underground Ore Reserves

Inferred material in the underground design has been excluded from the Ore Reserves. The Inferred material noted in Table 5.16 – Bellbird Underground Ore Reserves is the Inferred material in the Bellbird underground design that was included in the Life of Mine (LoM) schedule. The Probable Ore Reserve contains Measured and Indicated Resources.

Table 5.16 – Bellbird Underground Ore Reserves

Category	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Proven							
Probable	0.43	1.77	7.7	0.09	1.2	14.2	0.2
Total	**0.43**	**1.77**	**7.7**	**0.09**	**1.2**	**14.2**	**0.2**
Inferred*	*0.93*	*1.62*	*15.1*	*0.10*	*3.0*	*8.7*	*0.3*

Further definition drilling will be carried out and the results of that drilling in conjunction with level development will inform stope design. There is confidence that the stopes will be designed to optimise grade and recovery, reducing the amount of non-contributing material reporting to the mill.

5.4.4.1 Bellbird Underground Financial Test of Mine Design

The Bellbird underground Ore Reserves are based on Measured and Indicated tonnages. The mine design (and the LoM schedule) includes Inferred material of 0.93 Mt. The value of the recoverable metal within the Probable Ore Reserve is $94M. Copper represents 91%, gold 3% and silver 6%.

The design was tested with allocated costs, including direct mining and processing costs (based on the Site Financial Model) with commodity pricing. Recovery factors were also applied. The Bellbird underground mine design tonnage produced a positive contribution of over $3M, ignoring any value from Inferred material.

5.5 Reward Underground

The Reward decline is established from within the Reward open pit. This provides ready access and a relatively short haul to the run of mine (ROM) pad.

5.5.1 Reward Underground Mineral Resources

The Reward Mineral Resource is inclusive of Mineral Resource mined by both the Reward and Marshall underground designs. The Mineral Resource below 200 mRL (150 m depth) is shown in Table 5.17 below:

Table 5.17 – Reward Mineral Resources Below 200 mRL

Category	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Measured							
Indicated	4.78	2.12	101.6	0.45	69.2	42.6	6.55
Inferred	4.32	1.56	67.3	0.20	27.8	19.6	2.72
Total	**9.10**	**1.86**	**168.9**	**0.33**	**96.6**	**31.7**	**9.28**

5.5.2 Reward Underground Stope Optimisation Inputs

The commodity prices and dilution assumptions used in the optimisation are given in Chapter 4.

Table 5.18 – Reward Underground – Stope Optimisation Parameters

Reward Underground	
Level Interval	30m
Stope Strike Length	25m
Stope Dilution	10%
Mining Recovery	90%

The mining method selected for Reward Underground is bottom up long-hole stoping with cemented rock fill (CRF) with a 3-8% cement content as per Geotechnical recommendations.

A 50% recovery was assumed for the crown stopes at the open pit/underground interface.

5.5.3 Reward Underground Stope Optimisation Results

Stope Optimiser (Deswik.SO) runs on cut-off grades of 1% Cu grades were completed. Shapes are expanded for the 10% dilution.

The underground layout is seen in Figure 5.14 below.

The design includes development of the access decline, development required on each level to access the orebody, decline development to access the sub-levels along with horizontal and vertical development for fresh air intakes and return/exhaust airways. Stopes are designed with the minimum mining width (3.0m) and 0.5m hangingwall and footwall dilution.

5.5.4 Reward Underground Ore Reserves

The Ore Reserves for Reward underground mine are shown in Table 5.19, below. Inferred Resource tonnage in the underground mine design has been excluded from the Ore Reserves.

Table 5.19 – Reward Underground Ore Reserves

Category	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Proven							
Probable	1.82	2.30	41.9	0.64	37.6	30.2	1.8
Total	**1.82**	**2.30**	**41.9**	**0.64**	**37.6**	**30.2**	**1.8**
Inferred	*1.32*	*1.20*	*15.8*	*0.21*	*9.1*	*15.0*	*0.6*

Further definition drilling will be carried out and the results of that drilling in conjunction with level development will inform stope design. There is confidence that the stopes will be designed to optimise grade and recovery, reducing the amount of non-contributing material reporting to the mill.

5.5.4.1 Reward Underground Financial Test of Mine Design

The Reward underground Ore Reserves are only based on Indicated Resources within the mine design. The mine design (and the LoM schedule) includes 1.32 Mt of Inferred material. The value of the recoverable metal within the Probable Ore Reserve is approximately $596M. Copper represents 77%, gold 15% and silver 8%.

The design was tested with allocated costs, including direct mining and processing costs (based on the Site Financial Model) with commodity pricing. Recovery factors were applied. The Reward mine

design tonnage produced a positive contribution of over $161M, ignoring any value from Inferred material.

Figure 5.14 – Reward and Marshall Underground Mine Designs – Looking West

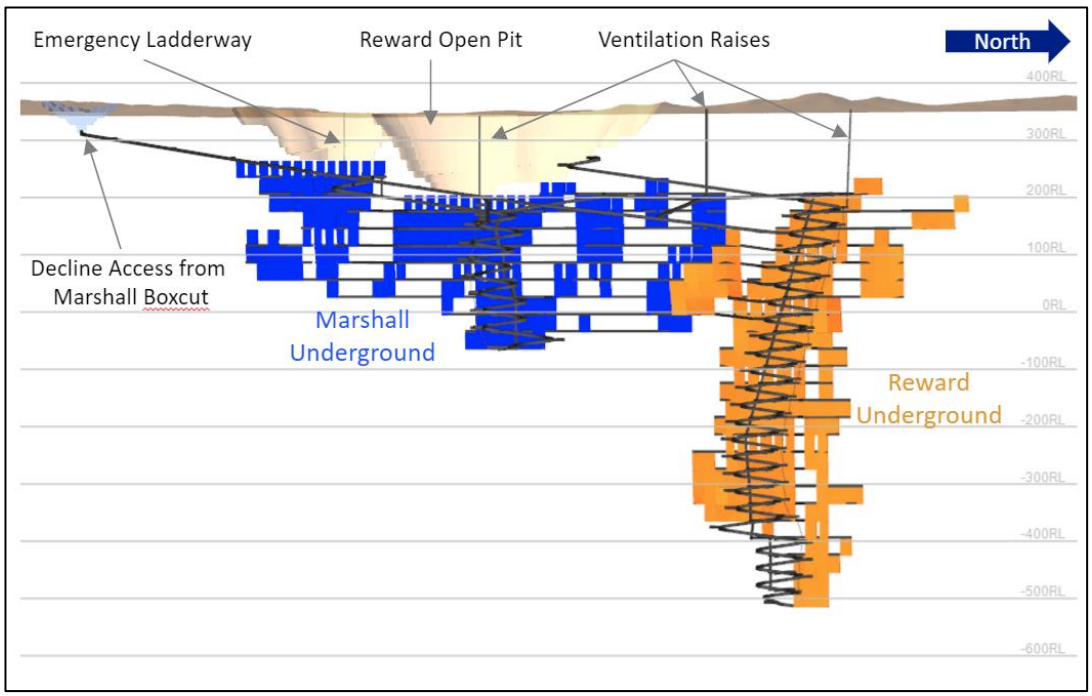
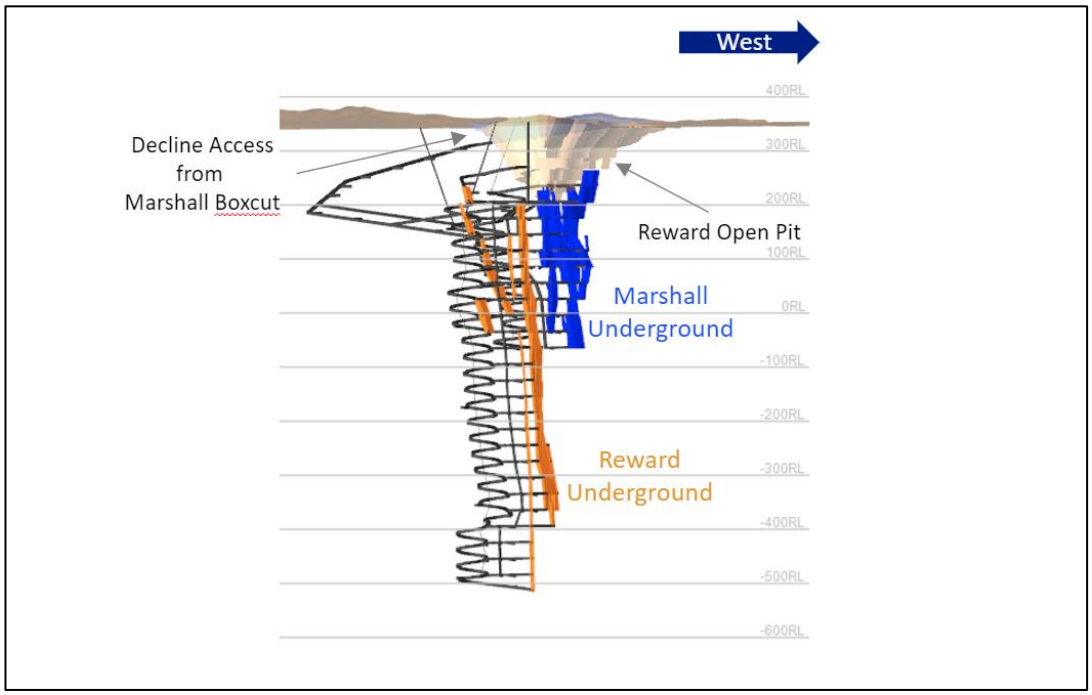


Figure 5.15 – Reward and Marshall Underground Mine Designs – Looking North



5.6 Marshall Underground

The Marshall decline will commence from a box cut located south of the Reward open pit. This allows decline development to commence at the start of mining operations.

5.6.1 Marshall Underground Mineral Resources

The Marshall underground is located within the Reward Mineral Resource. The Reward Mineral Resource below 200 mRL is shown in Table 5.17 above.

5.6.2 Marshall Underground Stope Optimisation Inputs

The commodity prices and dilution assumptions used in the optimisation are given in Chapter 4.

Table 5.20 – Marshall Underground – Stope Optimisation Parameters

Marshall Underground	
Level Interval	30m
Stope Strike Length	25m
Stope Dilution	10%
Mining Recovery	90%

Mining Methods selected for Marshall include:

- bottom up long-hole stoping with cemented rock fill (CRF), and
- top down long-hole stoping with cemented rock fill (CRF).

A 50% recovery was assumed for the crown stopes at the open pit/underground interface.

5.6.3 Marshall Underground Stope Optimisation Results

Stope Optimiser (Deswik.SO) runs on cut-off grades of 1% Cu grades were completed. Shapes are expanded for the 10% dilution.

The underground layout is seen in Figure 5.14 – Reward and Marshall Underground Mine Design and Figure 5.15 above.

The design includes development of the access decline, development required on each level to access the orebody, decline development to access the sub-levels along with horizontal and vertical development for fresh air intakes and return/exhaust airways. Stopes are designed with the minimum mining width (3.0m) and 0.5m hangingwall and footwall dilution.

5.6.4 Marshall Underground Ore Reserves

The Ore Reserves for Marshall underground mine are shown in Table 5.21, below. The Marshall underground Ore Reserves are only based on the Indicated Resources within the mine design.

Table 5.21 – Marshall Underground Ore Reserves

Category	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Proven							
Probable	2.98	1.57	46.7	0.23	21.6	43.2	4.1
Total	**2.98**	**1.57**	**46.7**	**0.23**	**21.6**	**43.2**	**4.1**
Inferred	*1.41*	*0.97*	*13.7*	*0.16*	*7.1*	*14.8*	*0.7*

5.6.4.1 Marshall Underground Financial Test of Mine Design

The mine design (and the LoM schedule) includes the Inferred material (1.41 Mt). The value of the recoverable metal within the Probable Ore Reserve is approximately $669M. Copper represents 76%, gold 7% and silver 17%.

The design was tested with allocated costs, including direct mining and processing costs (based on the Site Financial Model) with commodity pricing. Recovery factors were also applied. The Marshall mine design tonnage produced a positive contribution of over $120M, ignoring any value from Inferred material.

5.6.5 Reward/Marshall Underground Ore Reserves

The combination of Reward and Marshall underground mines Probable Ore Reserves totals 4.8 Mt at 1.84 %Cu, which represents 100% of the Indicated Mineral Resources, albeit at a reduced grade due to factoring in dilution. The LoM schedule includes Inferred material although both the Reward and Marshall underground mines both pass the positive contribution tests, ignoring any value from Inferred material.

6 SUMMARY OF JERVOIS MINERAL RESOURCES AND ORE RESERVES

6.1 Jervois Mineral Resources (31st August 2022)

The stated Mineral Resources are inclusive of Ore Reserves.

The full table of Mineral Resources is shown in Chapter 2 Resources (Table 2.1).

Table 6.1 – Jervois Project Mineral Resources by Source

	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Reward OP	4.48	1.67	75.0	0.28	39.7	35.0	5.0
Bellbird OP	3.52	1.77	62.1	0.15	16.4	11.7	1.3
Sub-total OP	**8.00**	**1.71**	**137.1**	**0.22**	**56.1**	**24.8**	**6.4**
Rockface UG	3.53	3.07	108.3	0.22	25.3	20.9	2.4
Reward UG	9.10	1.86	168.9	0.33	96.6	31.7	9.3
Bellbird UG	3.17	2.11	66.9	0.11	11.2	13.1	1.3
Sub-total UG	**15.80**	**2.18**	**344.1**	**0.26**	**133.5**	**25.5**	**13.0**
Total	**23.80**	**2.02**	**481.2**	**0.25**	**189.6**	**25.3**	**19.3**

Mineral Resources include Measured, Indicated and Inferred material only.

6.2 Jervois Ore Reserves (31st October 2022)

All Proven Ore Reserves have been converted from Measured Resources only. All Probable Ore Reserves have been converted from Measured and Indicated Resources. Any inferred material contained within the mine designs does not contribute metal to the stated Proven and Probable Ore Reserves.

Table 6.2 – Jervois Ore Reserves

	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Proven	1.40	2.07	29.1	0.12	5.2	12.3	0.6
Probable	10.33	2.10	217.1	0.31	104.0	32.1	10.7
Total	**11.73**	**2.10**	**246.2**	**0.29**	**109.2**	**29.8**	**11.2**

The value of the recoverable metal within the Proven and Probable Ore Reserves is approximately $3,300M.

Table 6.3 – Jervois Proven Ore Reserves by Mine/Source

	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Reward OP							
Bellbird OP	1.40	2.07	29.1	0.12	5.2	12.3	0.6
Sub-total OP	**1.40**	**2.07**	**29.1**	**0.12**	**5.2**	**12.3**	**0.6**
Rockface UG							
Reward UG							
Marshall UG							
Bellbird UG							
Sub-total UG	**0.00**	**0.00**	**0.0**	**0.00**	**0.0**	**0.0**	**0.0**
Total	**1.40**	**2.07**	**29.1**	**0.12**	**5.2**	**12.3**	**0.6**

Table 6.4 – Jervois Probable Ore Reserves by Mine/Source

	Tonnes (Mt)	Cu Grade (%Cu)	Cu Metal (kt Cu)	Au Grade (g/t Au)	Au Metal (koz Au)	Ag Grade (g/t Ag)	Ag Metal (Moz Ag)
Reward OP	2.34	1.73	40.6	0.34	25.7	38.5	2.9
Bellbird OP	0.44	1.12	5.0	0.06	0.9	5.9	0.1
Sub-total OP	**2.79**	**1.63**	**45.5**	**0.30**	**26.6**	**33.3**	**3.0**
Rockface UG	2.31	3.26	75.3	0.23	17.0	21.3	1.6
Reward UG	1.82	2.30	41.9	0.64	37.6	30.2	1.8
Marshall UG	2.98	1.57	46.7	0.23	21.6	43.2	4.1
Bellbird UG	0.43	1.77	7.7	0.09	1.2	14.2	0.2
Sub-total UG	**7.55**	**2.27**	**171.6**	**0.32**	**77.4**	**31.7**	**7.7**
Total	**10.33**	**2.10**	**217.1**	**0.31**	**104.0**	**32.1**	**10.7**

7 MINE SCHEDULE

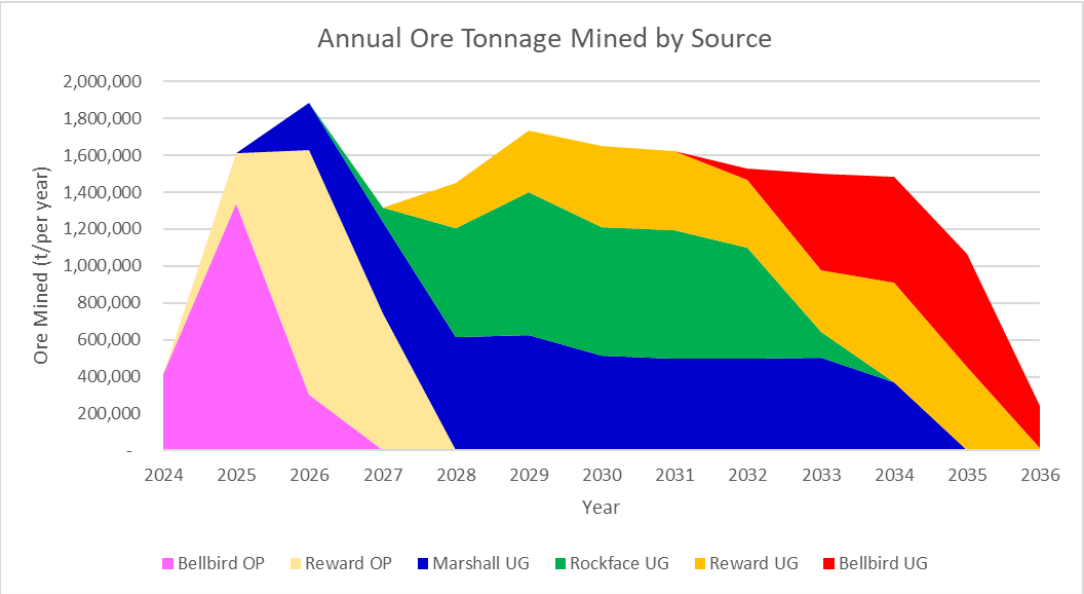
7.1 Mining Schedule

The Feasibility Study Life of Mine schedule is shown in Table 7.1 – Jervois Project Life of Mine Annual Ore Schedule by Sourceand Figure 7.1 – Jervois Project Life of Mine Annual Schedule of Ore Mined by Source. This includes all ore material within the open pit and underground mine designs mined within the project life of 13 years (2024 – 2036). It is inclusive of all measured, indicated, and inferred material.

Table 7.1 – Jervois Project Life of Mine Annual Ore Schedule by Source

Ore Sources		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	TOTAL
Reward Open Pit															
Ore tonnes	kt	-	272	1,325	745	-	-	-	-	-	-	-	-	-	2,342
Cu Grade	%	-	2.90	1.55	1.63	-	-	-	-	-	-	-	-	-	1.73
Bellbird Open Pit															
Ore tonnes	kt	414	1,311	133	-	-	-	-	-	-	-	-	-	-	1,858
Cu Grade	%	1.91	1.78	2.23	-	-	-	-	-	-	-	-	-	-	1.84
Marshall UG															
Ore tonnes	kt	-	-	259	491	614	628	514	501	501	506	372	5	-	4,390
Cu Grade	%	-	-	1.30	1.33	1.35	1.33	1.54	1.35	1.41	1.39	1.35	1.25	-	1.37
Rockface UG															
Ore tonnes	kt	-	-	-	79	591	775	696	691	599	136	-	-	-	3,566
Cu Grade	%	-	-	-	2.43	2.09	2.50	2.47	2.60	2.38	1.77	-	-	-	2.40
Reward UG															
Ore tonnes	kt	-	-	-	1	247	329	439	430	367	336	540	447	12	3,147
Cu Grade	%	-	-	-	0.55	1.40	1.77	1.86	1.88	1.61	1.82	1.91	2.12	3.12	1.83
Bellbird UG															
Ore tonnes	kt	-	-	-	-	-	-	-	-	52	392	437	368	115	1,365
Cu Grade	%	-	-	-	-	-	-	-	-	2.06	1.54	1.64	1.80	1.57	1.67
Grand Total															
Ore tonnes	kt	414	1,583	1,717	1,316	1,452	1,731	1,649	1,622	1,519	1,370	1,349	820	128	16,668
Cu Grade	%	1.91	1.97	1.56	1.57	1.66	1.94	2.02	2.02	1.86	1.57	1.67	1.97	1.73	1.81

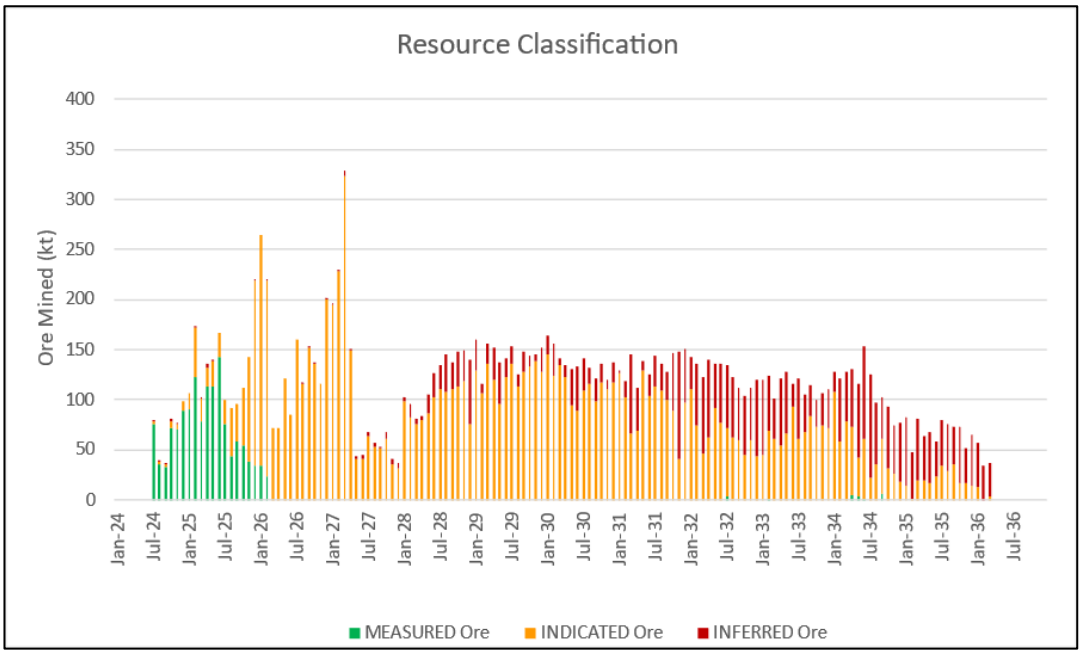
Figure 7.1 – Jervois Project Life of Mine Annual Schedule of Ore Mined by Source



7.2 Inferred Material

It is clear from Figure 7.2 – Mineral Resource Category of Mined Production that Inferred material does not drive the schedule. Inferred material does not exceed 10% of the mined production until late in the 5th year of operations. The majority of Inferred material (in and around the planned stopes) will be drilled in more detail, from underground development positions, prior to final stope outlines being designed. This will improve geological confidence (and reclassification as either Indicated or Measured) prior to mining those stopes.

Figure 7.2 – Mineral Resource Category of Mined Production



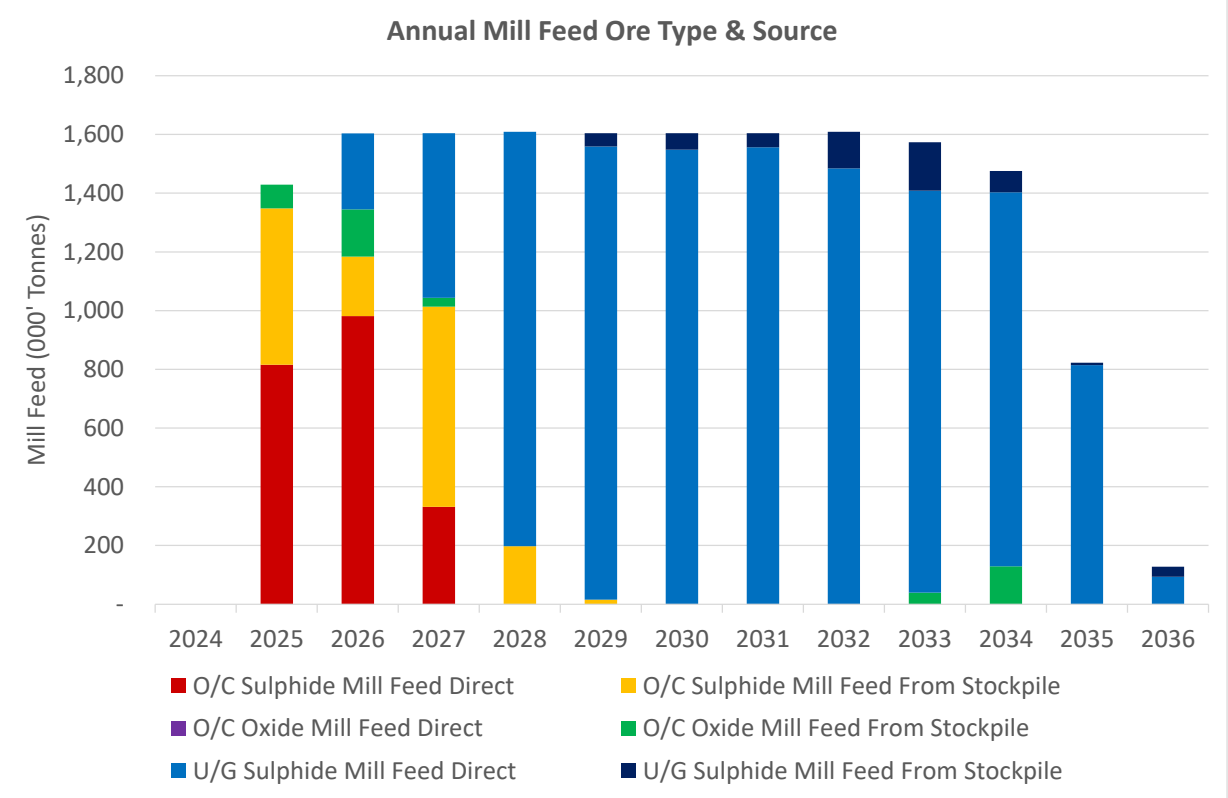
7.3 Mill Feed Schedule

The mill feed schedule is primarily based on a feed of sulphide ore with a feed of stockpile oxide ore during the life of the open pits and at the back end of the project schedule. This schedule shows all mined and stockpiled ore inclusive of measured, indicated, or inferred material. Annual milling is shown in Table 7.2 and Figure 7.3 below.

Table 7.2 – Jervois Project Life of Mine Annual Milling Schedule

Milling		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	TOTAL
Fresh Ore	kt	-	1,348	1,443	1,574	1,609	1,604	1,604	1,604	1,609	1,534	1,346	823	128	16,227
Oxide Ore	kt	-	81	160	30	-	-	-	-	-	40	129	-	-	441
Total Feed	kt	-	1,429	1,604	1,604	1,609	1,604	1,604	1,604	1,609	1,573	1,476	823	128	16,668
Cu Grade	%	-	1.97	1.68	1.62	1.64	1.94	2.05	2.06	1.84	1.55	1.65	1.97	1.73	1.81
Au Grade	g/t	-	0.12	0.27	0.28	0.19	0.24	0.28	0.27	0.23	0.22	0.32	0.32	0.14	0.25
Ag Grade	g/t	-	16.73	37.10	29.91	21.88	21.94	24.95	23.57	27.77	21.16	24.08	18.46	13.18	24.60
Recoveries															
Cu Rec	%	0.0%	92.3%	91.4%	92.2%	92.5%	93.0%	93.1%	93.2%	92.8%	91.3%	88.9%	93.0%	92.6%	92.1%
Au Rec	%	0.0%	50.6%	53.0%	52.4%	51.5%	50.9%	51.2%	52.4%	52.2%	50.0%	48.4%	49.5%	48.8%	51.2%
Ag Rec	%	0.0%	72.9%	73.7%	73.5%	74.0%	73.2%	69.7%	69.5%	68.5%	70.1%	69.9%	74.8%	70.0%	71.7%
Concentrate produced	kt	-	96.25	90.75	88.58	90.20	106.96	113.24	114.32	101.89	82.55	80.79	55.84	7.56	1,028.92
Cu metal	kt	-	26.0	24.5	23.9	24.4	28.9	30.6	30.9	27.5	22.3	21.8	15.1	2.0	277.8
Au metal	koz	-	2.85	7.51	7.48	5.15	6.18	7.43	7.45	6.33	5.47	7.31	4.15	0.29	67.6
Ag metal	koz	-	564.4	1,417.3	1,127.0	836.2	828.9	898.6	845.0	984.4	736.9	750.7	366.3	38.0	9,393.9

Figure 7.3 – Mill Feed Source by Ore Type & Source



A financial model has been developed, based on the Life of Mine Schedule, following the sequence in Section 3.2 and is summarised in Section 8 Project Economics.

8 PROJECT ECONOMICS

Project economics were modelled using an in-house financial model developed by KGL Resources Limited. A summary of project physicals and costs are included in Table 8.1 below.

Table 8.1 – Jervois Project Physicals and Costs Summary

Physicals and Costs	Units	Value		
Mining Physicals – Project				
Ore tonnage	Mt	16.7		
Grade Copper	%Cu	1.81		
Grade Gold	g/t Au	0.25		
Grade Silver	g/t Ag	24.60		
Contained Copper metal	kt	302		
Contained Gold metal	koz.	132		
Contained Silver metal	MOZ.	13.1		
Life of Mine ("LOM")	Years	11.75		
Run-of-Mine Ore	Mtpa	1.6		
Process Recoveries		**Cu**	**Au**	**Ag**
Bellbird Open Pit	%	91.8%	52.1%	73.1%
Reward Open Pit	%	92.8%	52.6%	73.6%
Rockface Underground	%	93.9%	59.9%	72.2%
Reward Underground	%	93.2%	59.7%	71.8%
Marshall Underground	%	92.1%	60.0%	72.3%
Bellbird Underground	%	92.8%	59.9%	72.2%
Copper Production				
Total	Kt	278		
Average Annual	Ktpa	23.1		
Upfront Capital Costs	$M	298		
Operating Costs				
Mining – Open Pit	$/t ore	39.48		
Mining – Underground	$/t ore	86.47		
Mining – Combined	$/t ore	74.63		
Processing	$/t ore	31.64		
Other	$/t ore	12.65		
Total	$/t ore	118.92		
Key Assumptions				
Copper Price	US$/lb	**4.00**		
Gold Price	US$/Oz	1850		
Silver price	US$/Oz	22.80		
Exchange Rate	A$:US$	0.70		
Discount Rate	%	8		

Physicals and Costs	Units	Value
Financials*		
Operating Cost (C1)	US$/lb	2.34
Net cash flow (undiscounted, post-tax)	$M	505
$NPV_{8\%}$ (post-tax)	**$M**	**180**
IRR (post-tax)	**%**	**17.7**

*Financials are from the KGL FS financial model using US$4.00/lb Cu, US$1850/oz Au and US$22.80/oz Ag.

Operating costs are important in any project. A solid understanding of contract pricing has been developed for both open pit and underground operations. An alternative dry hire arrangement for equipment and manning for open pit operations has been developed by KGL to provide a comparative cost for open pit mining. The Financial Test for Ore Reserves used for the Open Pit Ore Reserves is based on the higher contractor prices originally sourced as part of the FS.

Treatment costs and refining charges have been applied in the financial model as per the agreement with Glencore International AG.

The Life of Mine schedule and financial model has projected net cashflows as shown in Figure 8.1. This shows annual post-tax cash flow for the Project.

Figure 8.1 – Project Net Cashflows

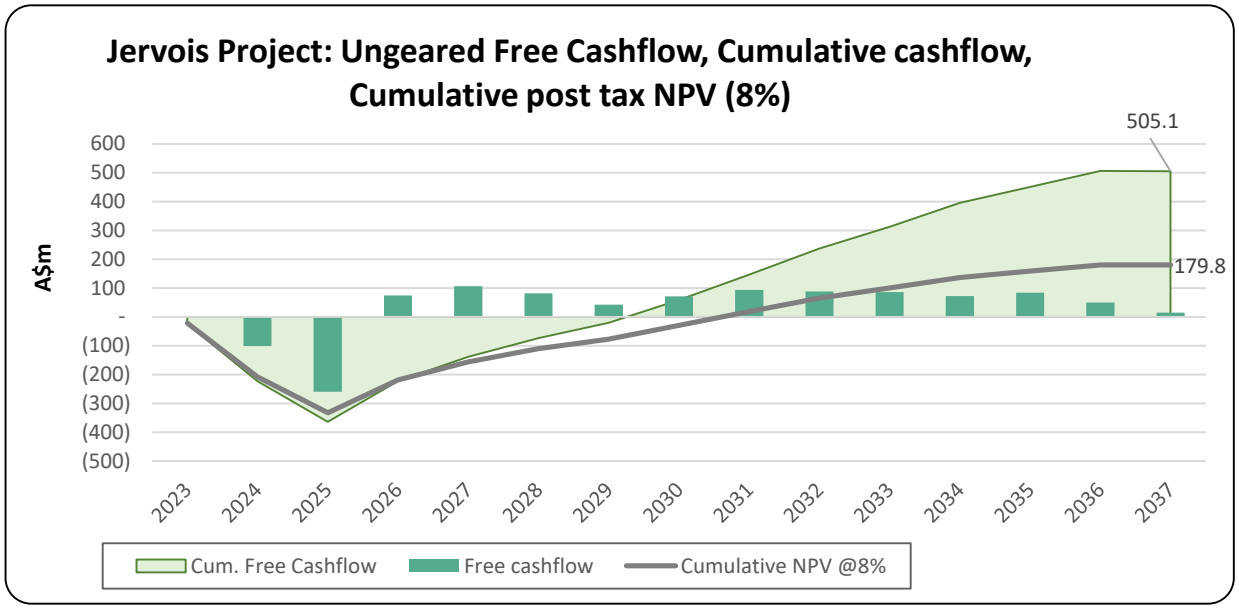
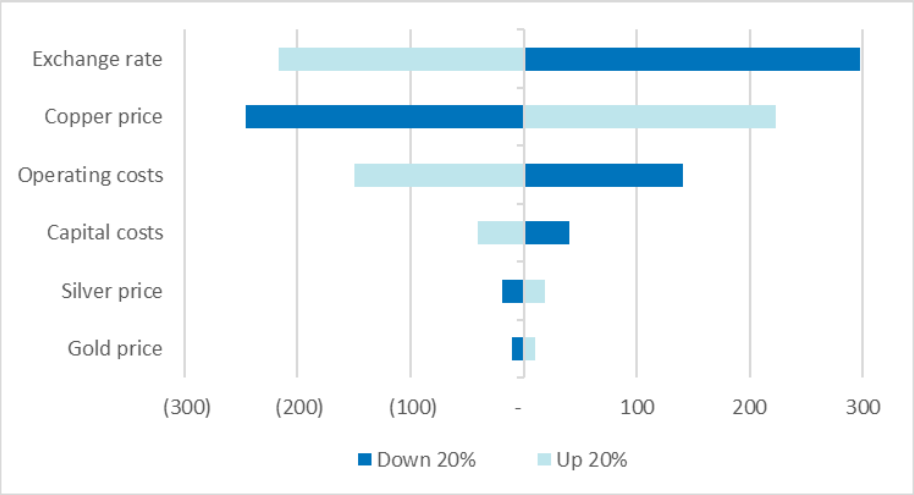


Figure 8.2 – Sensitivity Chart (+/-20%) Relative to NPV



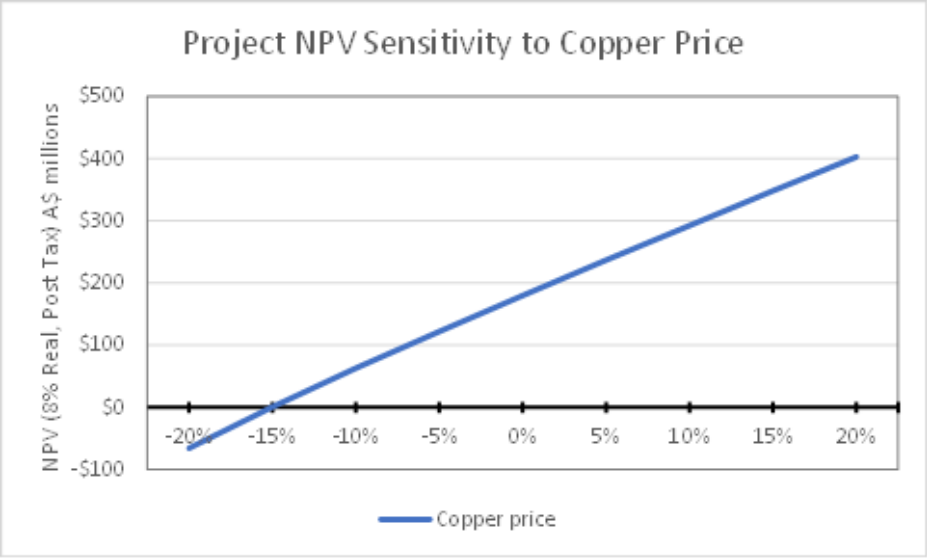
The above Figure 8.2 – Sensitivity Chart (+/-20%) Relative to NPV, shows the impact of 20% increase/decrease in several parameters (Commodity Prices, Exchange Rate, Opex and Capex). The project appears to be quite robust and is not particularly sensitive to capital changes.

The three major sensitivities are:

1. Exchange Rate
2. Copper Price
3. Opex.

Exchange rate has the biggest potential to impact on project value and is beyond the control of the project team. As Copper is the biggest single revenue for the project (approximately 90%), it is logical to expect that the project value would be sensitive to Copper Price.

Figure 8.3 – Copper Price Sensitivity Relative to NPV



9 PROJECT INFRASTRUCTURE

All key items of infrastructure required have been considered as part of the Jervois Project Feasibility Study (FS). The Jervois Project is designed as a remote standalone facility and comprises all components for operations.

Significant project infrastructure will include:

- Process plant
- Process plant mobile equipment fleet
- Sample Prep/XRF area
- Tailings storage facility
- Site buildings including:
  - Administration & first aid building
  - Emergency response facility
  - Warehouse
  - Crib rooms & ablutions
  - Reagent storage area
  - Process plant workshop
- On-site LV and HV roads.
- Fuel storage tanks – process plant and power station
- Hybrid wind/solar/diesel/battery - battery energy storage system (BESS) power station
- High voltage (HV) power reticulation and step-down transformers
- Water borefield including local power generation and overhead powerline transmission
- Communications infrastructure
- Bonya airstrip upgrades (not owned)
- Site gate/site fencing
- 260-room accommodation camp (build, own and operate contract) including:
  - Sewage treatment facilities
  - Water treatment plant and potable water reticulation
  - Camp roads, landscaping and fencing.

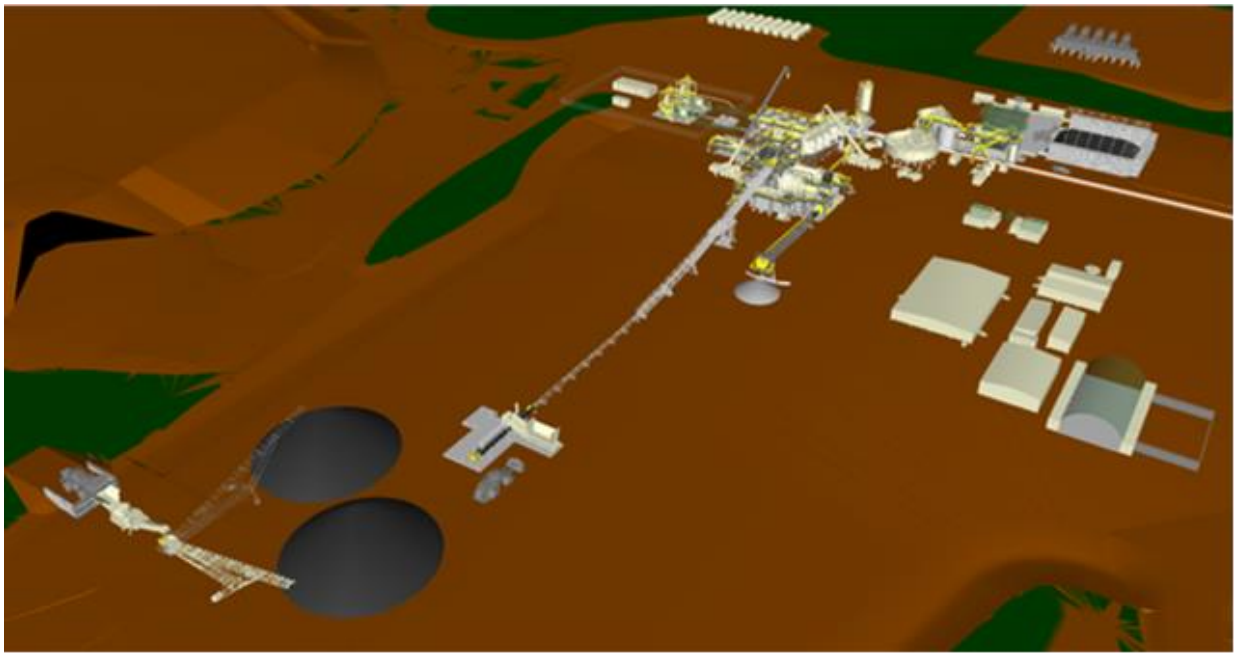
9.1 Process Plant

The process plant design is a conventional concentrator for base metals. The design consists of mobile jaw crushing, semi autogenous and ball mill grinding, rougher flotation, regrinding and cleaner flotation followed by concentrate thickening and dewatering by filter press. Product concentrate is stockpiled within a purpose-built covered concentrate holding facility prior to being loaded into side tipping bulk carrier road trains for delivery to Glencore's Mt Isa smelter. The plant design is based on a 200t/hr throughput rate for 1.6Mtpa processing capacity and is costed in the Feasibility Study report as $130.8M.

The process flowsheet and descriptions of the crushing, grinding and floatation circuits are contained in the relevant section of the Feasibility Study Report.

At this stage the design for the plant serves only to produce a copper-gold-silver concentrate.

Figure 9.1 – 3D Schematic of Process Plant



9.2 Concentrate Transport

Copper concentrate will be transported from the mine site to Mt Isa in covered bulk haulage trailers in road train configuration resulting in 100 tonnes concentrate per truck via the plenty Highway and National Road 83 (Bourke Development Road).

9.3 Sample Preparation Facility

A sample preparation/XRF scanning facility will be established adjacent the process facility.

9.4 Tailings Storage Facility

The tailings storage facility (TSF) will consist of one cell and will be constructed (raised) in stages using mine waste sourced from mining pre-strip, diversion drain excavation and locally borrowed soil materials.

The design objectives for the tailings storage facility included several aspects being:

- Permanent and secure containment
- Maximisation of tailings densities through sub-aerial deposition
- Removal and re-use of water through constant dewatering,
- Seepage minimisation and control,
- Storage capacity to retain a 1 in 100-year recurrence interval, 72-hour duration storm event throughout the life of the project

- Ease of operation
- Rapid and effective rehabilitation.

The TSF has been designed in accordance with design criteria applicable to 'High C' category drawn from the Australian National Committee on Large Dams (ANCOLD) guidelines. ANCOLD guideline design levels for earthquake were considered and consequential population at risk and potential environmental and economic impacts. The resulting peak ground acceleration levels are considered low.

The capacity design basis adopted for the TSF are detailed in Table 9.1 below:

Table 9.1 – Tailings Storage Facility Design Parameters

Design Parameters	Units	Design Value
Mill Feed	Mtpa	1.6
Copper Concentrate Production	Ktpa	Up to 130
Mine Life	Years	~10
TSF Capacity	Mt	>16
Tailings Density	t/m^3	1.30 - 1.45
Tailings Beach Slope	%	2.5

A tailings storage facility (TSF) is included in the Feasibility Study at an initial cost of $25.7M. Any future lifts will we covered in Sustaining Capital.

9.5 Warehouse

Stores and logistic areas total around 33,000 m^2 and will support inventory storage, laydown, receivals and issue for all logistic activities at site, located as a permanent stores facility adjacent to the process plant.

9.6 Fuel Storage Facility

The project's proposed main fuel storage facility will be located east of the power station and south of the process facility.

The fuel storage facility will consist of 10 equally sized self-bunded tanks of 110,000 litres each to provide a total storage of 1.1 million litres.

9.7 Power Plant and Medium Voltage Transmission

Power to the project will be supplied by an Build, Own Operate and Manage (BOOM) hybrid power generation facility consisting of a wind farm, large solar photovoltaic (PV) array, a diesel-powered power plant and battery energy storage system (BESS).

The remote nature of the Jervois site requires the construction of a power station to suit a 13MW maximum power demand. This will satisfy the requirements of the mining operations, process plant,

camp, contractor's area and other powered areas of site. The power station is modular and similar to many other remote site power stations, with the flexibility for adding or subtracting generation capability as the mine evolves over time.

The following main items are included in this footprint:

- 18 MW wind farm
- 8 MW solar power station,
- 10 MW battery energy storage system (5 MWhr capacity),
- 13 x 1MW diesel generator sets,
- Self-bunded diesel day tank
- Switch room
- Transformers and inverters
- Control system
- Control room
- Containerised office/workshop/store.

Power reticulation for the project will be by medium voltage site-wide power distribution network. This network will be installed between key electrical nodes, with distances between power take off nodes warranting a voltage of 11 kV to reduce resistance related power losses through power transmission.

The above power station arrangement looks to provide a unit cost of $0.24 per kWh.

9.8 Water Management

Water is to be sourced predominantly from groundwater bores and from dewatering pits and underground workings as mining activities progress. All water captured in sediment ponds, within mine pits and underground mines will be reused in processing.

The Lucy Creek borefield system, located 20 km north-north-west of the mine site and approximately 40km from the processing facility. A mineral lease (ML32277) over this area was approved in July 2020. The peak water demand is expected to be 3.5ML per day, while water approvals for the Lucy Creek borefield and additional supply from the Jervois Dam equates to 4.6ML per day.

Potable water will be provided through a 3.8 m^3/hr capacity Reverse Osmosis plant, installed at the processing facility.

9.9 Accommodation Camp

The accommodation camp will be sited approximately 2.5km from the process plant. There will be a total of 260 rooms at site. The camp facility and the servicing costs are estimated at ~$83 per person per day.

Accommodation requirements have based around the scheduled personnel requirements of the development commencing with an upgrade of an existing exploration camp and construction of a permanent camp.

- The exploration camp upgrade will accommodate personnel constructing the permanent camp and contractors performing preliminary civil works on site and is planned to provide 60 rooms. Cost of $3.2M.
- The (new) permanent camp is sized at 200 accommodation rooms. Cost of $16.4M.

9.10 Ancillary Infrastructure

Other items of infrastructure that have also been covered in the FS allow for:

- Site buildings including:
  - Clinic and emergency response building,
  - Administration / first aid building,
  - Security building,
  - Shift change rooms,
  - Core shed building.
- Communications infrastructure
- Process plant mobile equipment
- Bonya (Baikal) airstrip (located at the Bonya community approximately 17km west of the Process facility) upgrade (to all-weather airstrip)
- Airport shed and parking
- Site gate / security fencing
- CCTV system for site access points, accommodation camp, breathalysers, stores, kitchen/mess hall as a recorded but not monitored system
- Sewage treatment facility
- On-site roads (separated from heavy haulage roads/routes)
- Vehicle washdown, and
- Creek diversion

10 MINE APPROVALS & ENVIRONMENTAL STATUS

KGL has been progressing environmental assessments and submitted the Notice of Intent (NOI) to the NT government in 2013. This was updated (amended) and the notice of alteration submitted in 2017. The Environmental Impact Statement (EIS) required several studies to be undertaken and the EIS was submitted in 2018.

It was available for public comment until mid-December 2018. After the public comment, the NT EPA provided direction to prepare a supplementary EIS. This was completed and submitted in mid-2019.

The notice of completion of the EIA process was received by KGL in September 2019 when the NT EPA issued its Assessment Report. The Mine Management Plan (MMP) was submitted in early 2020 and KGL submitted clarification for a number of queries relating to the submission. The NT Minister for Mining and Industry granted Authorisation 1061-01 for the approval of the Project and associated Mining Management Plan (MMP) in January 2021.

The approved MMP for the Project contains numerous strategies and environmental management plans which have been specifically designed to address and monitor all commitments and recommendations which form part of the Project authorisation.

An Indigenous Land Use Agreement (ILUA) between Jinka Minerals Ltd, Kentor Minerals (NT) Pty Ltd (KGL's operating company; the company name was subsequently changed to Jervois Operations Pty Ltd) and the Central Land Council. This ILUA has been registered with the National Native Title Tribunal since May 2017.

11 CONCLUSIONS AND RECOMMENDATIONS

The Life of Mine plan developed for the Jervois Project as part of the 2022 Feasibility Study forms the basis for the declaration of the October 2022 Ore Reserves. It uses the stated Mineral Resources for the Jervois Project as reported in August 2022.

The completed open pit and underground optimisations and resultant open pit and underground mine designs are deemed appropriate as of October 2022 and represent the final design outputs for the Feasibility Study.

In total 51% by copper metal of the available Mineral Resources have been converted to Ore Reserves.

The total of 11.7 Mt of Proven and Probable Ore Reserves is deemed a suitable basis to support an open pit and underground mining operation treating 1.6Mtpa of ore for 11 years.

There is significant potential for further increases in the Resource base and expansion of the Reserves as part of resource definition, mine resource development and near mine exploration considering the significant inventory of drilling targets available across the Reward, Reward South, Bellbird and Marshall deposits. Many of these will be pursued during and following the lead up to project start-up and the execution phase for the Jervois Project.

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APPENDIX A. JORC TABLE 1

Note – Sections 1, 2 and 3 have been extracted from the Mineral Resource Estimate, Reward, Bellbird and Rockface Deposits – Jervois Project, Northern Territory, Australia; By Mr Ian Taylor of Mining Associates dated 31 August 2022. This was included in the KGL Resources ASX Announcement on 14 September 2022.

SECTION 1 SAMPLING TECHNIQUES AND DATA – JERVOIS PROJECT

Criteria	*JORC Code explanation*	• Commentary
Sampling techniques	*Nature and quality of sampling (e.g. 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.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	• At the Jervois Project, diamond drilling and reverse circulation (RC) drilling were used to obtain samples for geological logging and assaying. The core samples comprised a mixture of sawn HQ quarter core, sawn NQ half core and possibly BQ half core (historical drilling only). Sample lengths are generally 1 m, with adjustments made were necessary to take into account geological variations. RC sample intervals are predominantly 1 m, with some 2 m and 4 m compositing (historical holes only). • RC samples are routinely scanned by KGL Resources with a Niton XRF. Samples assaying greater than 0.1% Cu, Pb or Zn are submitted for chemical analysis at a commercial laboratory. • Documentation of the historical drilling (pre-2011) for Jervois Project is variable.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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 KGL and previous Jinka Minerals RC drilling was conducted using a reverse circulation rig with a 5.25-inch face-sampling bit. Diamond drilling was either in NQ2 or HQ3 drill diameters. Metallurgical diamond drilling (JMET holes) were PQ core. • There is no documentation for the historic drilling techniques, drill type is recorded as UNK. • Diamond drilling was generally cored from surface with some of the deeper holes at Rockface utilising RC pre-collars. • Oriented core has been measured for the recent 2020-2021 KGL drill program.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *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.*	• The KGL RC samples were not weighed on a regular basis. KGL report no sample recovery issues were encountered during the drilling program. • Jinka Minerals and KGL split the rare overweight samples (>3kg) for assay. Since overweight samples were rarely reported no sample bias was established between sample recovery and grade. • Drilling muds are used to improve drilling recovery, and in broken ground triple tube barrels are employed. Core recovery for recent drilling is >95% with

Criteria	*JORC Code explanation*	• Commentary
		the mineral zones having virtually 100% recovery. • No evidence has been found for any relationship between sample recovery and copper grade and there are no biases in the sampling with respect to copper grade and recovery.
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.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	• All KGL RC and diamond core samples are geologically logged. Logging in conjunction with multi-element assays is appropriate for Mineral Resource estimation. • Core samples are orientated and logged for geotechnical information suitable for mining studies. • All logging has been converted to quantitative and qualitative codes in the KGL Access database. • All relevant intersections are logged. • Paper logs existed for the historical drilling. There is very little historical core available for inspection.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* *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.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• The following describes the recent KGL sampling and assaying process: • RC drill holes are sampled at 1 m intervals and split using a cone splitter attached to the cyclone to generate a split of ~3 kg. • RC sample splits (~3 kg) are pulverised to 85% passing 75 microns. • Diamond core was quartered with a diamond saw and generally sampled at 1 m intervals, with sample lengths adjusted at geological contacts. • Diamond core samples are crushed to 70% passing 2 mm and then pulverised to 85% passing 75 microns. • Two quarter core field duplicates were taken for every 20 m of sampling by Jinka Minerals and KGL Resources. • All sampling methods and sample sizes are deemed appropriate for Mineral Resource estimation. • Details for the historical sampling are not available.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *For geophysical tools, spectrometers, handheld XRF instruments, etc, the 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• The KGL drilling has QAQC data that includes standards, duplicates and laboratory checks. Within mineralisation, standards are added at a ratio of 1:10 and duplicates and blanks 1:20. • Base metal samples are assayed using a four-acid digest with an ICP AES finish. Gold samples are assayed by Aqua Regia with an ICP MS finish. Samples over 1 ppm Au are re-assayed by Fire Assay with an AAS finish. • Fluorine is determined with carbonate infusion • There are no details of the historic drill sample assaying or any QAQC. • All assay methods were deemed appropriate at the time of undertaking.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	• Data is validated on entry into the MS Access database, using database check queries within Maxwell's DataShed.

Criteria	JORC Code explanation	• Commentary
	The use of twinned holes. *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	• Further validation is conducted when data is imported into Micromine and Leapfrog Geo software. • Hole twinning was occasionally conducted at Reward and Bellbird with mixed results. This may be due to inaccuracies with historic hole locations rather than mineral continuity issues. • No twin holes have been drilled at Rockface. • For the resource estimation, below detection values were converted to half the lower detection limit.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	• Surface collar surveys for the KGL drilling were picked up using a Trimble DGPS, with accuracy to 1 cm or better. • Historical holes commonly only have a collar and identical end of hole survey record. Recent (post 2011) downhole surveys were taken during drilling with an Eastman style tool at 30 m intervals. Recent (post 2018) drilling uses a Ranger or Reflex survey tool at intervals of between 5 and 15 m downhole. • All drilling by Jinka Minerals and KGL is referenced on the GDA 94, MGA Zone 53. All downhole magnetic surveys were converted to MGA azimuth. • There are concerns about the accuracy of some of the historic drill hole collars at the Jervois Project, but there are virtually no preserved historic collars for checking. Several spurious holes from each deposit were excluded. Historic holes with complete assay data and logging, and confirmed by newer drilling, were used in the resource estimate. • There is no documentation for the downhole survey method for the historic drilling. • Topography was mapped using Trimble DGPS and merged with the LIDAR.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *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.* *Whether sample compositing has been applied.*	• Drilling at Reward and Bellbird was on 25 m spaced sections in the upper part of the mineralisation extending to 50 m centres with depth and ultimately reaching 100 m spacing on the periphery of mineralisation. Several sections are drilled with tight (~10-15m) spaced shallow drillholes • Drilling at Rockface was on 50 m spaced sections (50 m x 50 m grid), with significant areas infilled to 25 m centres by drilling on intermediate sections or with child holes. • The drill spacing for all areas is appropriate for resource estimation and the relevant classifications applied. • A small amount of sample compositing has been applied to some of the near surface historic drilling.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• Reward and Rockface Holes were drilled perpendicular to the strike of the mineralization; the default angle is -60 degrees, but holes vary from -45 to -80. • Rockface Holes were drilled perpendicular to the

Criteria	JORC Code explanation	• Commentary
	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.	strike of the mineralisation; the default angle is -60°, but holes vary from -20° to -90° (navi holes). • A small amount of sample compositing has been undertaken on some of the near surface historic drilling, this data was excluded from the Resource estimate. • Drilling orientations are considered appropriate, and no obvious sampling bias was detected.
Sample security	*The measures taken to ensure sample security.*	• Samples were stored in sealed polyweave bags on site and transported to the laboratory at regular intervals by KGL staff or a transport contractor.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• The sampling techniques are regularly reviewed internally and by external consultants.

SECTION 2 REPORTING OF EXPLORATION RESULTS – JERVOIS PROJECT

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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Jervois Project is within EL25429 and EL28082, 100% owned by Jinka Minerals and operated by Jervois Operations Pty Ltd, both wholly owned subsidiaries of KGL Resources Limited. • Excised from the Exploration Licences are four Mining claims (ML 30180, ML 30182, ML 30829 & ML 32277) owned by Jinka Minerals. Rockface lies within ML30182. • The tenements are all in good standing. • An Indigenous Land Use Agreement (ILUA) was registered in 2017. • Royalties will be payable as per the NT Minerals Royalty Act (1982) on production of saleable mineral commodities.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration has primarily been conducted by Reward Minerals, MIM and Plenty River. • This report references a Mineral Resource Estimate and this item is not applicable.
Geology	*Deposit type, geological setting and style of mineralisation.*	• EL25429 and EL28082 lie on the Huckitta 1: 250 000 map sheet (SF 53-11). The tenement is located mainly within the Palaeo-Proterozoic Bonya Schist on the north-eastern boundary of the Arunta Orogenic Domain. The Arunta Orogenic Domain in the north western part of the tenement is overlain unconformably by Neo-Proterozoic sediments of the Georgina Basin. • The stratabound mineralisation for the project consists of a series of complex, narrow, structurally controlled, sub-vertical sulphide/magnetite-rich deposits hosted by Proterozoic-aged, amphibolite grade metamorphosed sediments of the Arunta Inlier. • Mineralisation is characterised by veinlets and disseminations of chalcopyrite in association with magnetite. In the oxide zone, which is vertically limited, malachite, azurite and chalcocite are the

Criteria	*JORC Code explanation*	• Commentary
		main Cu-minerals.
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:* *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* *down hole length and interception depth* *hole 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.*	• This report references a Mineral Resource Estimate, and this item is not applicable. • All drill holes are stored in the drill hole database, detailing drill hole collar location including elevation or RL (Reduced Level – elevation above sea level in metres), dip and azimuth of the hole at consistent points down hole, and hole length.
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.* *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.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• This report references a Mineral Resource Estimate, and this item is not applicable. • No metal equivalents are used.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be 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').*	• This report references a Mineral Resource Estimate, and this item is not applicable.
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.*	• Appropriate scaled maps and sections are provided in the body of the report.
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.*	• This report references a Mineral Resource Estimate, and this item is not directly applicable. The Mineral Resource considers all drilling within the Rockface deposit area.

Criteria	*JORC Code explanation*	• Commentary
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 treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Outcrop mapping of exploration targets using Real-time DGPS. • IP, Magnetics, Gravity, Downhole EM are all used for targeting. • Metallurgical studies are well advanced, including recovery of the payable metals including Cu, Ag and Au. • Deleterious elements such as Pb, Zn, Bi, U and F are modelled. Pb and Zn may have future economic value, at present KGL do not intend to recover Pb and Zn as economically beneficial metals.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• The current report relates to an updated Mineral Resource as a result of ongoing confirmatory drilling.

SECTION 3 ESTIMATION AND REPORTING OF REWARD MINERAL RESOURCES

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

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.* *Data validation procedures used.*	• MA has undertaken limited independent first principal checks of the database. • Historical ITRs accept the integrity of the database. • The geological database is managed and updated by KGL Staff. • Basic database validation checks were run, including checks for missing intervals, overlapping intervals and hole depth mismatches.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	• The CP(Mr I.Taylor) visited site from the 1st to 3rd November 2020 to review the geology, drill core and field practices as part of the 2020 DFS and Mineral Resource Estimate Update.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource estimation.* *The use of geology in guiding and controlling Mineral Resource estimation.* *The factors affecting continuity both of grade and geology.*	• The geological model is well understood at a deposit scale. Reward is interpreted as an original syn-depositional copper rich polymetallic massive sulphide deposit that has undergone deformation, metamorphism and some degree of structural remobilisation. • Geological logging, structural mapping and drill hole assays have been used in the establishment of a resource estimate. Validation has been carried out by KGL and MA competent persons. • No alternative interpretations have been presented. Alternative estimation methods applied to density estimation had little effect on overall tonnes and grade. • Geological and grade continuity within defined domains appears well understood. Lithology and

		weathering were considered during the mineralisation domain interpretations • Infill drilling by KGL since the 2020 resource update have increased the confidence in grade and geology interpretations which is the basis for the mineral resource estimation.
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.*	• The Reward deposits strike over 1.5 km. Within the structural corridor lie five high grade shoots each approximately 200m in length and plunge steeply south up to 800 m below the surface. Two lodes lie to the east in the footwall of the reward structure.
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 description of computer software and parameters used.* *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 assumptions made regarding recovery of by-products.* *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* *Any assumptions behind modelling of selective mining units.* *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* *Discussion of basis for using or not using grade cutting or capping.* *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Ordinary Kriging has been used as the interpolation technique to estimate the Mineral Resource. This method considered appropriate given the nature of mineralisation. All elements were estimated using ordinary kriging. • Estimation was undertaken in Surpac 2021 (v7.4.2). • Drill hole intercepts were flagged manually within Surpac with individual domain codes. The flagged drill hole intercepts were imported into LeapFrog, and three-dimensional mineralisation wireframes created. Intervals were checked for inconsistences, split samples, edge dilution and mineralisation outside the interpretation. A separate table was created to store drill hole intercepts greater than 0.2% S. these intercepts were domained as stratabound mineralisation. • The domain codes (for Cu and S) have then been used to extract a raw assay file from MS Access for grade population analysis (multi-element), as well as analysis of the most appropriate composite length to be used for the estimation. • Analysis of the raw samples within the Cu mineralisation domains indicates that the majority of sample lengths are at 1 m. Samples were composited to one metre honouring geological boundaries. • Grade continuity analysis within Cu domains to define the mineralisation has been undertaken. Where variograms could not be generated for a particular element, variograms were considered from adjacent domains. • 3D experimental variogram modelling using a nugget (C0) and two spherical models (C1, C2), occasionally one spherical model was sufficient. Nuggets ranged from reasonable low to high, between 0.20 and 0.73, and variogram ranges varied between 60 and 150 m for Cu. The high nugget was for the new domain main HW. Nuggets for additional elements ranged from 0.2 to 0.7 and variogram ranges varied between 50 and 180 m. • Anisotropic ellipses based on the resulting bearing, plunge, dip, and defined ranges and anisotropic ratios were graphically plotted in Surpac and displayed against the extracted assay composites to ensure modelled parameters were reasonably orientated. Estimation utilised dynamic anisotropy based on local

		variations in domain orientation. • The interpolations have been constrained within the mineralisation wireframes and undertaken in three passes with the mineralisation wireframes utilised as hard-boundaries during the estimation. • The first pass utilised a search distance of 70 m and a minimum number of informing samples of 8, and a maximum number of informing samples of 20. The second pass utilised a minimum of 6 and maximum of 16 samples, the search distance was doubled to 140 m. Both passes restricted the maximum number of samples per hole to 4. The third pass dropped the minimum to 2 and maximum to 10 samples and the restriction of samples per hole was lifted. Third pass maximum distance was 210 m. 56% of estimated metal (> 0.5 % Cu) is estimated in pass 1. • The company is not intending to recover Pb, Zn at this stage of the project. Ag and Au will report to the copper concentrate. • The model includes an estimation of deleterious elements Bi, W, U and F, these elements will attract a penalty and rejection limits in the concentrate may apply. S for potential acid mine drainage characterisation is included in the block model. • No specific assumptions have been made regarding selective mining units. However, the sub-blocks are of a suitable selective mining unit size for either an open pit operation or underground mining scenario. • A 3D model with a parent block size of 2.5 m (X) by 10 m (Y) by 5 m (Z) was used. The drill hole spacing in the deposit ranges from 25 m by 25 m in the better drilled parts of the deposit to the dominant 50 m by 50 m drill pattern. In order for effective boundary definition, a sub-block size of 1.25 m (X) by 5 m (Y) by 2.5 m (Z) has been used; the sub-blocks are estimated at the parent block scale. • There is a moderate to good correlation between Pb and Ag and weak correlation between Bi and Ag. There is a moderate (> 0.5) correlation between Cu, Pb, Zn, Ag Au and S. Fe is associated with magnetite and shows a weak correlation (!0.3) with S and Cu There is no correlation between F, U and W and the other elements. • The geological model (grade domains and faults interpretations) was used to control grade estimation. • High grade outliers (Cu, Pb, Zn, Ag, Au, Bi, F, U and W) within the composite data were capped. No capping was applied to Fe and S. Domains were individually assessed for outliers using histograms, log probability plots and changes in average metal content; grade caps were applied as appropriate. Generally the domains defined a well distributed population with low CV's and only minimal grade-capping was required. • The resource has been validated visually in section and level plan along with a statistical comparison of the block model grades against the composite grades to

		ensure that the block model is a realistic representation of the input grades. No issues material to the reported Mineral Resource have been identified in the validation process •
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are based on dry tonnes.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The resource is reported above 200 m RL and a 0.5 % Cu lower cut-off representing open pit potential mineralisation. Below 200 m RL the resource is reported at a 1 % Cu Cut-off reflecting an underground mining scenario. Assumed Copper price is $AU 12,082/t ($US 4.00/lb), and assumed Silver price of $AU 24/t. The 2020 Recovery algorithms for copper and silver were supplied by KGL. Assumed payables are 95.5% Cu, 90% Ag > 30g/t and 90% Au > 1.0 g/t in concentrate.
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.*	• The mineralisation above the 200 m RL (approximately 150 m below the surface) has been deemed to be potentially accessible by open cut mining methods The deposit is a large steeply dipping syn-depositional copper deposit likely resulting in a high strip ratio. • Mineralisation below the 200 m RL (approximately 150 m below the surface) is considered to have underground potential above a 1 % Cu cut off. • No other mining assumptions have been used in the estimation of the Mineral 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 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 made.*	• No metallurgical factors have been applied to the in-situ grade estimates. • Metallurgical Recoveries for copper and silver are determined as functions of copper grade in oxide/transitional and sulphide ore.
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. Where these aspects have not been considered this should be reported*	• KGL is undertaking Kinetic test work to assess potential for acid mine drainage, preliminary results indicate most of the waste material recoverable by mining will have low potential to become acidic. • Sulphur has been estimated through-out the block model. Fe and S have been estimated within the S domain and outside the sulphur domain (waste rock). • It is assumed that surface waste dumps will be used to

	with an explanation of the environmental assumptions made.	store waste material and conventional storage facilities will be used for the process plant tailings.
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.* *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.* *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Onsite measurements (13,846 density readings are matched to an assay value) by water immersion method are only conducted on competent transitional and fresh core. Limited oxide samples have been taken. • Dry bulk density has been varied according to the weathering profile. Within Fresh material bulk density was estimated (OK) directly from density readings. A minimum of 5 samples and a maximum of 12 samples was used. In areas not filled with estimated density values, a linear regression of iron assays was employed; the calculated density data was then used in a second pass. • Reward - the average modelled density of mineralised oxide material is 2.60 t/m^3, transitional material is 3.02 t/m^3, the high sulphide material averages 3.07 t/m^3 and mineralised fresh material averages 3.09 t/m^3
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.* *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).* *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• Blocks have then been classified as Indicated, Inferred or Unclassified based on drill hole spacing, geological continuity and estimation quality parameters. • The above criteria were used to determine areas of implied and assumed geological and grade continuity. Only small areas have confirmed geological and grade continuity, thus no measured is yet defined. Classification was assessed on a per domain basis and resource categories were stamped onto the individual domains. • Unclassified mineralisation has not been included in this Mineral Resource. Unclassified material is either contained in isolated block above cut off within the strata-bound domain and in deep proportions of the deposit with sparse dill intercepts. • The classification reflects the competent person's view of the Reward deposit.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	• There has been a limited independent audit of the data performed by MA, there has been no independent review of the mineral resource.
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 statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to*	• With further drilling it is expected that there will be variances to the tonnage, grade and contained metal within the deposit. The competent person does not expect that these variances will impact the economic extraction of the deposit. • The mineral resource estimate appropriately reflects the competent person's view of the deposit. • No geostatistical confidence limits have been estimated. Consideration has been given to all relevant factors in the classification of the mineral resource. • The ordinary kriging result, due to the level of smoothing, should only be regarded as a global estimate, and is suitable as a life of mine planning tool. • Should local estimates be required for detailed mine scheduling, techniques such as Uniform conditioning or conditional simulation could be considered. Ultimately grade control drilling will be required.

	technical and economic evaluation. Documentation should include assumptions made and the procedures used. *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Limited Mining records exist (40 kt of oxide extracted from Green Parrot – south of the resource). Some historic mining has occurred on the Marshall – Reward structure, records are insufficient to reconcile. •

SECTION 3 ESTIMATION AND REPORTING OF BELLBIRD MINERAL RESOURCES

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

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.* *Data validation procedures used.*	• MA has undertaken limited independent first principal checks of the database. • Historical technical reports accept the integrity of the database. • The geological database is managed and updated by KGL Staff. • Basic database validation checks were run, including checks for missing intervals, overlapping intervals and hole depth mismatches. MA identified three drill collars as spurious, KGL staff corrected the errors.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	• The CP (Mr I.Taylor) visited site from the 1st to 3rd November 2020 to review the geology, drill core and field practices as part of the 2020 DFS and Mineral Resource Estimate Update.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource estimation.* *The use of geology in guiding and controlling Mineral Resource estimation.* *The factors affecting continuity both of grade and geology.*	• The geological model is well understood at a deposit scale. Bellbird is interpreted as an original syn-depositional copper rich polymetallic massive sulphide deposit that has undergone deformation, metamorphism and some degree of structural remobilisation and enrichment. • Geological logging, structural mapping and drill hole assays have been used in the establishment of a resource estimate. Validation has been carried out by KGL and MA competent persons. • No alternative interpretations have been presented. Alternative estimation methods applied to density estimation had little effect on overall tonnes. Alternate estimation methods (ID^2 and NN) were run and performed as expected. • Geological and grade continuity within defined domains appears well understood. Lithology and weathering were considered during the mineralisation domain interpretations • Infill drilling by KGL since the May 2022 resource update have increased the confidence in grade and geology interpretations which are the basis for the mineral resource estimation.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and*	• The Bellbird deposits strike over 1.3 km. Within the structural corridor lie three defined lodes ranging from approximately 200 m to 500 m in length, and plunge

	depth below surface to the upper and lower limits of the Mineral Resource.	moderately North. Three mineralised structures lie in the hanging wall position of the main structure and two oblique lodes lie to the east of the Bellbird structure.
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 description of computer software and parameters used.* *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 assumptions made regarding recovery of by-products.* *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* *Any assumptions behind modelling of selective mining units.* *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* *Discussion of basis for using or not using grade cutting or capping.* *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Ordinary Kriging has been used as the interpolation technique to estimate the Mineral Resource. This method considered appropriate given the nature of mineralisation. All elements were estimated using ordinary kriging. • Estimation was undertaken in Surpac 2022 (v7.5). • Drill hole interecpts were flagged manually within Surpac with individual domain codes. The flagged drill hole intercepts were imported into LeapFrog, and three-dimensional mineralisation wireframes created. Intervals were checked for inconsistences, split samples, edge dilution and mineralisation outside the interpretation. A separate table was created to store drill hole intercepts greater than 0.5% S. These intercepts were domained as stratabound mineralisation. • The domain codes (for Cu and S) have then been used to extract a raw assay file from MS Access for grade population analysis (multi-element). • Analysis of the raw samples within the Cu mineralisation domains indicates that the majority of sample lengths are at 1 m. Samples were composited to one metre honouring geological boundaries. • Grade continuity analysis within Cu domains to define the mineralisation was undertaken. Where variograms could not be generated for a particular element, copper or lead variograms were considered. • 3D experimental variogram modelling was undertaken using a nugget (C0) and two spherical models (C1, C2), occasionally one spherical model was sufficient. Nuggets ranged from reasonably low to high, between 0.19 and 0.48, and variogram ranges varied between 112 and 230 m for Cu. • Anisotropic ellipses are based on the strike and dip of the lodes and plunges were determined from variogram maps. Defined ranges and anisotropic ratios were graphically plotted in Surpac and displayed against the assay composites to ensure modelled parameters were reasonably orientated. Estimation utilised dynamic anisotropy based on local variations in domain orientation. • The interpolations have been constrained within the mineralisation wireframes and undertaken in three passes with the mineralisation wireframes utilised as hard boundaries during the estimation. • The first pass utilised a search distance of 70 m and a minimum number of informing samples of 8, and a maximum number of informing samples of 16. The second pass utilised a minimum of 6 and maximum of 13 samples, the search distance was doubled to 140 m. The third pass dropped the minimum to 4 and maximum to 8 samples and the restriction of samples per hole was lifted. Third pass maximum distance was

		210 m. 44% of estimated metal (> 0.5 % Cu) is estimated in pass 1. • The company is not intending to recover Pb, Zn at this stage of the project. Ag and Au will report to the copper concentrate. • • The model includes an estimation of deleterious elements Bi, W, U and F, these elements may attract a penalty and rejection limits in the concentrate may apply. S for potential acid mine drainage characterisation is included in the block model • No specific assumptions have been made regarding selective mining units. However, the sub-blocks are of a suitable selective mining unit size for either an open pit operation or underground mining scenario. • A 3D model with a parent block size of 2.5 m (X) by 10 m (Y) by 5 m (Z) was used. The drill hole spacing in the deposit ranges from 12.5 m by 50 m in shallower parts of the deposit to the dominant 50 m by 50 m drill pattern. In order for effective boundary definition, a sub-block size of 0.625 m (X) by 5 m (Y) by 2.5 m (Z) has been used; the sub-blocks are estimated at the parent block scale. • There is a moderate (> 0.5) correlation between Cu, Ag S, and Bi. Pb and Zn have a good correlation (0.8). Fe is associated with pyrite and magnetite and shows a moderate correlation (~0.5) with S. There is no correlation between F, U and W and the other elements. • The geological model (grade domains and faults interpretations) was used to control grade estimation. • High grade outliers (Cu, Pb, Zn, Ag, Au, Bi, F, U and W) within the composite data were capped. No capping was applied to Fe and S. Domains were individually assessed for outliers using histograms, log probability plots and changes in average metal content; grade caps were applied as appropriate. Generally, the domains defined a well distributed population with low CV's and only minimal grade-capping was required. • The resource has been validated visually in section and level plan along with a statistical comparison of the block model grades against the composite grades to ensure that the block model is a realistic representation of the input grades. No issues material to the reported Mineral Resource have been identified in the validation process
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are based on dry tonnes.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The resource is reported above 200 m RL and a 0.5 % Cu lower cut-off representing open pit potential mineralisation. Below 200 m RL the resource is reported at a 1 % Cu Cut-off reflecting an underground mining scenario. Assumed Copper price is A$12,598/t (US$4.00/lb) and assumed Silver price of A$33.57/oz. Assumed payables are 95.5% Cu, 90% Ag > 30 g/t and

		90% Au > 1.0 g/t in concentrate. Penalties for Bi in the concentrate may apply.
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.*	• The mineralisation above the 200 m RL (approximately 150 m below the surface) has been deemed to be potentially accessible by open cut mining methods. The deposit is a large steeply dipping syn-depositional copper deposit likely resulting in a high strip ratio. • Mineralisation below the 200 m RL (approximately 150 m below the surface) is considered to have underground potential above a 1 % Cu cut off. • No other mining assumptions have been used in the estimation of the Mineral 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 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 made.*	• No metallurgical factors have been applied to the in situ grade estimates. • Metallurgical Recoveries for copper and silver are determined as functions of copper grade in oxide/transitional and sulphide ore. Recovery algorithms were updated in 2022 by Sedgman and are similar to the 2020 algorithms. • The company is not intending to recover Pb, Zn at this stage of the project. Ag and Au will report to the copper concentrate.
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. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• KGL is undertaking Kinetic test work to assess potential for acid mine drainage, preliminary results indicate most of the waste material recoverable by mining will have low potential to become acidic. • Sulphur has been estimated throughout the block model. Fe and S have been estimated within the S domain and outside the sulphur domain (waste rock). • It is assumed that surface waste dumps will be used to store waste material and conventional storage facilities will be used for the process plant tailings.
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.* *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.* *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Onsite measurements by water immersion method are only conducted on competent transitional and fresh core. Limited oxide samples have been taken. 2,976 density readings are matched to an assay value. • Dry bulk density has been varied according to the weathering profile. Within Fresh material bulk density was estimated (OK) directly from density readings. A minimum of 5 samples and a maximum of 12 samples was used. In areas not filled with estimated density values, a linear regression of iron assays was employed; the calculated density data was then used in a second pass. • Bellbird - the average modelled density of mineralised oxide material is 2.60 t/m^3, transitional material is 2.80 t/m^3, the high sulphide material averages

		2.91 t/m^3 and mineralised fresh material averages 2.88 t/m^3
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.* *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).* *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• Blocks have then been classified as Measured, Indicated, Inferred or Unclassified based on drill hole spacing, geological continuity and estimation quality parameters. • The above criteria were used to determine areas of implied and assumed geological and grade continuity. Classification was assessed on a per domain basis and resource categories were stamped onto the individual domains. • Unclassified mineralisation has not been included in this Mineral Resource. Unclassified material is either contained in isolated block above cut off, too thin or in deep proportions of the deposit associated with isolated dill intercepts. • The classification reflects the competent person's view of the Bellbird deposit.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	• There has been a limited independent audit of the data performed by MA, there has been no independent review of the mineral resource.
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 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.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• With further drilling it is expected that there will be variances to the tonnage, grade and contained metal within the deposit. The competent person does not expect that these variances will impact the economic assessment of the deposit. • The mineral resource estimate appropriately reflects the competent person's view of the deposit. • Geostatistical procedures (kriging statistics) were used to quantify the relative accuracy of the estimate. Consideration has been given to all relevant factors in the classification of the mineral resource. • The ordinary kriging result, due to the level of smoothing, should only be regarded as a global estimate, and is suitable as a life of mine planning tool. • Should local estimates be required for detailed mine scheduling, techniques such as Uniform conditioning or conditional simulation could be considered. Ultimately grade control drilling will be required. • Minor historic mining has occurred on the Main Bellbird structure, records are insufficient to reconcile. •

SECTION 4 – ESTIMATION AND REPORTING OF MINERAL RESOURCES AND ORE RESERVES

(Criteria listed in Section 1, and where relevant in Section 2, also apply to this section)

Criteria	JORC Code Explanation	CP Comments
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• This Ore Reserve Statement is based on the August 2022 Mineral Resource Estimate as compiled by Ian Taylor of Mining Associates. • The August 2022 Resource Estimate is based on the previous Mineral Resource Report of March 2022 and The Bellbird Mineral Resource Update completed in August 2022. • Mineral Resources are reported inclusive of Ore Reserves.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• A site visit was conducted by myself, Iain Ross, accompanied by the Resource CP, Mr Ian Taylor of Mining Associates, from 1st to 3rd November 2020. • During that visit, all deposits (outcrops) were inspected along with the proposed sites for proposed infrastructure. Exploration drill cores were examined and some spot checks on randomly selected holes (collars seen during the visit) were performed.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *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 optimisation process is deemed to be of Feasibility Study level and was completed as part of open pit and underground studies documented by Xenith Consulting in the 2022 Feasibility Study (FS) compiled by KGL. • Proven Reserves have been declared for the Bellbird open pit and only Probable Reserves have been declared for the Reward open pit and the 4 proposed underground mines. Modifying Factors in respect of dilution and mining recoveries, are noted herein and documented within the FS. • A Life of Mine plan has been prepared which has been financially modelled. The assumptions in the plan appear reasonable and the costs have been sourced from suppliers, contractors, consultants or agents. This information is documented in the FS. • The mining sequence has been established and follows reasonable assumptions regarding mining rates and durations, as documented in the FS. • Sufficient metallurgical test-work has been undertaken to identify likely recovery rates for different grades (including composites). The recovery formulae have been built into the optimisation models. • Other modifying factors including tailings disposal, environmental considerations,

Criteria	JORC Code Explanation	CP Comments
		leasing, accommodation, power supply and logistics have all been considered and costs have been appropriately applied in the financial model.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• A split cut-off has been applied in the Resource model, with 0.5 %Cu above the 200 mRL and 1.0% Cu below the 200 mRL. The 200 mRL delimiter is approximately 150m below surface and is considered likely maximum depth for open pit operations leaving the vertical extent of Mineral Resource below the 200 mRL as underground mining extent. • Using the price assumptions for Ore Reserves and Mineral Resources, anticipated recovery factors, the material above cut-off of 0.5 %Cu would readily cover open cut mining and processing costs and contribute towards overheads. Similarly, material above the 1.0 %Cu cut-off for the material below 200m RL would cover typical underground mining and processing costs. • Xenith had undertaken a preliminary CoG assessment considering typical open pit and underground mining costs at the on-set of the Feasibility Study, verifying the applicability of 0.5% Cu for Mineral Resources above 200 mRL (150 m depth) and 1.0% Cu for Mineral Resources below 200 mRL. The cut-offs are deemed appropriate.
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 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 assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made, and Mineral Resource model used for*	• The assumptions used in the FS appear valid for both the open pits and the underground mines. All deposits have been optimised though a valid process and the preliminary designs tested against updated costs and metal prices. • The mine designs, assumptions, mining fleets and methods, recovery factors and assumed dilution parameters are all stated in the FS chapters relating to the individual deposits and represent a pragmatic approach to mining engineering and incorporates industry standards with respect to fleet selection for open pit and underground mining of similar sized deposits similar to the Jervois Project. • Geotechnical recommendations from Entech regarding both pit wall slopes and stope dimensions were sourced as part of the PFS.

Criteria	JORC Code Explanation	CP Comments
	pit and stope optimisation (if appropriate). • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	These are detailed in Chapter 7 - Mining of the FS. • Minimum mining widths underground are 3m and maximum stope width is 30m. 2m widths are considered but are expanded to an effective mining width of 3.0m including dilution in the narrower sections of the deposits. • Due to the variable geometry of the ore deposits in the Open Pits, a different dilution has been applied. Underground stope optimisations include 0.5m dilution for both the hangingwall and footwall of proposed underground stopes. Dilution of 10% for Reward open pit has been applied where wider ore lenses are to be mined, and 15% for Bellbird where narrower ore lenses are to be mined. • Mining recoveries of 95% have been applied for the open pits. • The mining recoveries applied in the underground mines are considered conservative and in line with averages seen in similar style operations and are given as 90% of diluted stope shapes including the mining of sill pillars between mining panels. Crown pillars between open pit and underground are designated as 50%. • Any Inferred material contained in underground mine designs was excluded from the Ore Reserve statement. A check was made to ensure that the Indicated material (probable Reserve) still contained sufficient value to carry the costs of mining the inferred material (at zero value). However, the inferred tonnages and grades remain in the LoM forecast for both open pit and underground mines. • Inferred Resources in the LoM forecast do not drive the mining plan. The Inferred material is typically of substantially lower grade than that seen in the Indicated ore and is proposed to be stockpiled until the latter half of life of mine (years 8-13).
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.*	• The mill flotation process planned for concentrate recovery is a standard approach widely used in industry. • Test-work has been completed and predictive algorithms developed and verified. The CP considers the metallurgical test work

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	• *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the ore body as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	appropriate, considering the work to date is at FS level. • The presence of deleterious elements (including Bismuth) has been factored into the financial model as penalty elements. Mining and blending strategies have been introduced to limit Lead and Zinc content in the Copper concentrate (<0.5 % by volume). • Composite samples (to represent potential head-feed blends over the first 3 years of operation) have been tested and validate modelled recoveries.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the 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.*	• The EIS process was acknowledged as completed in 2019 by the EIA following a number of studies and submissions up until 2019. Requirements have been included in the MMP for the Jervois Project.
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 infrastructure can be provided or accessed.*	• Infrastructure is planned and contractor built/owner-operator systems for both the accommodation camp and power station have been included in the infrastructure requirements.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The derivation of assumptions made of metal or commodity*	• A reputable mining contractor has provided indicative rates for the designs, methods and mining rates proposed and a dry hire rate (for open pits) also obtained for reference. • The process plant has been designed and costed by Sedgman at the onset of the FS. This is documented in Section 9 – Process Plant of the FS. • Transport charges have been based on the selected route to the (Glencore) Mt Isa treatment facility.

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	price(s), for the principal minerals and co- products. • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Presence of Bi, Pb, Zn, S, F and U has been assessed as they can impact on Concentrate quality or recovery. Where levels of penalty elements (Bi, F and U) are likely to incur penalties, these have been accounted for in the financial model. • Costs are documented in the project financial section of the FS, and summarised in Section 8 of this report.
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.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• Commodity prices are taken from recent reputable studies and consensus pricing (Wood Mackenzie and Goldman-Sachs reports from mid-2022). The copper price is the Goldman Sachs average incentive price for 2022-2027. • Copper Price US$8818/t, Gold US$1850/Oz, Silver US$22.80/Oz and an Exchange Rate of 0.70 US/AU was used in optimisation and contribution tests.
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.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• Analysts reports and price forecasts from Goodman Sachs and Wood Mackenzie sourced mid-2022 have indicated that Copper demand will remain relatively strong. There appears to be potential constraints on supply so prices should remain stable or even increase over the medium to long term.
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.*	• Sensitivity to changes in Commodity prices, Opex and Capex has been examined. • The project is sensitive to Copper price changes (as expected) and to a lesser extent, Opex. • Changes in other commodity prices (Au and Ag) do not have much impact as they are minor compared to the value generated by Cu.

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	• *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• NPV and variations are indicated in Section 8 and follow the KGL financial model outcomes.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• There are ongoing consultations with local landowners and relationships appear sound. • Discussion with NT authorities are on a sound footing. • Status of agreements: An ILUA (between the Central Land Council and Jervois Operations) has been formalised and registered with the National Native Title Tribunal since 2017.
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.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and 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 materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• No issues are apparent with any of the Leases or permits required. • An offtake agreement has been signed with Glencore and the relevant costs, charges and conditions have been appropriately applied in the financial model. • All approvals are in place in line with completion of the FS and progression to the Execution Phase for the Project. • The NT Minister for Mining and Industry granted Authorisation 1061-01 for the approval of the Project and associated Mining Management Plan (MMP) in January 2021. Further details in Section 10 of this report.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether 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).*	• Only the Bellbird open pit has Proven and Probable Reserves (with the majority being Proven). All other Reserves are classified as Probable Reserves only. The Probable reserve for the Bellbird Underground includes a small quantity of Measured Resources. • This is considered satisfactory for the FS stage of the project with the first 2 years of mining dominated by Measured material and the following 3 years near solely mining Indicated material. The first 5 years of

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		operation are founded on 94.6% of mill feed being Proven and Probable ore reserves. • It is unlikely that Measured Resources will be declared for the underground mines until stope definition drilling is carried out. This may be only one to three months ahead of stoping operations.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• The 2022 Ore Reserve statement has been audited for veracity by Mr Mark Perquin who is a full-time employee of Xenith Consulting and a member of the AusIMM and is in agreement with the assumptions used and the resultant Ore Reserve Estimate included in this report.

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 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.*
	• *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 current study stage.*
	• *It is recognised that this may not be possible or appropriate in all*
		• The FS study estimates accuracy to be within +/-10-15%.
		• The level of confidence associated with the 2022 Ore Reserve statement is high given the cost basis has been determined from a Feasibility Level study into the Jervois Project.
		• The resource block models from which the Ore Reserve has been derived was based on a geostatistical estimation completed by Mr Ian Taylor of Mineral Associates. Within the Ore Reserve estimation process the effects of included dilution have been accounted for to produce an anticipated selective mining unit grade.
		• Modifying factors that could potentially impact the Ore Reserve estimate include:
		  • Mining loss & dilution
		  • Geotechnical issues associated with pit wall and ramp stability.
		  • Geotechnical issues associated with ground stability, stope stability and pillar stability.
		  • Metallurgical recoveries.
		  • Presence and levels of deleterious elements within the transported concentrate.

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	circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

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