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02 December 2020

JORC Reserve & Pre-Feasibility Study of KGL's Jervois Copper Project

The attached announcement contains:

1. An update on the Jervois Copper Project.
2. The Executive Summary of the Jervois Pre-feasibility Study.
3. The Jervois Ore Reserve Report prepared by Xenith Consultants.

This announcement is authorised by the KGL Resources Limited Board of Directors.

Cautionary Statement

The Pre-Feasibility Study referred to in this announcement has been undertaken to determine the potential viability of development of the Jervois Copper Project.

The production target for the Jervois Copper Project is based on Probable Ore Reserves of 83% and 17% Inferred Mineral Resources.

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target will be realised.

The Ore Reserve and Mineral Resource estimates underpinning the production targets were prepared by a Competent Person in accordance with the JORC Code 2012

The production target and forecast financial information derived from the production target set out in this release (supported by the Pre-Feasibility Study) are based on the material assumptions outlined in Pre-feasibility Executive Summary.

While KGL Resources considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the studies will be achieved.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of these studies.

JORC Reserve & Pre-Feasibility Study of KGL's Jervois Copper Project

- Pre- Feasibility Study (PFS) demonstrates an economically robust project with average annual copper in concentrate production of 30,000 tpa over an initial 7.5 year operating life *.
- The outcome of the PFS provides the Board of KGL with the confidence to progress to a Feasibility Study (FS).
- Study investigations confirm potential to upgrade existing Inferred Resources and delineate additional Resources on the highly prospective Jervois leases in 2021.

*Refer to Cautionary Statement on Production Target on cover page of this announcement

Key Highlights

Ore Reserve

- JORC Probable Reserve of 9.4 Mt at 2.41% Cu, 32.9 g/t Ag and 0.39 g/t Au.

Strong Financial Returns

- Pre-tax NPV_8 of A$177m and Pre-tax IRR of 23.1% based on initial 7.5 year mine life.
- Capital payback of 38 months.

Competitive Capex and Operations Costs

- Pre-production capital of A$200m (US$142m).
- Life of Mine (LOM) unit direct cash costs of operations of US$1.60/lb Cu.
- LOM AISC[1] of US$2.25/lb Cu.

Physical Parameters

- Processing 1.6 Mtpa at 2.2% Cu (mean Cu head grade).
- Average annual production of 30,000 t Cu, 893,000 oz Ag and 8,600 oz Au.*
- Mining inventory comprises 83% Probable Ore Reserves and 17% Inferred Mineral Resources.
- Initial mine life of 7.5 years.
- Current focus is copper-silver-gold production from indicated resources rather than to expand or develop known lead and zinc resources.

Significant Upside Potential from Initial Mine Plan

- Mine plan based currently on 11.3 Mt of Mineralised Material representing only 56% from Total Resource of 20.1 Mt.
- Focus for FS is to increase LOM which KGL is confident can be achieved through drilling targeted to upgrade Inferred Resources (currently 44% of Total Resources) as well as extensional drilling to the existing Reward, Rockface and Bellbird Resources with additional targets already identified.

Next Steps

- Board has approved progress to Feasibility Study.
- Restart drilling program to focus on identifying additional Resources/Reserves to facilitate a minimum 10 year mine life.
- Cost optimisation, including evaluating shipment from the Port of Darwin.

[1] AISC is All in sustaining costs, and includes C1 cost, corporate costs, sustaining capex and open cut and underground capital development.

KGL Resources Limited **(ASX: KGL) (KGL or the Company)** is pleased to announce the result of the Pre-feasibility Study (**PFS**) on the Company's 100% owned Jervois Copper Project (**Jervois**) in the Northern Territory and also the **JORC Reserve at Jervois** that underpins the PFS.

In addition, given the results of the PFS and the known opportunities to enhance the project further over the coming 12 months, the Board of KGL has approved the progression to the Feasibility Study (**FS**) stage of Jervois following today's release.

Announcing the decision, KGL Chairman Mr Denis Wood said:

"We are delighted with the results of the PFS. They demonstrate the Jervois Project will support a robust initial mining operation. It is particularly pleasing given the efforts of the past few years to focus on the higher-grade copper deposits at Jervois although unfortunately much of this year's field work to further upgrade and expand the resource had to be stopped due to the Covid-19 pandemic. To achieve such a strong PFS result with this backdrop leaves the team excited to further enhance the project during the Feasibility Study stage. In particular we see opportunities to enhance the quality and size of the resource which should enable us to extend the mine life to our target of minimum 10 years.

Given the Company is also getting closer to finalising the Mining Management Plan with the Northern Territory Government, 2021 should be an exciting year for the Jervois Project and KGL. This PFS is a great starting position from which to maximise the value of Jervois for all stakeholders."

The Jervois PFS confirms the potential to develop an initial 7.5 year operation primarily focused on the copper rich ore producing **222 kt** of copper metal (with silver (**6.7 Moz**) and gold (**64 koz**) by-products) in concentrate.[1]

The project has attractive financial returns with a pre-tax NPV (8% real) of **A$177m** and pre-tax IRR of **23.1%** with a total investment of pre-production capital of A$200m. Based on a forecast copper price of US$3.08/lb (today's Cu price US$3.45/lb) and exchange rate of 0.71 AUD:USD, Jervois will generate significant annual EBITDA.

The initial mine plan is largely based on today's announced JORC mineral Reserve of **9.4 Mt at 2.41% Cu, 32.9 g/t Ag and 0.39 g/t Au** and involves open pit mining at the Reward and Bellbird deposits as well as underground operations accessed via declines at the Reward, Bellbird and Rockface deposits. Further optimisation of the scheduling of these deposits will occur during the FS.

The PFS assumes the concentrate will be transported by road to Alice Springs and then railed to Adelaide for export. The economic model currently assumes concentrate is sold CIF Adelaide to South East Asian ports. An estimated 230 people will be employed during the construction phase and 300 during operations.

Importantly, KGL views the PFS as a starting position only. Management has already identified several areas for further project optimisation during the FS stage. Unfortunately, due to the Covid-19 pandemic, much of the resource definition and expansion drilling planned for 2020 was unable to be completed and will now occur in 2021 with the drill rig expected to be on site early in the new year. It is worth noting that 44% of the Jervois Resource (**20.97 Mt at 2.03% Cu, 31.8 g/t Ag**) is currently in the Inferred category and the Company's drilling program is aimed at both upgrading a portion of that material as well as delineating additional resources with additional drilling. This will enable the Company to not only extend the mine life but also optimise the timing of capital expenditure associated with the development of each deposit, delivering improved financial returns from those delivered in today's PFS.

Beyond the initial mine developments in the pre-feasibility study and the prioritised high grade extensions now being pursued, KGL has a number of other high potential mineralised sites identified by the Company's advanced understanding of the geological structures and state-of-the-art exploration on the Jervois and adjoining Unca Creek tenements.

[1] Refer to Cautionary Statement on Production Target on Cover Page of this Announcement

KGL believes that the current schedule of progressing Jervois with the FS next year followed potentially by development is ideally timed given the recent strengthening of the copper market with pricing at seven-year highs. In the medium term, copper demand is forecast to increase underpinned by Covid-19 driven government spending programs on infrastructure at the same time as the world transitions to focus on a lower carbon economy (renewable energy, electric vehicles etc). This is all in addition to the traditional industrial and construction usage.

In addition to the supportive copper market outlook, KGL has been pleased with the level of support from the Project's key stakeholders, including the Northern Territory Government with whom management has been working to finalise the Mining Management Plan, the final key regulatory approval required prior to development. Jervois will create significant direct and indirect economic benefit to the Northern Territory Government as well as local businesses and community in general.

Table 1: PFS Key Metrics

Parameter	Units	Jervois
Physicals		
Mineralised material Mined	Mdmt	11.3
Cu Head Grade	%	2.20
Cu in Mill feed	kt Cu	249
Recovery	%	88.9
Concentrate Grade	%	27
Cu in concentrate	kt Cu	222
Au in concentrate	Koz	64.4
Ag in concentrate	Moz	6.7
Unit Costs		
Direct Cash Cost of Operations[2]	**US$/lb Cu**	**1.60**
Royalties	US$/lb Cu	0.26
C1 Cost	**US$/lb Cu**	**1.86**
Sustaining Capital	US$/lb Cu	0.04
Corporate Cost	US$/lb Cu	0.03
OC Stripping and UG Development Capital	US$/lb Cu	0.32
All in Sustaining Costs (AISC)[3]	**US$/lb Cu**	**2.25**
Financial Metrics		
Pre-Production capex [4]	A$m	200
Total Revenue[5]	A$m	2,462
Project Cash Flow (pre-tax)	A$m	385
NPV (8% real, pre-tax)	A$m	177
EBITDA	A$m	823
IRR (pre-tax)	%	23.1
Capital payback period	months	38

[2] Direct cash cost of operations includes all site operating cash costs; domestic transport to Adelaide port; CIF costs (South East Asian port) (US$0.06/lb Cu); smelting and refining charges; penalties, and by-product credits of US$0.56/lb Cu.
[3] AISC is All in sustaining costs, and includes C1 cost, corporate costs, sustaining capex and open cut stripping and underground capital development.
[4] Excludes working capital requirements
[5] Gross revenue, including by-product credits

Key contributors to the Jervois PFS included:

Study Management: KGL	Processing: Sedgman Pty Ltd
Reserve: Xenith Consulting	Infrastructure: Knight Pièsold & TMM
Mining: Entech	Marketing and Logistics: Balance Advisory
Resources: Mining Associates	Metallurgy: Core Metallurgy
Economic Analysis: Pimo & KGL	

JORC Compliance Statement

The Jervois Resources information were first released to the market on 15/09/20 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 data in this report that relates to the 2015 Reward South Resource was first released to the market on 29/07/2015 (then named Green Parrot). 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 contained in this release that relates to the Jervois Ore Reserves Estimate is based on information compiled by Mr Iain Ross, who is am a Member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Ross is a full-time employee of Xenith Consulting. Mr Ross has sufficient experience that is relevant to the style of mineralisation and type of deposit described in the release to qualify as a Competent Person as defined by the JORC Code, 2012 Edition. Mr Ross consents to the inclusion of this information in the form and context in which it appears in this release.

JORC Table 1, Section 4 contained within Xenith Report at page 53.

KGL RESOURCES

Jervois Copper Project
Pre-Feasibility Study
Executive Summary

December 2020

Executive Summary

1.1 Introduction

This Pre-feasibility Study (PFS) report explains the geology, mining, ore processing, associated infrastructure, commercial viability and other key aspects of the Jervois Copper Project. The Project is located approximately 380 km by road north-east of Alice Springs in the Northern Territory of Australia.

The PFS should be viewed within the overall strategy to commence operations to provide a revenue base to further exploration and resource extensions at depth at the Reward and Bellbird deposits and other prospects within the Jervois tenements.

The target commodity for the Jervois Project is copper with subordinate silver and gold. The project has been the subject of extensive, largely surficial exploration and mining interest dating from 1929.

KGL commenced preparation of an updated PFS in April 2020 following submission of the Project's Mine Management Plan (MMP) to the Northern Territory Government. This report has been prepared based on the latest information available to KGL including updated mineral resources, mining strategies and key Project economic drivers such as Copper price and power cost.

This PFS report was prepared to allow the directors of KGL to independently reach an informed decision regarding the economic viability of developing the Project, and whether to progress to Feasibility Stage.

1.2 Key External Contributors

The principal external contributors to the PFS are listed in Table 1.

Table 1: Principal Study Contributors.

External Contributor	Study Element
Mining Associates	Mineral Resources evaluation
Entech	Open Pit and Underground Mine optimisation, design, scheduling and Geotechnical evaluation
Xenith Consulting	Mining Reserves evaluation
Core Metallurgy	Metallurgical Testing and Process Plant design criteria
Tier 1 EPC Contractor	Process Plant Design, Capital and Operating cost estimates
Balance Logistics	Transport and Logistics evaluation and cost estimation
Tier 1 Mining Contractor	Open Pit & Underground Mining Capital and Operating cost estimates
Pimo Modelling	Economic Analysis

1.3 Project Description

The project described in this PFS develops the Jervois deposits as two open pit mines and three underground mines utilising conventional dig and haul and long hole stoping mining methods respectively.

The PFS considers only the mining of resources from Jervois' copper-rich deposits, and the resources tonnes of the Reward South polymetallic deposits are not included in this study. The resource could be considered for inclusion at a later time should economic parameters warrant its inclusion.

Mineralised ore would be trucked from both open pit and underground mines and fed to a nominal 200 tonne per hour crushing, milling and flotation concentration plant capable of producing a copper concentrate of around 27% copper, also containing silver and gold.

The total planned mine life is 7.5 years within which time, 11.3 million tonnes of mineralised plant feed will be mined and processed*. Tailings will be stored in a standalone storage facility.

Life of Mine (LOM) concentrate production is estimated at 808,000 dry metric tonnes (dmt). In this study, the assumed transportation route is via road train to a rail head at Alice Springs, then transported by rail to Adelaide port for export to a refinery for smelting. Other domestic and international options exist and will be explored further in the next study phase.

Electrical power for the project is proposed to be provided by a hybrid power station consisting of diesel generators, a solar photovoltaic array and a battery energy storage system (BESS).

Table 2 and Table 3 outline the major Project elements and the key design parameters of the Project.

Table 2: Jervois Copper Project Key Technical Features

PROJECT ELEMENT	JERVOIS Cu-Ag-Au PROJECT
MINING	
Cu-Ag-Au Resource	19.1Mt @2.15% Cu, 27.6g/t Ag and 0.29g/t Au
Cu-Ag-Au Reserve	9.4Mt @2.41% Cu, 32.9g/t Ag and 0.39g/t Au
Mining Method	Reward and Bellbird Deposit Open Pit Conventional Drill Blast, Load and Haul
Mining Method	Reward, Bellbird and Rockface Underground Decline access, Longhole Stope Mining with Cemented Rock Fill Secondary access (egress) Ventilation Rise for each Underground mine
Mill Production Rate	1.6 Mtpa
Life of Mine (Processing)	7.5 years
Commodity	Copper with subordinate Silver and Gold
PROCESSING	
Process Flowsheet	Single stage crushing circuit with a conventional SAG and ball mill (SAB) grinding circuit. The flotation circuit will consist of roughing, cleaning, and re-cleaning stages.
Product	Copper Concentrate with Silver and Gold credits.
Production *	Average of 108,000t of concentrate p.a.
SURFACE INFRASTRUCTURE	
Site Access	Plenty Highway, Lucy Creek Station Access Road and then Site Access Road
Power	Hybrid Power generation facility consisting of a large solar (PV) array, and diesel-powered power plant and BESS.
Water	Ground water will be drawn from wells within the Georgina Basin about 20 km to the north of the mine site on ML32277, and supplemented by local storage facilities - Capacity 40 L/s approximate 1,265 ML p.a.
Village	330 Individual Room Build Own Operate Village with 200 rooms adapted for "Motel use" during Construction
Airstrip	Upgrade of existing Bonya Community Airstrip 14km from Mine site
TAILINGS	
Tailings Disposal	Conventional Thickened Tailings
Tailings Storage Facility	Purpose built surface impoundment with surface and underdrainage water recovery. Two construction stages designed for up to 10-years' mine life with maximum capacity of 17.4Mt.

***See Cautionary Statement on Production Target on cover page of main announcement**

Table 3: Jervois Copper Project Key Design Parameters

KEY PROJECT DESIGN PARAMETERS		JERVOIS Cu-Au-Ag PROJECT
Cut-Off Grades		Open Pit - 0.5% Cu Underground - 1.0% Cu
Underground Mining	Level Spacing	30m
	Dilution	0.5m HW, 0.5m FW plus 2% Fill dilution
	Minimum Stope Width	3m
	Maximum Stope Width	100m
	Mining Recovery	90%
Open Pit	Dual Lane Ramp Width	25m
	Single lane Ramp Width	17m
	Spill Berm Width	10m
	Face Angle	80^{o}
	Bench Height	20m
Process	Crusher Availability	70%
	Crusher Throughput	260tph
	Crushing Work Index	9.5kWh/t
	Mill/Flotation Availability	91%
	Mill/Flotation Throughput	200tph
	Ball Mill Work Index	14.7kWh/t
	Average Mill Feed Grade*	2.2%Cu
	Average Copper Recovery	88.9%
	Average Concentrate Grade	27% Cu

*Mill feed includes some lower grade inferred material mined within the open pit and underground designs.

The timeline for Project development is summarised in Figure 1:

Figure 1: Jervois Copper Project Indicative Timeline

Summary Project Schedule	Year									
Item	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Definitive / Bankable Feasibility Study[1]										
Construction										
Reward Open Cut										
Reward Underground										
Bellbird Open Cut										
Bellbird Underground										
Rockface Underground										
Processing										

Unfortunately, due to the Covid-19 pandemic, much of the resource definition and expansion drilling planned for 2020 was unable to be completed and will now occur in 2021.

[1] KGL Board have approved progress to Feasibility Study.

1.4 Location, Access and Ownership

The Project area is reached from Alice Springs via the Stuart Highway and Plenty Highway to Jervois Pastoral Station, about 380km from Alice Springs. The final 30km to the Project's main Lease area (EL 25429) is via the Lucy Creek Road and from there, by station tracks within Jervois Station.

The Project footprint is approximately 970 hectares of which a significant portion has been disturbed by historical mining activities. The Project lies within four Mining Leases (including a standalone Lease covering groundwater bores).

The Project Leases are owned by Jinka Minerals Ltd, a 100% owned subsidiary of KGL Resources Ltd (KGL). The Project will be operated by Kentor Minerals (NT) Pty Ltd, also a 100% owned subsidiary of KGL.

The status of Project Leases is summarised in Table 4.

Table 4: Tenement Status

Tenure No.	Status	Area (Ha)
ML 30180	Granted	33.21
ML 30182	Granted	481.7
ML 30829	Granted	1,438
EL 25429	Granted	Approx. 3,800
ML 32277 (Lucy Creek Borefield)	Granted	124.1

The Project location and the Project Mineral leases are shown in Figure 2 and Figure 3.

Figure 2: Project Location

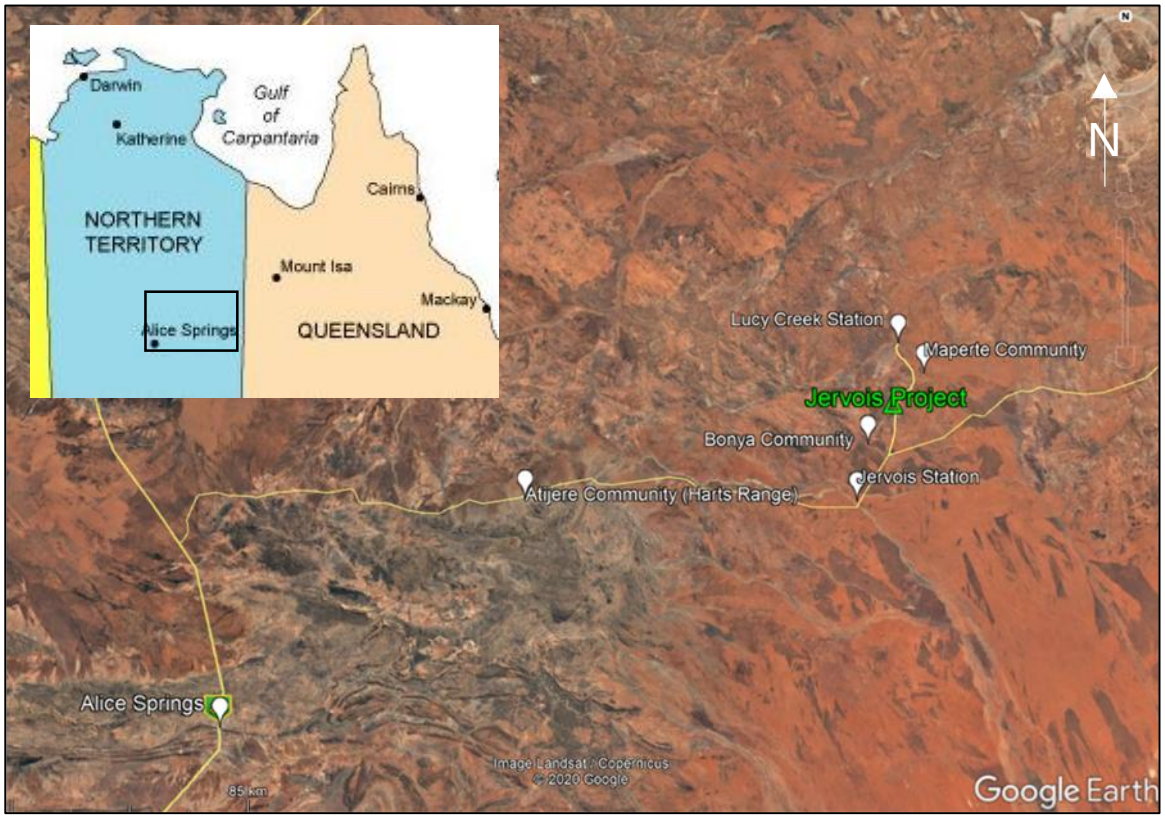


Figure 3: Project Tenements

1.5 History, Exploration and Drilling

Following sporadic small-scale mining since the discovery of base metals in the Jervois Range area in 1929, systematic exploration has been undertaken intermittently, by various groups including Petrocarb Mineral Exploration, Union Corporation, Plenty River Mining Company, Anaconda / Normandy Poseidon, and Britannia Gold most recently in a JV with Mount Isa Mines.

Mining and processing of a polymetallic deposit to the south of the proposed Reward Pit was undertaken briefly following the construction of a concentrator process facility by Plenty Mining in the early 1980's. However with a slump in mineral prices the project was quickly wound up after a brief processing period.

Reward Minerals acquired the Jervois tenements from Britannia Gold in 2003 and conducted exploration until transfer of the tenements to Jinka Minerals in October 2009. KGL acquired Jinka Minerals in 2011.

1.6 Geology and Mineralisation

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

The Jervois 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 Jervois 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) of calc-silicate, garnet-chlorite-magnetite rock and garnet-magnetite quartzite, within a thick succession of spotted andalusite-cordierite schist and quartz-sericite-magnetite schist. 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.

KGL recognise two main styles of mineralisation and alteration/metamorphic mineral assemblages:

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.

1.7 Geophysics and Exploration

Induced Polarisation (IP) surveys respond well to the disseminated sulphides often found in a halo around the massive sulphide mineralisation at Jervois. IP Resistivity surveys can also detect the conductivity contrast between the massive sulphide bodies and the adjacent highly electrically resistive steeply dipping lithologies.

Airborne magnetics and Sub-Audio Magnetics (SAM) data provide a high-resolution image base on which many structural features can be resolved. Such structures include shear zones that host mineralisation and faults that could offset the mineralisation.

SAM anomalies show a broad spatial relationship with stratigraphic elements of the mineralisation such as ironstones and thus provide indirect indications for the presence of mineralisation.

Exploration targets have been generated using geophysics applied to geological models. From 2017 to 2020, down hole electromagnetic (DHEM) surveys have been the most successful in identifying continuous conductive sulphide bodies at depth.

1.8 Mineral Resource Estimates

The Project comprises the mineralised deposits of Reward, Bellbird, and Rockface. Additional areas of mineralised zones have been identified at the site and further work is required to fully evaluate them.

The updated JORC report on the Resource Estimates for Reward, Rockface and Bellbird deposits was prepared by Mining Associates. The new Cu-Ag-Au Resource Estimates for the Jervois Project are summarised below in Table 5.

Table 5: Project Resource Summary[2]

Deposit part	Deposit	Category	M tons	Cu %	Cu kt	Ag g/t	Ag Moz	Au g/t	Au koz
Open Cut Potential > 0.5 % Cu	Reward	Indicated	3.34	1.86	62.2	41.8	4.49	0.44	47.5
		Inferred	0.76	0.93	7.0	9.5	0.23	0.06	1.4
	Bellbird	Indicated	1.33	3.08	40.9	17.4	0.74	0.23	9.8
		Inferred	1.40	1.19	16.6	9.1	0.41	0.10	4.5
	Sub Total		6.82	1.86	126.7	26.8	5.87	0.29	63.2
Underground Potential > 1 % Cu	Reward	Indicated	3.69	2.22	81.8	42.8	5.07	0.51	60.2
		Inferred	3.50	1.48	51.7	26.8	3.01	0.18	20.7
	Rockface	Indicated	2.45	3.54	86.8	19.8	1.56	0.25	20.0
		Inferred	0.84	2.07	17.5	15.6	0.42	0.18	5.0
	Bellbird	Indicated	0.34	3.52	11.9	22.4	0.24	0.18	2.0
		Inferred	1.43	2.36	33.7	16.6	0.76	0.10	4.6
	Sub Total		12.25	2.31	283.4	28.1	11.06	0.29	112.5
Cu-Ag-Au Resources	**Total**		**19.07**	**2.15**	**410.1**	**27.6**	**16.94**	**0.29**	**175.7**
Pb/Zn Resources	Reward South	Indicated	0.50	0.99	5.1	64.0	1.06		
>0.3% Cu		Inferred	1.40	0.81	11.1	78.0	3.44		
	Pb/Zn Total		**1.90**	**0.86**	**16.2**	**74.2**	**4.50**		
All Resources[1]		Indicated	11.65	2.48	288.7	35.1	13.20		139.4
		Inferred	9.33	1.48	137.6	27.8	8.23		36.1
	Total		**20.97**	**2.03**	**426.2**	**31.82**	**21.44**		**175.7**

The considerable advances in the resource grade when compared with the previously reported estimates, are due to the confirmatory infill drilling undertaken from June 2019 to March 2020 coupled with improved understanding of the geological controls on mineralisation.

[2] Overall Resources as announced in the *"Resource Upgrade at KGL's Jervois Copper Project"* 15th Sept. 2020.

1.9 Ore Reserves Estimates

Cu-Ag-Au ore reserves have been determined by Xenith Consulting and conform to the requirements of ASX Listing Rules 5.6, 5.22 and the JORC Code 2012 Edition.

Reserves are summarised in Table 6, and form part of the Resource stated in Table 5.

Table 6: Cu-Ag-Au Ore Reserves[3]

	Jervois Project Reserves						
	Mt	%Cu	kt Cu	Au (g/t)	Au (koz)	Ag (g/t)	Ag (koz)
Reward OC	2.6	1.90	50.0	0.48	40.9	43.5	3,670
Bellbird OC	1.6	1.7	27.8	0.1	4.7	9.6	485
Sub-total OC	***4.3***	***1.83***	***77.7***	***0.34***	***45.5***	***31.4***	***4,156***
Rockface UG	1.8	3.74	68.5	0.28	15.9	21.5	1,227
Reward UG	2.9	2.27	64.8	0.56	49.5	44.0	3,907
Bellbird UG	0.4	3.55	15.0	0.18	2.4	23.1	304
Sub Total UG	***5.1***	***2.90***	***148.3***	***0.43***	***67.9***	***34.2***	***5,438***
Total	**9.4**	**2.41**	**226.0**	**0.39**	**113.4**	**32.9**	**9,593**

Approximately 55% of copper metal in the estimated Project Resources has been converted into Reserves.

Reserves represent 83% of the mill throughput, with 17% inferred resource material mined within the optimised underground and open pit designs.

1.10 Mining

The Project will include conventional open cut mining of copper-gold-silver mill feed at Reward and Bellbird open pits, and decline access underground mining of copper-silver-gold mill feed at Reward, Rockface and Bellbird.

Mined materials will be stockpiled temporarily on the Run of Mine (RoM) pad from where it will be rehandled into an ore feed bin via front end loader before being fed into the plant, via the crushing circuit.

Open pit mining targets access to the Rockface decline from a small starter pit at the Bellbird open pit area together with Stage 1 of Reward open pit, to allow commencement of the Reward UG. This fulfills the earliest possible start of the Rockface and Reward underground mines, which determine the overall LoM schedule. (Reward UG and Rockface UG underground mines are scheduled to operate, for 7 years and 6 years respectively).

A two-excavator mining fleet will be used to mine Stage 2, Stage 3 and Stage 4 open pit operations at Reward for a period of two years. As the work areas towards the base of the Reward pit become restricted, open pit mining will be undertaken with a single excavator for the final 6 months of mining, followed by a break of two years with no open pit mining. Open pen pit mining recommences in year five, with the return of a single excavator fleet to complete mining the Bellbird open pit for a period of two years, and sustain the required mill throughput.

[3] Xenith, Jervois Project JORC Ore Reserve Statement (November 2020)

1.11 Metallurgical Testing and Mineral Processing

A considerable amount of metallurgical testwork has been conducted on samples sourced from the Reward, Rockface and Bellbird orebodies. Completed testwork programs have been undertaken by ALS AMMTEC, (ALS Metallurgy), Dunstan Metallurgical Services (DMS), Auralia Metallurgy, Sedgman Pty Ltd and most recently by Core Metallurgy.

Laboratory scale testwork has been conducted on a series of samples from individual orebodies together with bulk sample composites composed of drill core.

Comminution testing results show that primary ores from all deposits have medium hardness and competency and it appears ores have the tendency to become harder with depth. UCS values for all ore types were low to moderate, ranging from 10 MPa to 110 MPa across all domains with ball mill work indices ranging from 8.2 kW/t to 12.2 kW/t (medium) for the target grind particle size.

Sulphide, transition and oxide ore types were flotation tested which identified copper recovery was dependent upon copper head grade. Greater than 87% copper recovery was achieved using a primary grind P_{80} of 120 micron, regrind of rougher concentrate to a P_{80} of 38 micron, and two stages of cleaning to achieve a final concentrate grade of nominally, 27% copper.

Bismuth is the main penalty element in the copper concentrate, and such penalties have been considered as part of the economic analysis.

The plant design consists of conventional unit processes including single stage crushing circuit with a conventional SAG mill grinding circuit with a smaller regrind mill. The flotation circuit will consist of roughing, cleaning, and re-cleaning stages. Tailings will be thickened, then pumped out to the Tailings Storage Facility (TSF). Concentrate will be dewatered through a filter press with fluids returning to the process plant for re-use.

1.12 Infrastructure

The Jervois Project is proposed to be a remote standalone facility and as such, will comprise all components required for operations. Major components include accommodation and power supply (both costed as Build, Own and Operate facilities by contactors), in addition to reticulation, water supply, processing and tailings facilities, warehousing, workshops, laboratory, fuel storage and explosives magazine.

All infrastructure and mining will be undertaken within the existing Mineral Leases, with no further land required at the Project. Adequate areas for operations have been confirmed at the Alice Springs rail yard and at the Adelaide port.

Sustainable groundwater supplies have been identified and bores established on the granted borefield Mineral Lease 20km north of the Process Plant on the Lucy Creek Pastoral Station.

Project early works will consist of access roads, communications, establishment of pumps and a water pipeline from the Lucy Creek borefield and power adequate for construction. These will be gradually expanded as requirements dictate, including the establishment and expansion of accommodation facilities which will be most utilised during the construction phase.

The overall site layout is shown in Figure 4.

The process plant design is shown in Figure 5.

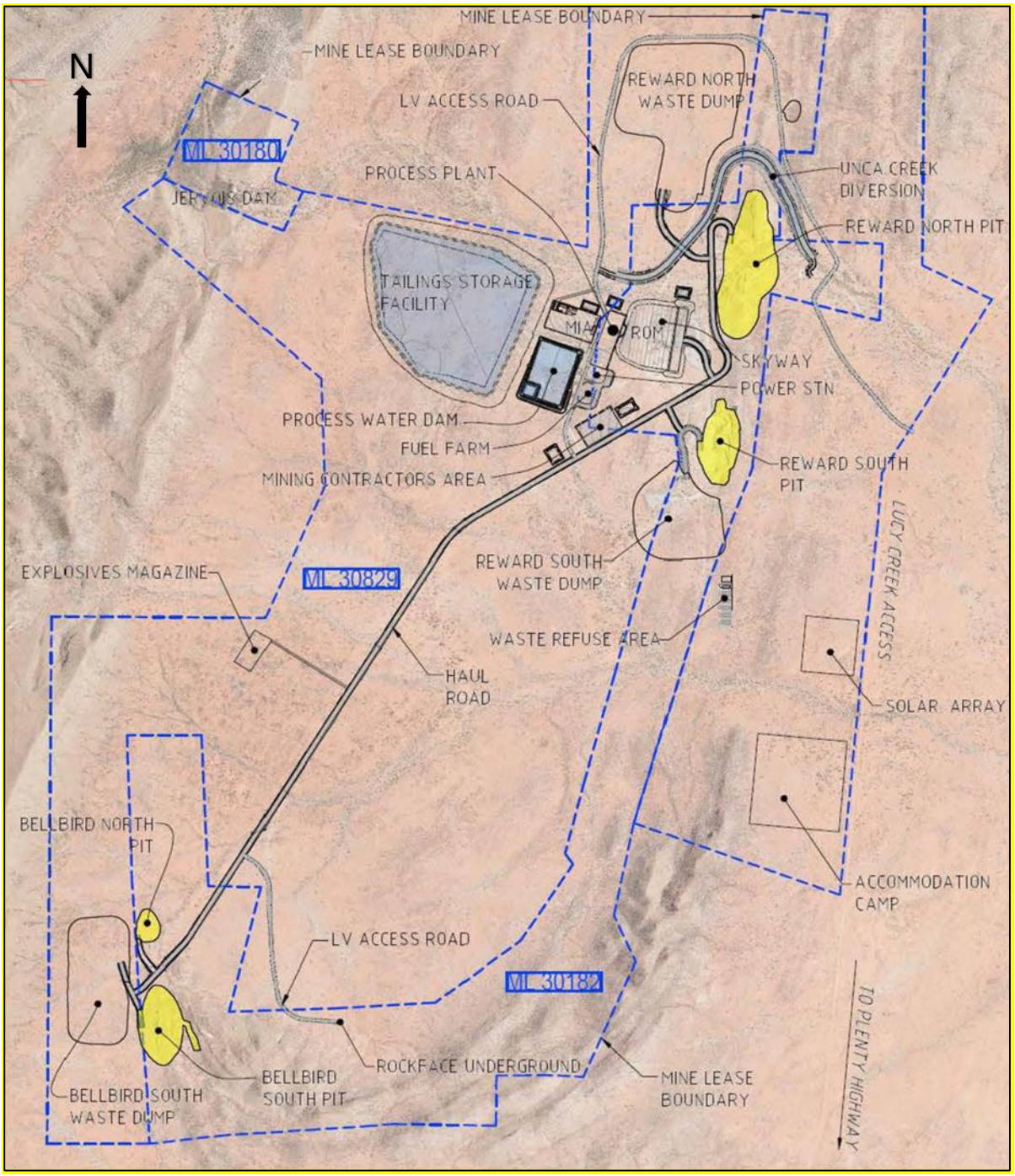


Figure 4 – Proposed Project Layout

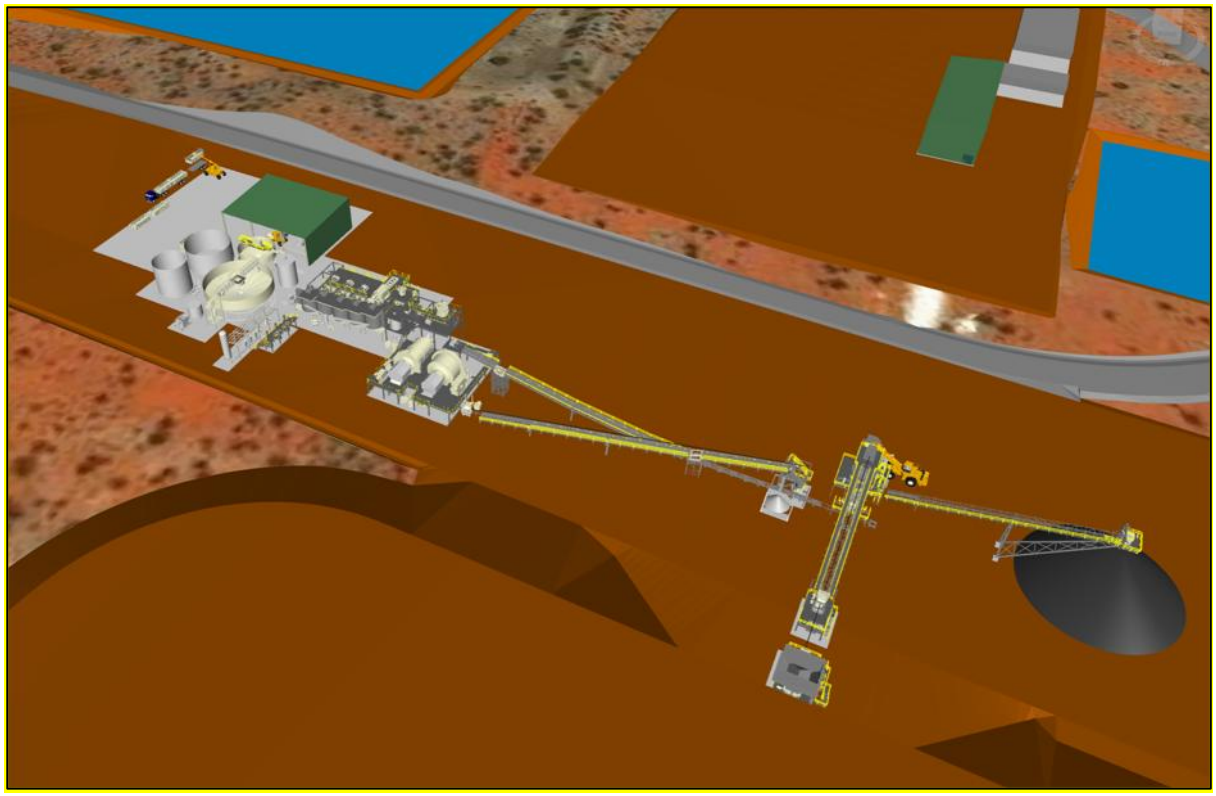


Figure 5 - 3D Process Plant Layout Looking West from the RoM Stockpile.

1.13 Transport

KGL commissioned Balance Advisory consultants to conduct a study of transport options for the Jervois Project.

The Project will export up to 120,000 tonnes of copper concentrate per year from the mine.

The proposed method of transport for copper concentrate is via half height (3 m) sealed shipping containers, each with a 24-27 tonne nett carrying capacity. The Project is well serviced by existing road and rail infrastructure enabling consideration of several supply chain solutions.

For this PFS, transport of concentrate from Jervois will be by road to Alice Springs, by rail from Alice Springs to the Port of Adelaide and shipment from the Port of Adelaide (CIF) assuming South East Asia destination.

Options of alternative exporting ports, including Darwin, will be investigated as part of the next study phase.

1.14 Environment, Permitting and Stakeholder Engagement

The Jervois Project has completed a significant portion of the approval process for both exploration and environmental approval for mining activities.

Significantly, the Project's Environmental Impact Statement (EIS) has been completed and approved by the Northern Territory Environmental Protection Authority.

The Project's Mining Management Plan (MMP) has been submitted to the NT Government, awaiting approval.

A Native Title Agreement is in place for the Project development.

Outstanding secondary approvals will consist of local government building and planning certifications, licensing for dangerous goods and explosives storage, and utilisation.

KGL is committed to sound environmental management being a fundamental part of our business and business priorities must support appropriate environmental protection.

KGL has developed strong relationships with Project stakeholders and will continue to foster an open dialogue on environmental, community and social engagement.

It is anticipated that the project will generate 230 construction jobs, and ongoing operational positions for 300 personnel. These positions will be sourced locally were possible, reducing travel costs and environmental impact. Personnel will be housed in the Project's accommodation facility.

The Project will also deliver significant royalties and payroll tax contributions to the NT Government, and provide compensation, employment and business opportunities for the Native Title parties.

1.15 Capital and Operating Cost Estimates

The Capital Cost Estimate (CAPEX) for the Project's process plant, infrastructure, and mine was prepared by an experienced tier 1 EPC contractor in accordance with standard industry best practice for this level of study and to a level of definition and intended accuracy of ±25%. The Project principal consultants and KGL's consultant specialists provided input for the CAPEX.

In addition, tier 1 open pit and underground contractors provided review and input to mining capital operating and infrastructure costs based on the PFS Life of Mine Plan.

Contractors and service suppliers were consulted to establish today's market costs. The Pre-feasibility Study capital cost has been benchmarked with a second tier 1 engineering group and a tier 1 second mining contractor.

Mining and related labour costs are based on the Project LoM Plan which has been reviewed by an experienced mining contractor and mining consulting group. Mining cost estimates are based on operational equipment, labour and consumables.

1.15.1 Capital Costs

Capital Costs are summarised in Table 7.

Table 7: Initial Project Capital Costs

Initial Capital	AUD ($m)
Process Plant	92.7
Infrastructure	31.9
Indirects, including EPCM cost	26.7
Tailings Storage Facility	8.6
Owners Team, Exploration Costs, Levy and Compensation	6.9
Rehabilitation bond	11.4
Mining Capital	10.7
Contingency	11.4
Total Initial Capital	**200.3**

The open cut stripping and underground capital development has been estimated at A$221m over the life of the project and will be amortised over the mine production. Other LoM sustaining capex is estimated at A$27m, the majority of which is an upgrade to the tailings storage facility (TSF). These operational capital items are included in the All in Sustaining Costs (AISC) of operations.

Working capital costs are not included.

1.15.2 Operating Costs

Average LoM operating costs are summarised in Table 8 and Table 9.

Table 8: Life of Mine average operating cost (US$)

Cost Category	US$ / t [4] ROM Feed	US$ / lb[4] Cu Produced
Mining	39	0.91
Processing	20	0.45
Admin / infrastructure / rehab	1	0.01
Transport / smelting[5]	34	0.79
By-product credits (gold & silver)	(24)	(0.56)
Total direct costs of operations	**70**	**1.60**
Royalties	10	0.26
Total C1 cost	**80**	**1.86**
Sustaining Capital	2	0.04
Corporate Cost	1	0.03
OC Stripping and UG Development Capital	14	0.32
Total AISC	**97**	**2.25**

Table 9: Life of Mine average operating cost (AUD)

Cost Category	AUD / t ROM Feed	AUD / t Cu Produced
Mining	55	2,815
Processing	28	1,408
Admin / infrastructure / rehab	1	42
Transport / smelting[5]	48	2,439
By-product credits (gold & silver)	(34)	(1,726)
Total direct costs of operations	**98**	**4,978**
Royalties	17	785
Total C1 cost	**115**	**5,763**
Sustaining Capital	2	124
Corporate Cost	2	89
OC Stripping and UG Development Capital	19	996
Total AISC	**138**	**6,972**

[4] Converted at: AUD: USD exchange rate 0.71.

[5] Transport / smelting costs includes cash cost from mine gate to Adelaide Port, CIF shipping costs to South East Asia port (A$4 / Feed tonne; US $0.06/ lb Cu), smelter refining, treatment, payables and penalty charges.

1.16 Economic Analysis

1.16.1 Summary

The Jervois Project has been valued using a discounted cash flow approach in the determination of the net present value (NPV), payback period, and internal rate of return (IRR) for the Project.

Annual cash flow projections were estimated over the life of the mine based on the estimates of capital expenditures, production costs, and sales revenue. Sales revenue is primarily based on the production of copper concentrate with gold and silver credits.

The economic analysis includes the entire project life, comprising 20 months of construction and 7.5 years of milling. The valuation date on which the NPV and IRR are measured is the commencement of construction.

Sensitivity analyses were performed for variations in copper price, copper grade, copper recovery, operating costs and capital costs to determine their relative importance as Project value drivers.

This Pre-feasibility Study contains forward-looking information regarding projected mine production rates, construction schedules, and forecasts of resulting cash flows as part of this study.

The mill head grades are based on sufficient sampling that is reasonably expected to be representative of the realised grades from actual mining operations.

Factors such as the ability to obtain major equipment or skilled labour on a timely basis, to achieve the assumed mine production rates at the assumed grades, may cause actual results to differ materially from those presented in this economic analysis.

The economic analysis has been undertaken on a pre-tax basis with no inflation, using a 2020-dollar basis.

1.16.2 Basis of Analysis

The economic model was created using various assumptions that are based on current and projected future expected economic conditions including, but not limited to, sales prices, operating costs, annual production, ore grades, and exchange rate.

Table 10 outlines the key inputs and assumptions used.

Table 10 – Inputs and Assumptions *

Parameter	Unit	Value
Mine Life (Milling)	Years	7.5
Total Mineralized Material	Mt	11.3
Total Waste	Mt	43.6
Processing Rate	Mt/year	1.6
Mean Copper Head Grade	%Cu	2.20
Mean Copper Recovery	%	88.9
Mean Gold Recovery	%	54.4
Mean Silver Recovery	%	64.2
Copper Metal Produced	kt	222
Gold Metal Produced	koz	64.4
Silver Metal Produced	Moz	6.7
Copper Price	USD/lb USD/t	3.08 6,788
Gold Price	USD/oz	1,850

Parameter	Unit	Value
Silver Price	USD/oz	22.80
Exchange Rate	AUD: USD	0.71

A discount rate of 8% has been used in calculations.

Revenues and costs are calculated for each period in which they occur rather than actual outgoing/incoming payment.

*See Cautionary Statement on Production Target on cover page of main announcement

1.16.3 Revenues and Net Smelter Return Parameters

Mine copper revenue will be derived from the sale of copper concentrates averaging 27% Cu and 257 g/dmt Ag and 2.48 g/dmt Au.

Concentrates are expected to attract a penalty for bismuth content which has been estimated at US$1/dmt per 0.01% over a limit of 0.15%.

The sale of concentrate basis proposed is CIF pricing, from Port of Adelaide to a South East Asian port.

Marketing cost assumptions used for the economic model are based on discussions with concentrate trading companies and on the Company's own views and experience in the copper concentrate market.

For copper-gold concentrates it assumed that LoM treatment charges and refining charges (TC/RC) will average $US76/dmt and $US0.076/lb, respectively. These estimates have been benchmarked against data from recent, similar projects, and potential offtake organisations.

Copper payability is assumed to be 95.5% and gold approximately 95% and silver at 90%. Copper concentrate production and sales begin during commissioning and continue for 7.5 years.[6]

1.16.4 Taxes

The economic analysis for the purpose of this study has been done on a pre-tax basis.

Currently the Company has approximately $126 million in tax losses available.

1.16.5 Royalties and Compensation

Economic analysis for the Project accounts for the Northern Territory royalty (as defined by Section 9A Mineral Royalty Act, NT) of 20% of net value or 1- 2.5% of gross revenue, whichever is greater.

Compensation agreements in place for the project include initial payments, annual payments, annual administration costs and shut down payments all of which have been taken into account in the economic analysis. The terms of these agreements are confidential, but their economic effects are included in the financial analysis.

Royalties and compensation of approximately A$174 million are modelled to be payable over the life of the mine.

1.16.6 Economic Result

The Life of Mine forecast economics for the Project are shown in Table 11.

[6] **See Cautionary Statement on Production Target on cover page of main announcement**

Table 11: Project Economics

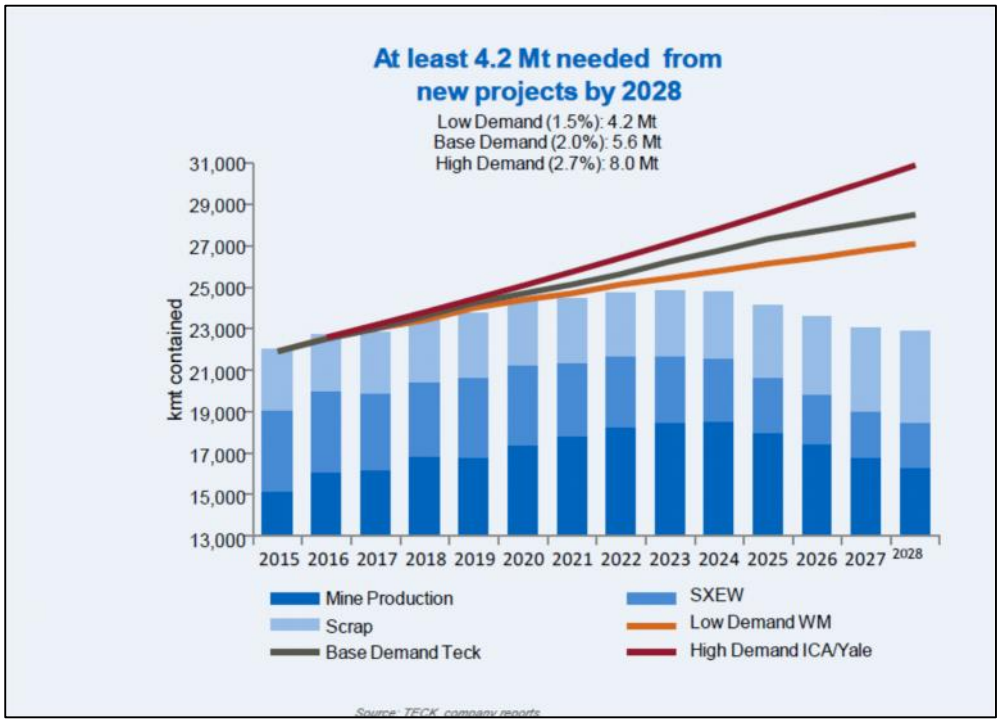
Metric	Unit	Value
Copper Price	US$/lb	3.08
Exchange Rate	A$:$US	0.71
Discount Rate	%	8
Pre-tax Net Present Value	A$m	177
Pre-tax Internal Rate of Return	%	23.1
Payback	Months	38

1.17 Market Studies

Market studies detailing future copper supply and demand predictions have been somewhat restricted during the Covid-19 pandemic. KGL has researched several scenarios however and in the short term, an upward trend on copper prices is expected during 2020 and into 2021.

This is summarised in Figure 6, sourced from Teck Company Reports.

Figure 6: Copper Market Supply and Demand Projections.



Looking further, changes to the mining environment in South America are expected to impact the world copper supply. Growth forecast in copper use is forecast to increase, largely driven by the requirement in electric cars. A growth of 10% is estimated over the next 10 years in this sphere; in context with lowering grades at the world's larger resources as well as further restrictions on South American mines' water use, it is expected to see a continued upper trend in copper prices.

1.18 Sensitivities

Copper is the biggest single revenue for the Project, and it is logical to expect that the Project value would be sensitive to Copper Price. No exchange rate sensitivity has been performed, due to the historical correlation between the AUD: USD exchange rate and USD denominated commodity prices, which creates a natural hedge between AUD: USD exchange rates and USD commodity prices.

Sensitivities are shown in Table 12 for Cu Price, Capital Cost, and Operating Cost, and Table 13 for Cu Recovery.

Table 12: Pre-tax NPV, Sensitivity Results

	Pre-tax NPV: (8%) ($Million)				
Variable	**-20%**	**-10%**	**Base Case**	**+10%**	**+20%**
Cu Price	(36)	71	177	282	386
Capital Cost	204	191	177	162	148
Operating Cost	344	261	177	92	7

For the sensitivity to Cu recovery, a 1% increase in recovery was applied, due to +10% and +20% increases not being feasible or physically possible.

Table 13: NPV Sensitivity Results, Cu Recovery

	Pre-tax NPV: (8%) ($Million)				
Variable	**-10%**	**-5%**	**-1%**	**Base Case**	**+1%**
Cu Recovery	74	125	166	177	187

Similar to other copper development projects, Jervois is most sensitive to Copper Price and Operating Cost.

This and other significant sensitivities are shown graphically in Figure 7 and Figure 8.

Figure 7: Project Pre-tax NPV and significant Project sensitivities

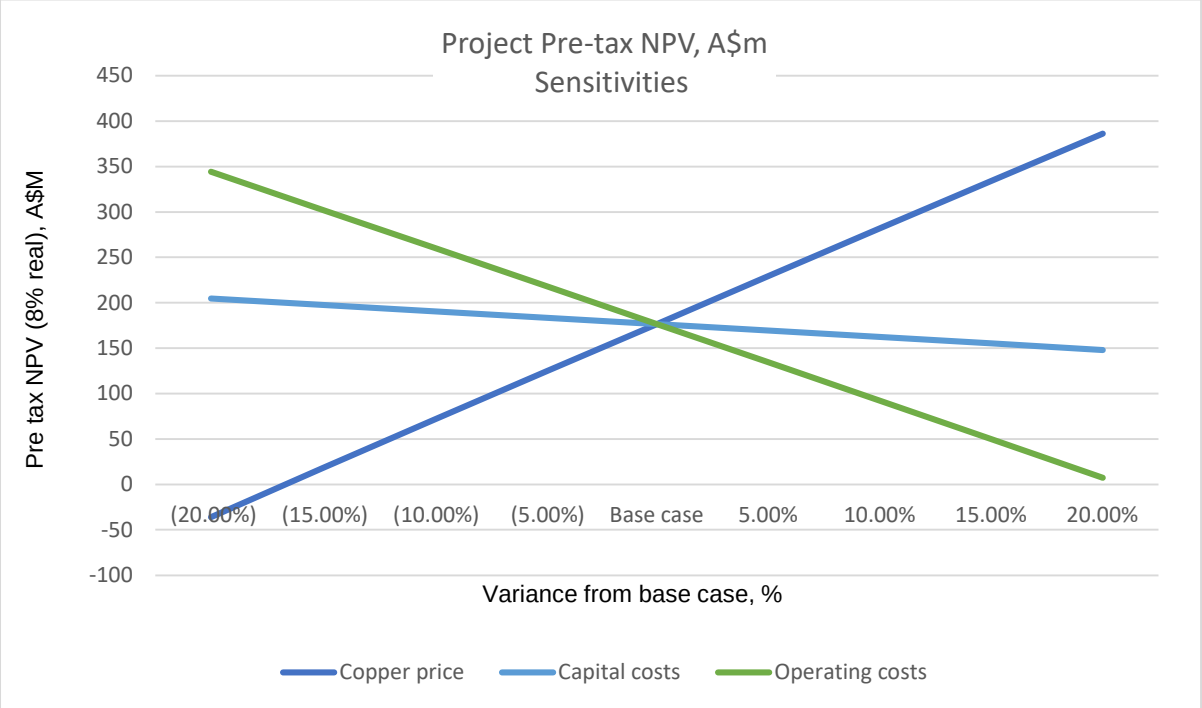
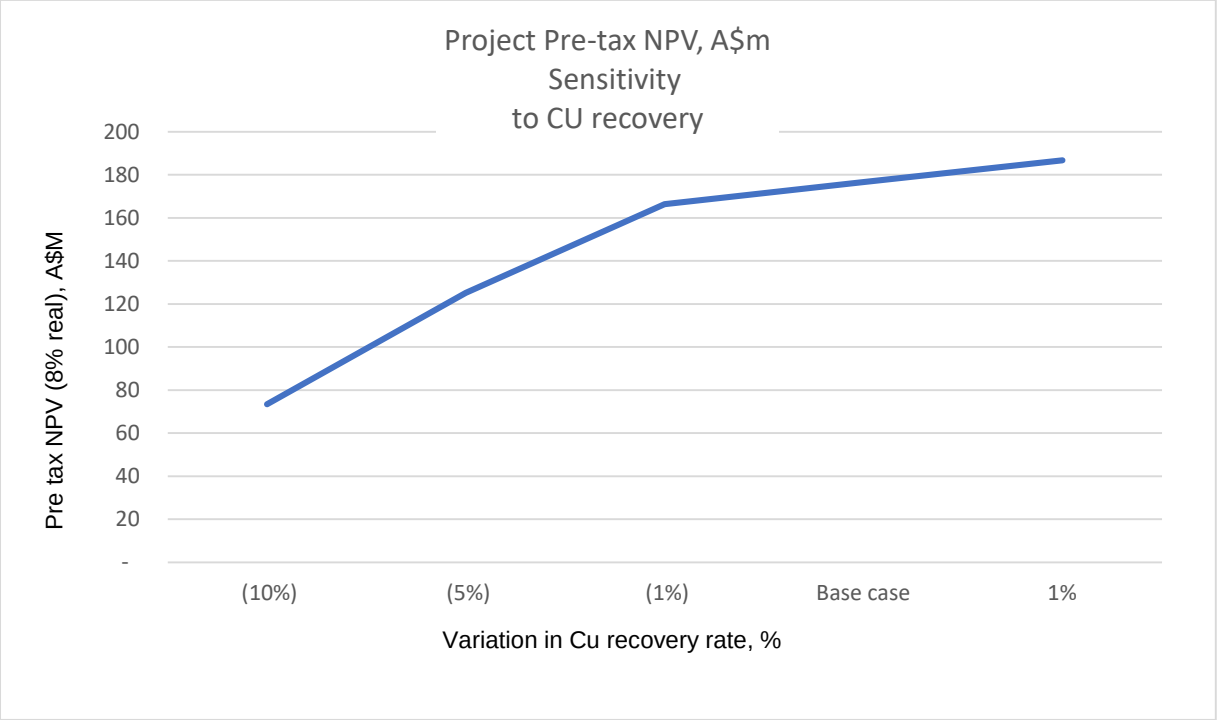


Figure 8: Project Pre-tax NPV and sensitivity to Copper Recovery



1.19 Project Risk Management

A full risk assessment for development has been performed.

The highest category risks identified, and proposed control strategies are:

- Market manipulation and price and exchange rate stability:

  Control Strategies - secure long-term contracts and establish flexible financing

- Third party access to port facilities not established in time for concentrate shipment:

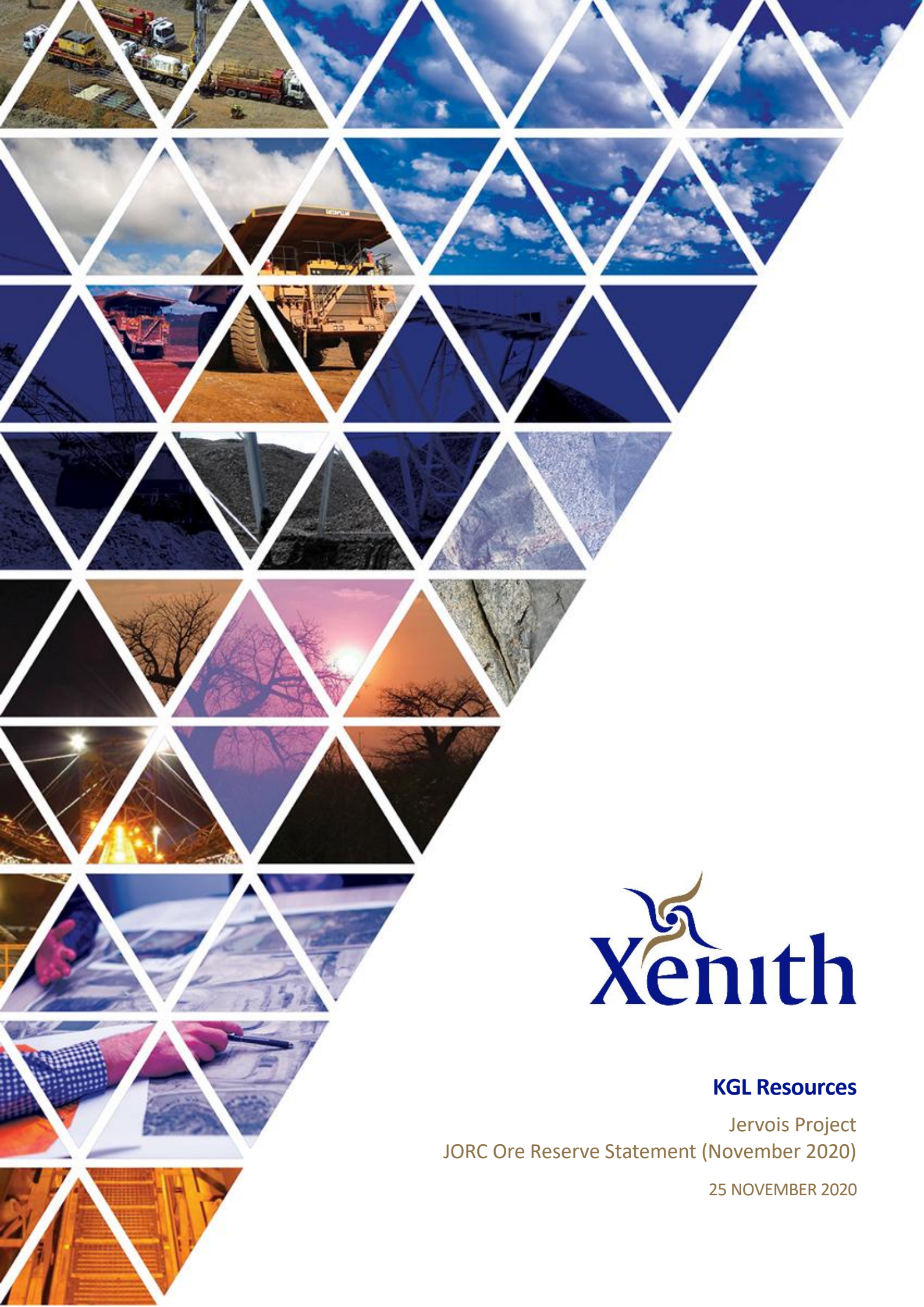
  Control Strategies – KGL to monitor Port Authority approvals and ensure access agreement in place.

- Road Train Accident:

  Control Strategies – Transport Company safety training and systems. Extra driver availability. Extra equipment availability.

- Inadequate time to complete detailed Engineering and Availability of construction and project personnel:

  Control Strategies – Strategy to guide construction and tendering. Develop HR strategies for early engagement of required construction personnel.



KGL Resources

Jervois Project
JORC Ore Reserve Statement (November 2020)

25 NOVEMBER 2020

COMPETENT PERSON CONSENT FORM

Statement

I, Iain Ross

(Insert full name(s)

confirm that I am the Competent Person for the 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

(Insert company name)

and have been engaged by

KGL Resources Ltd

(Insert company name)

to prepare the documentation for

Jervois

(Insert deposit name)

on which the Report is based, for the period ended

25th November 2020

(Insert date of Resource Estimate/Reserve Statement)

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest.

I verify that the Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Exploration Targets, Exploration Results, Mineral Resources and/or Ore Reserves.

Signed_____

EXECUTIVE SUMMARY

Open pit and underground stope optimisations were carried out by ENTECH consultants in September/October 2020. These optimisations were based on the Mineral Resource Estimate effective as at 30th June and issued on 7th September 2020, by Mr Ian Taylor of Mining Associates. The results from these processes were used by ENTECH to generate a Life of Mine (LoM) schedule. The LoM schedule physical quantities were then fed into a KGL Financial Model for costing and analysis purposes. This is the basis of this Ore Reserve Statement.

The Ore Reserves as at 25th November 2020 are shown in Table 1.1 below.

Table 1.1 – Jervois Ore Reserve Statement (25th November 2020)

	Mt	%Cu	kt Cu	Au (g/t)	Au (kOz)	Ag (g/t)	Ag (kOz)
Reward Open Pit							
Probable Reserve	2.6	1.90	50.0	0.48	40.9	43.5	3670
Reward Underground							
Probable Reserve	2.9	2.27	64.8	0.56	49.5	44.0	3907
Bellbird Open Pit							
Probable Reserve*	1.6	1.70	27.8	0.09	4.7	9.55	485
Bellbird Underground							
Probable Reserve	0.4	3.55	15.0	0.2	2.4	23.1	304
Rockface Underground							
Probable Reserve	1.8	3.74	68.5	0.28	15.9	21.5	1227
Total Reserves	**9.4**	**2.41**	**226.0**	**0.39**	**113.4**	**32.9**	**9593**

*Bellbird Open Pit (OP) tonnage contains Inferred material.

Notes:

- Open pits may contain Inferred tonnage, but any associated metal content has been removed in line with the JORC code.
- Where underground (UG) mine designs include Inferred tonnage, this has been removed from this estimate. The total designed tonnage was fully costed and tested against potential revenue from the Indicated tonnage only.

- Commodity Price and Exchange Rate assumptions used for the Reserves (provided by KGL Resources) are shown in Table 1.2 below.

Table 1.2 – Metal Price Assumptions

	US$
Copper (t)	6,788
Gold (Oz)	1,474
Silver (Oz)	17.85
F/X (US$/AU$)	0.71

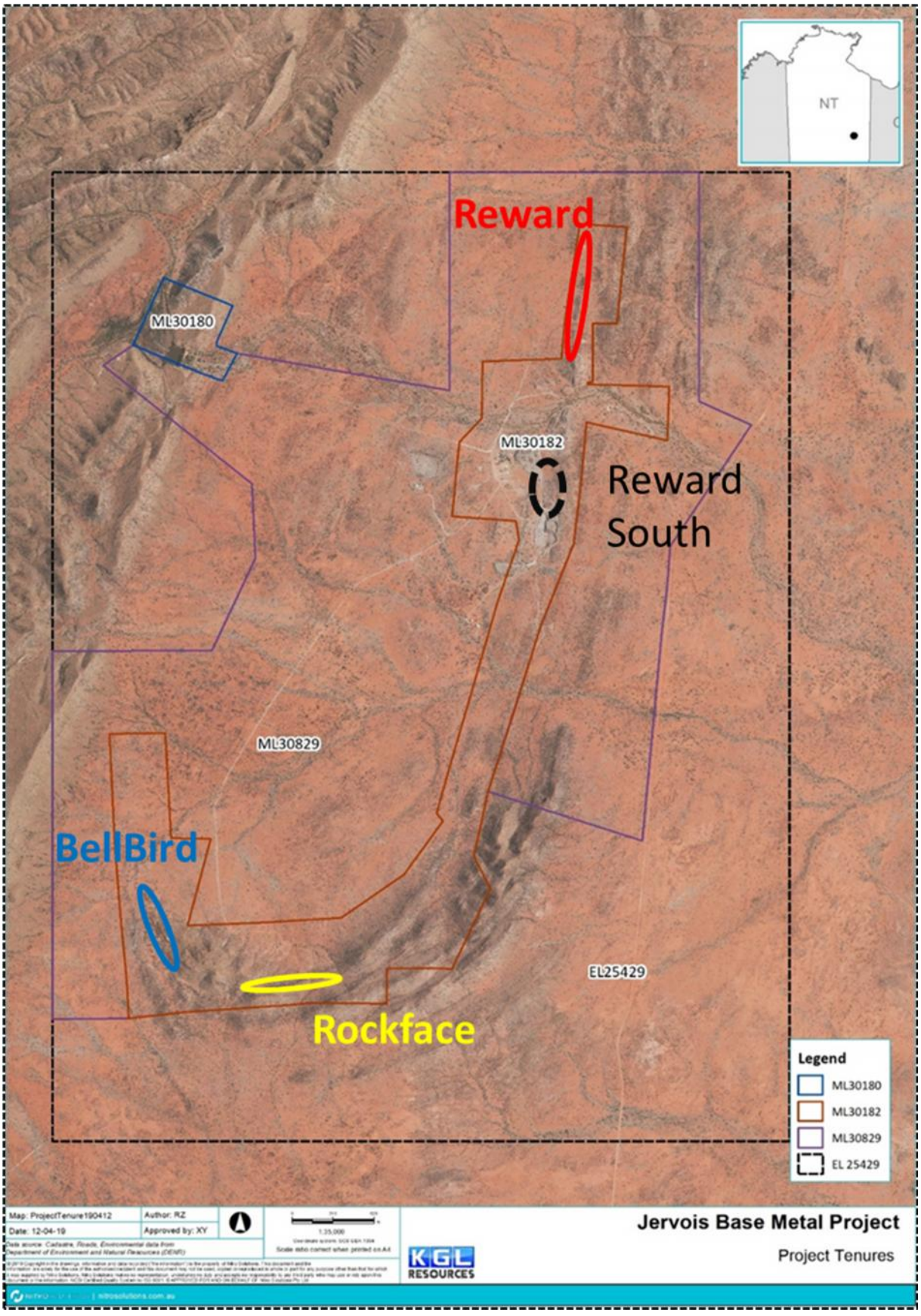
All dollar figures in this report refer to Australian Dollars unless specifically indicated otherwise (e.g. US$).

Commodity prices, provided by KGL, have been assumed in line with recent (mid-2020) reputable studies (e.g. Rio Tinto's Oyu Tolgoi project) and consensus pricing.

The assumptions made are appropriate for this stage of the study process. There are opportunities for further optimisation during the Feasibility Study process as more data becomes available.

Approximately half of the estimated Mineral Resources (19 Mt @ 2.15 %Cu containing 410 kt Cu) have been converted to Reserves (9.4 Mt @ 2.41%Cu containing 226 kt Cu).

Figure – Relative Location of Deposits at Jervois



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DOCUMENT ISSUE APPROVAL

Project & Document No:	Date:
2241KGLR_03 2020 Q4 Update to Jervois Ore Reserves	27/11/2020
Title	**Revision No:**
Jervois Reserves Update as at 25th November 2020	1
Client:	**Status:**
KGL Resources	Final

	Name	Position	Signature	Date
Prepared by:	Iain Ross	Principal Mining Engineer		25/11/2020
Reviewed by:	Mark Perquin	Manager		26/11/2020
Approved by:	Iain Ross	Project Manager & CP		27/11/2020

DISTRIBUTION

Organisation	Attention	No of hard copies	No of electronic copies	Actioned

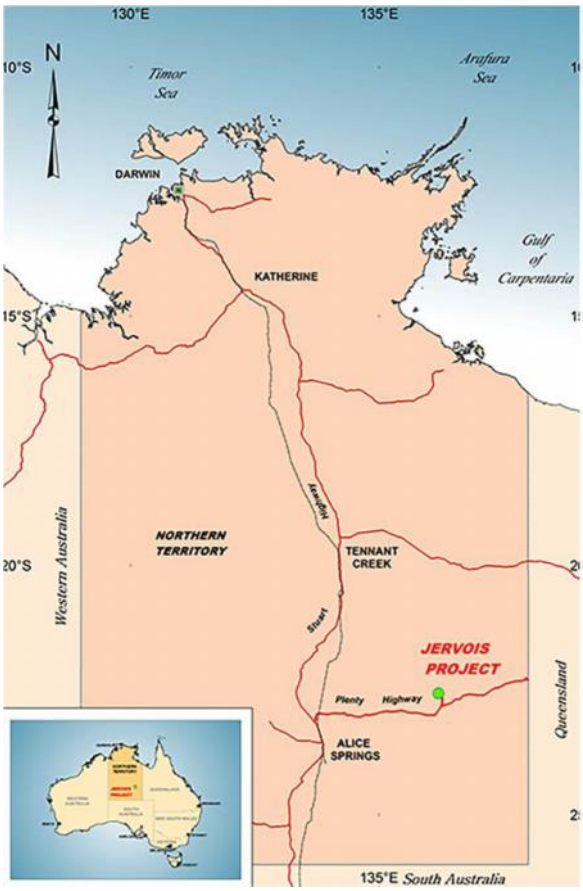
To be initialled and dated by the person who actions the issue of the documents.

1 INTRODUCTION

1.1 Project Description

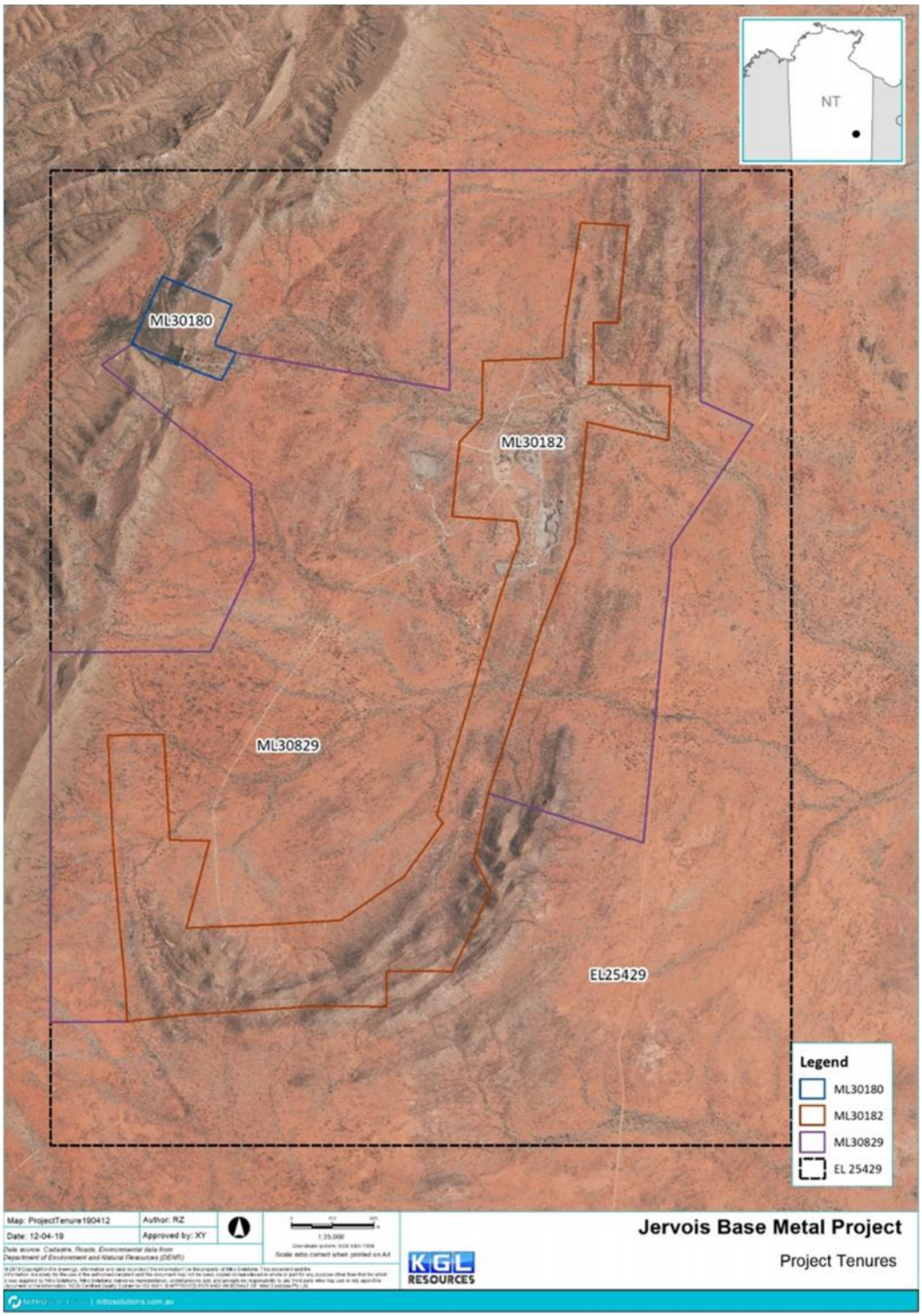
The Jervois project ('the project') is located in the south-eastern part of the Northern Territory of Australia, approximately 275 km ENE of Alice Springs (Figure 1.1 below). The project is approximately centred on 22.65°S and 136.27°E.

Figure 1.1 – Project Location



The project is geographically remote from major centres and ports. This means that the project will have to bear higher transport and logistical overheads compared to other projects which are situated closer to major centres with established infrastructure and transport routes.

Figure 1.2 – Lease Area



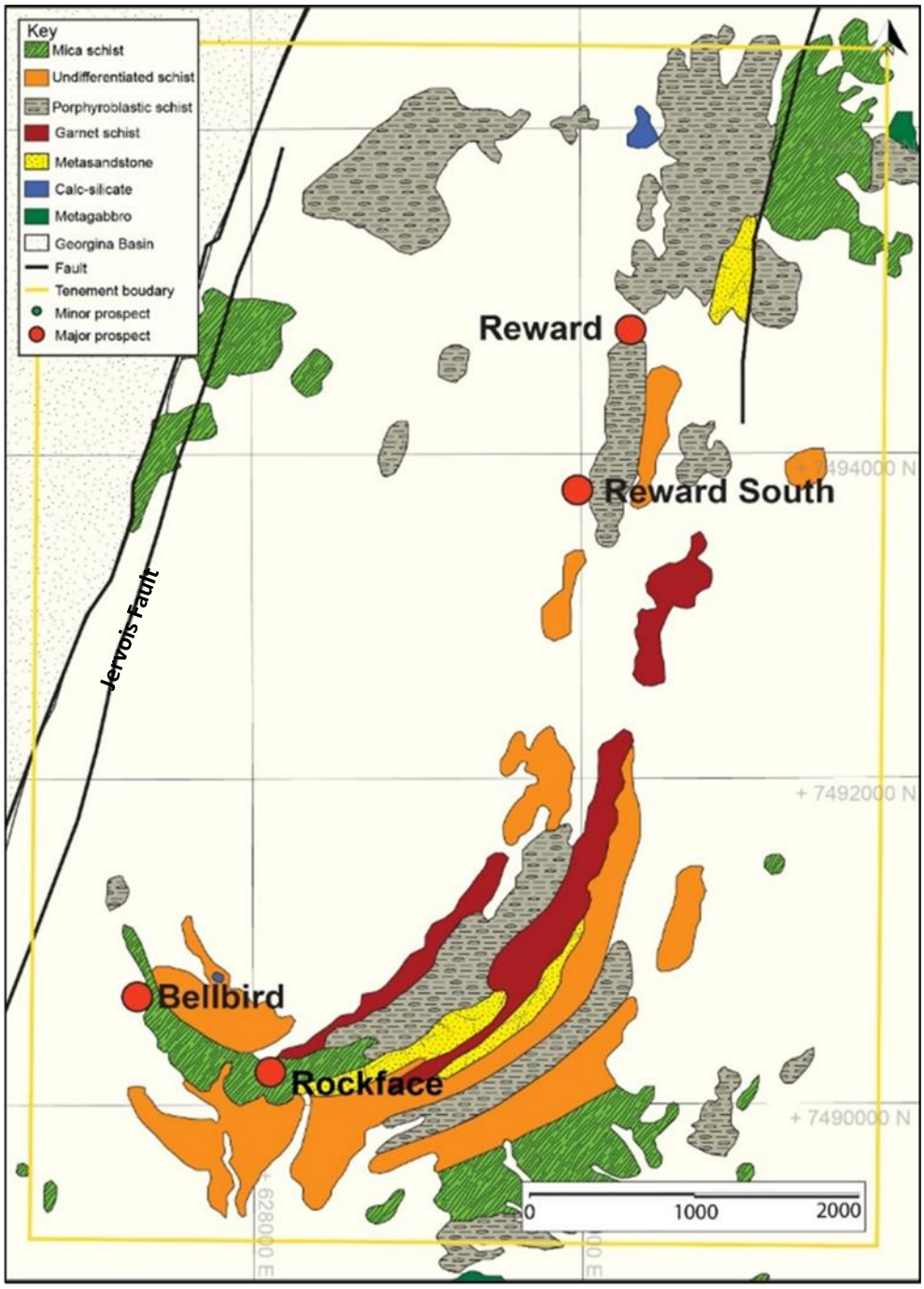
The 3 Mining Leases (ML30180, ML30182 and ML30829) cover the area containing the current Mineral Resources is shown in Figure 1.2. They also cover the planned mining/processing infrastructure, along with the accommodation village – see Figure 1.4.

The Exploration lease EL2549 allows potential for further drilling/discoveries close to the mining leases. No issues with renewals of any of the required leases are evident.

1.2 Geology

The "J – shape" of the deposits forming the project is illustrated, with simplified geology, in Figure 1.3 below.

Figure 1.3 – Project Geology



The geology, mineralisation and mineral resources are focused on the Cu-Ag-Au Reward, Rockface and Bellbird deposits. At all three Cu-Ag-Au deposits the mineralization is broadly similar, although each

deposit differs in its detail, especially with respect to geological structure. Extensive geological descriptions and synthesis can be found in reports by Van Herk (2020) and CSIRO (2018).

1.2.1 Geological Setting

The geological setting and mineralisation are described by Taylor (2020) in his Mineral Resource Estimate.

Geologically, the project lies within the eastern part of the Arunta Region, which forms part of the North Australian Craton. The base metal mineralization is hosted by Paleoproterozoic aged Bonya formation which is a unit in the Aileron Province of the eastern Arunta region which have been metamorphosed to lower-middle amphibolite grade. The Bonya formation is in part overlain in the western part of the project area by Georgina Basin 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).

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 (Figure 1.3) that lies to the west (Weisheit 2019). The more resistant lithologies crop out as a series of hills that prominently define the J-structure on aerial photographs and satellite images. Although the outcrop pattern appears to be uncomplicated, in detail the structure is complex with folding repeated at various scales, from regional to outcrop.

Sericitisation is also associated with Cu mineralisation and can form large halos around ore bodies (Schmid et al., 2018). However, this alteration assemblage typically reflects the metamorphic history of rocks within the J-fold.

Overall, the metamorphosed alteration halos of the mineralisation are hosted within a thick succession of pelites and psammites.

1.2.2 Mineralisation

The mineralisation at the project 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.

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

- Lower grade, primary syn-depositional or stratabound sulphides, and
- higher grade, structurally controlled shoots,

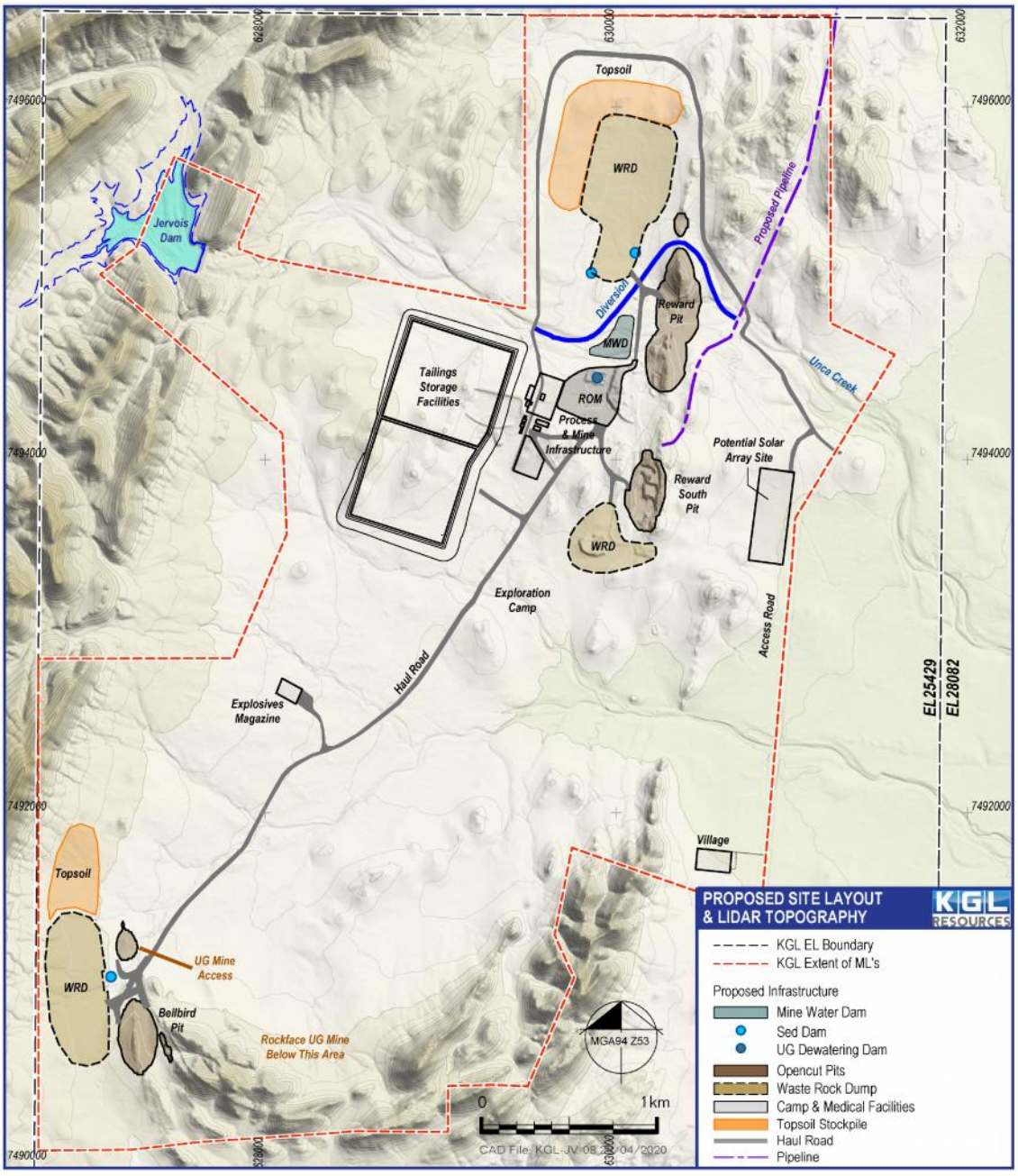
representing both remobilised stratabound syngenetic mineralisation, and a possible late tectonic intrusion-related mineralising event.

Structurally controlled shoots are the result of structurally reworked and remobilised primary strata-bound base metal, during and after peak metamorphism, granite intrusion (see Van Herk 2020). The shoots are observed as massive or semi-massive sulphide-magnetite veins and chalcopyrite-rich brecciated veins.

1.3 Site Layout

A general site layout is shown in Figure 1.4, including haul roads, areas for waste rock dumps, tailings storage, solar array and accommodation village.

Figure 1.4 – Plan of Site Facilities



2 RESOURCES

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

Table 2.1 – Project Mineral Resources

	Mt	%Cu	kt Cu	Au (g/t)	Au (kOz)	Ag (g/t)	Ag (kOz)
Reward Open Pit							
Indicated	3.3	1.86	62.1	0.44	47.2	41.8	4489
Inferred	0.8	0.93	7.1	0.06	1.5	9.5	225
Sub-total	4.1	1.69	69.2	0.38	48.7	37.0	4713
Reward Underground							
Indicated	3.7	2.22	81.9	0.51	60.5	42.8	5078
Inferred	3.5	1.48	51.8	0.18	20.3	26.8	3016
Sub-total	7.2	1.86	133.7	0.36	80.8	36.2	8093
Bellbird Open Pit							
Indicated	1.3	3.1	41.0	0.2	9.8	17.4	744.0
Inferred	1.4	1.2	16.7	0.1	4.5	9.1	409.6
Sub-total	2.7	2.11	57.6	0.17	14.3	13.6	1154
Bellbird Underground							
Indicated	0.3	3.52	12.0	0.18	2.0	22.4	245
Inferred	1.4	2.36	33.7	0.10	4.6	16.6	763
Sub-total	1.8	2.58	45.7	0.12	6.6	18.3	1008
Rockface Underground							
Indicated	2.5	3.54	86.7	0.25	19.7	19.8	1560
Inferred	0.8	2.07	17.4	0.18	4.9	15.6	421
Sub-total	3.3	3.16	104.1	0.24	24.6	19.4	1981
Total Resources	**19.1**	**2.15**	**410.4**	**0.29**	**174.9**	**28.6**	**16949**
Resources (1st June 2020)	*22.6*	*1.75*	*394.8*	*0.26*	*180.0*	*24*	*16577*

The Mineral Resources were estimated in 2020 by Mr Ian Taylor of Mining Associates to reflect more recent drilling results as well as a revised, structurally controlled, geological interpretation relating to Rockface and Bellbird Resources . His report is effective 30 June 2020, issued 7th September 2020. The Resources are inclusive of Reserves.

The contributing Resources are:

- Reward
  - open pit
  - underground.
- Rockface
  - underground.
- Bellbird
  - open pit
  - underground.

The bottom row of Table 2.1 – Project Mineral Resources, displays the previous total Resource (effective 1st June 2020). While the Resource tonnage is reduced by approximately 3.5 Mt, the contained metal remains very similar to that used in the June 2020 Mineral Resource estimate.

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. The Resource may be revisited in the future, but this November 2020 Reserve Statement is only evaluating Cu-Au-Ag Resources.

2.1 Resource Cut-off Grades

When evaluating the Resource models two different cut-off grades (CoG) were applied:

- above the 200m RL, a 0.5%Cu cut-off,
- below the 200m RL, a 1.0%Cu cut-off.

Although selecting the 200m RL for the change in CoG is somewhat arbitrary, it is a reasonable assumption at this stage of the study. This assumes that mining above 200m RL will be by open pit methods and below that level will be mined by underground methods.

The 0.5% Cu cut-off covers the direct mining and processing unit cost (also allowing for metallurgical recovery). There is a small surplus (<$10/t of potential millfeed on Reserve pricing) from open pits, that contributes towards overheads.

The 1.0% Cu cut-off will compensate for the higher unit mining costs incurred, applying basic underground methods. Table 2.2 – Cut-off Grades and Contributions, below is an approximate indication of the potential contribution for a tonne of material at the cut-off grade towards overheads after considering direct mining costs (after metallurgical recovery has been applied).

Table 2.2 – Cut-off Grades and Contributions

Cut-off (% Cu)	0.5%	1.0%
Value ($/t)		
USD	$ 33.94	$ 67.88
AUD	$ 47.80	$ 95.61
Cost (t)		
Recovery	83%	90%
Mining	$ 10.00	$ 50.00
Processing	$ 22.00	$ 22.00
Contribution (AU$/t)	$ 7.68	$ 14.05

Note:

It should be noted that the arbitrary cut-off can be a self-fulfilling assumption – Pits are unlikely to drive deeper than 200mRL as the "marginal material" between 0.5% and 1.0%Cu is excluded from the next bench below that level. With relatively high strip ratios (over 10:1), the reduction in ore tonnes (albeit at higher grade) cannot support the waste stripping cost incurred. Allowing the pits to drive deeper on an "unconstrained optimisation" may result in a larger open pit Reserve tonnage.

However, the issue is a complex one. Early in the mine life, "low risk" tonnes (lower grade, open pit) are key to providing millfeed, but high-grade production is important to maximise early returns. This improves financial metrics (DCF, IRR, NPV).

This should be a subject of trade-off study in the final PFS or FS stage.

3 MINE PLAN

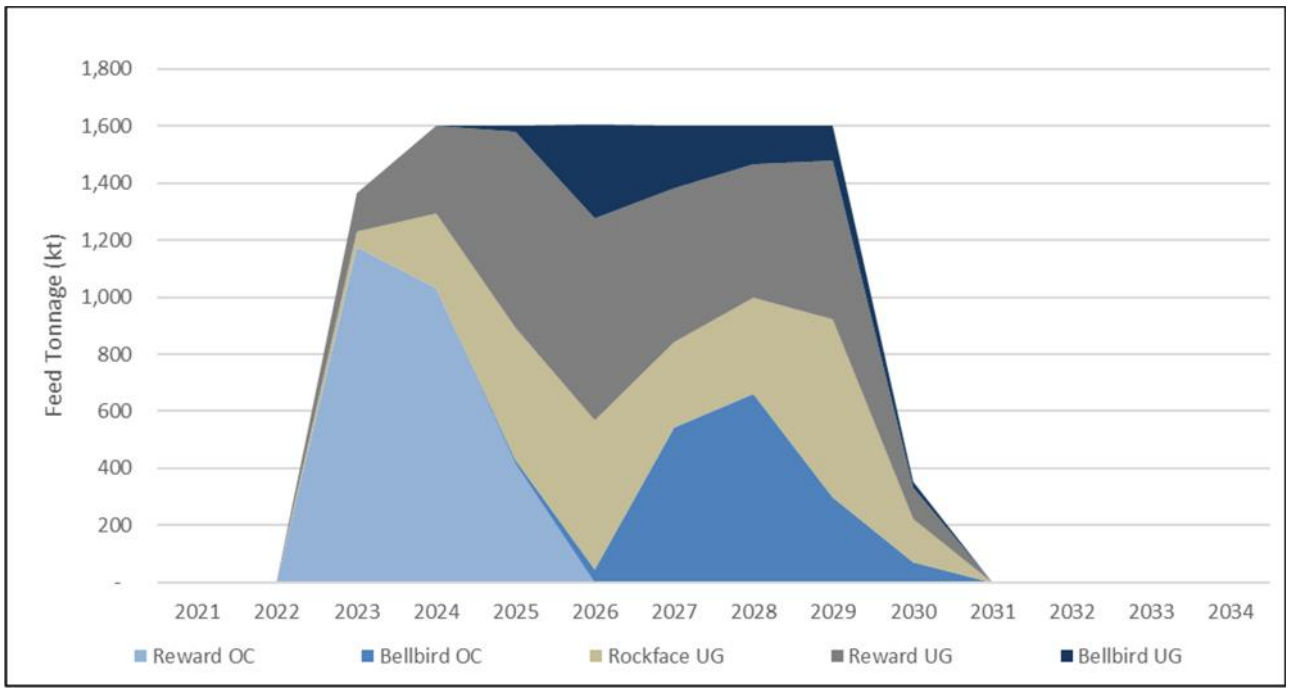
3.1 Mining Sequence

The Life of Mine (LoM) plan focusses on the Cu-Au-Ag Resources and sequences the project as follows:

1. Reward stage 1 pit and Bellbird stage 1 pit – to facilitate the commencement underground access declines.
2. Reward and Rockface access declines commence.
3. Reward stage 2 pit.
4. Rockface underground.
5. Reward underground production will ramp-up and supplement Reward stages 3 and 4 pit feed.
6. Bellbird access decline is commenced from Reward decline and Bellbird underground produces in parallel with Bellbird stage 2 pit (under crown pillar), requiring three producing underground mines.
7. Bellbird stage 2 pit will replace Reward stage 4 pit feed and underground production.

The general OP ideology, as per the schedules, is a two-digger fleet for a period dropping to a single digger, a break with (no open pit mining – just treating stockpiled material), followed by the return of a single digger.

Figure 3.1 – Millfeed Source by Mine



A financial model has been developed, based on the Life of Mine Schedule, following the sequence in section 3.1.

3.2 Metallurgical Factors

KGL Resources have engaged a reputable engineering company to design the processing facility and other site infrastructure. Multiple phases of test work and analysis have been carried out and are summarised in the document: Jervois Copper Project, Process Plant Upgrade PFS Refresh, dated 4th November 2020.

The predictive algorithms developed were independently verified by a third party as being appropriate for use in the studies. There were some specific areas where minor modifications were suggested but these were minor in nature and not material to the final recovery for most of the sulphide material. There were some suggested changes to the recovery algorithm for lower grade transitional material.

The formula used to estimate recovery for various grades of ore in the optimisations for sulphide material was:

Cu Rec = ((Cu_{HG}%-0.075) x 0.975/(Cu_{HG}%))*100

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

Table 3.1 – Calculated Recoveries

	Open Pit Cut-off	UG Cut-off	Resource (average grade)	Reserve (average grade)
Head Grade (%Cu)	0.50	1.00	2.15	2.41
Recovery	83.0%	90.2%	93.6%	94.0%

3.3 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. The Mine Management Plan (MMP) was submitted in early 2020 and KGL have clarified queries on the submission and finalisation is expected by the end of 2020.

3.4 Infrastructure

The main items of Infrastructure that are required and have been considered in the Pre-Feasibility Study (PFS) have all been the subject of specific studies/reports which have been referenced in the Process Plant Upgrade PFS Refresh document (date 4 November 2020). The main items are briefly described in this section.

3.4.1 Process Plant

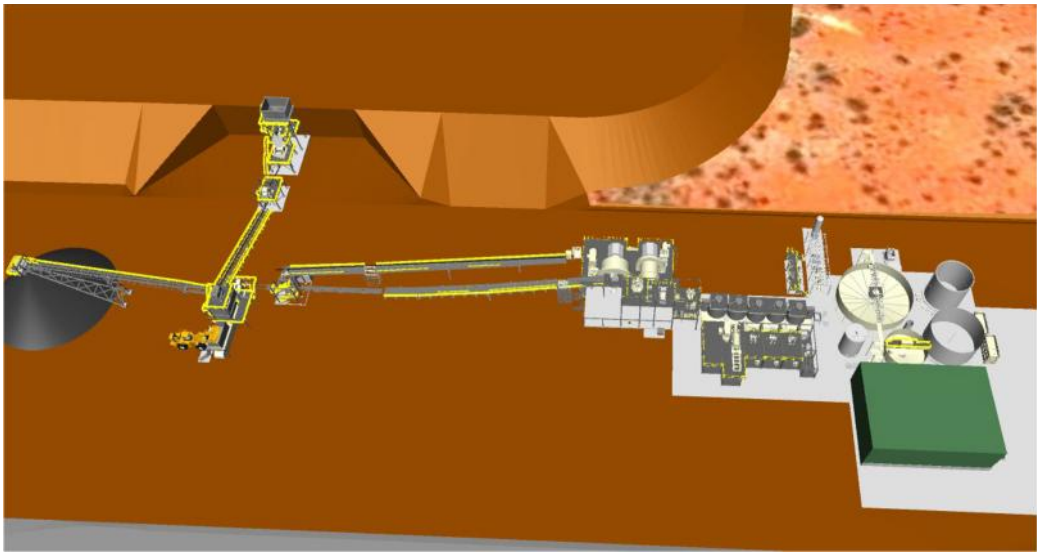
A processing plant capable of handling ~1.6 Mtpa of copper/gold sulphide ore has been designed and costed in the PFS Refresh report (approx. $57.5M plus indirects). See Figure 3.2 below.

A tailings storage facility (TSF) is also included at a cost of ~$15M.

The process flowsheet and descriptions of the crushing, grinding and floatation circuits are contained in the relevant section of the PFS Refresh report.

At this stage the design for the plant modifications to treat the Lead/Zinc ores has not been updated and does not form part of this analysis for Reserves.

Figure 3.2 – 3D Schematic of Process Plant



3.4.2 Power Plant

The intent of KGL is to have a contract for a Build, Own Operate (BOO) power generation facility at the mine-site. Commercial discussions have been held and indicative proposals have been tabled. There are options regarding the generation make-up (diesel, gas, wind and solar) and the final selection will impact both the monthly charge and the Thermal energy charge that makes up the ultimate cost per kWh.

The cost model assumes a unit cost of $0.24 per kWh based on the indicative proposals.

3.4.3 Accommodation Village

Similarly, a BOO contract approach is planned for the accommodation village, which will be sited approximately 2.5km from the process plant. It will be a 340-person capacity facility and the costs are estimated at $100 per person per day.

3.4.4 Water Supply

Water supply is planned from a borefield system, approximately 40km from the processing facility, to the NE of the Lucy Creek Station. A mineral lease (ML32277) over this area was approved in July 2020.

Potable water will be provided through a 16m^3/hr capacity Reverse Osmosis plant, installed at the processing facility.

3.4.5 Ancillary Infrastructure

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

- Site buildings including:
  - Clinic and emergency response building
  - Administration / first aid building
  - Security building
  - Shift change rooms
  - Core shed building
- Fuel storage tank (1,500m^3 capacity - to be reviewed after equipment has been finalised)
- Communications
- Process plant mobile equipment
- Baikal airstrip (approximately 30km W of Process facility) upgrade to all-weather
- Airport shed and parking
- Site gate / fencing
- Sewage treatment
- On-site roads
- Vehicle washdown
- Diversion dam.

4 COMMODITY PRICES AND COSTS

4.1 Financial Assumptions

The commodity prices indicated in Table 4.1 were used for:

- Mineral Resource estimation (Mining Associates)
- Mine optimisations (ENTECH)
- Reserve validation (Xenith).

Table 4.1 – Commodity Price Assumptions

	Reserves
Revenue	**US$**
Copper (t)	6788
Gold (Oz)	1474
Silver (Oz)	17.85
US$/AU$	0.71

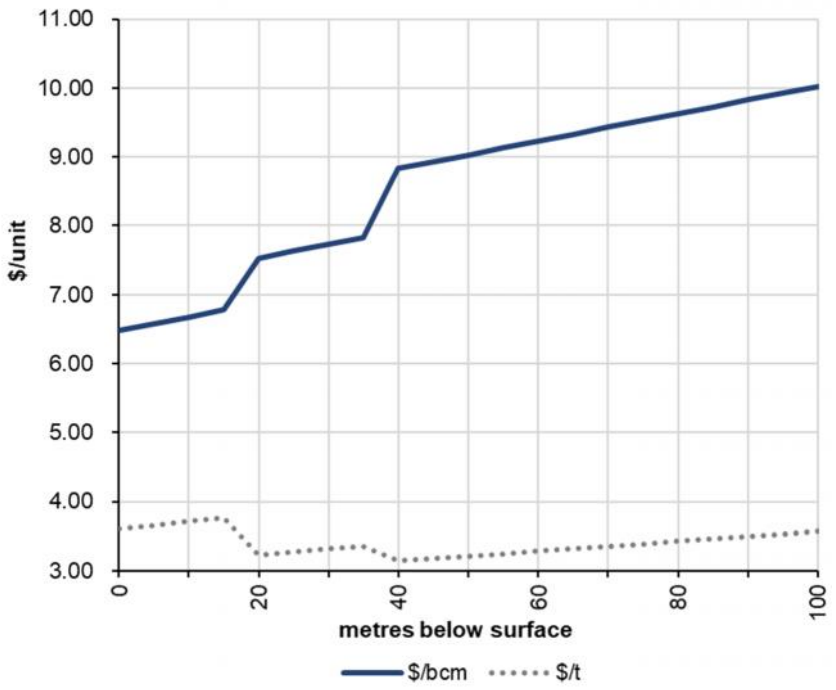
It should be noted that all the optimisations, both for open pits and underground deposits have only utilised revenue from the Copper (Cu) contained in the models.

Revenue from both Gold (Au) and Silver (Ag) were not included as part of the optimisation process. This will typically result in a conservative conversion from Resource to Reserve as Au and Ag typically contribute up to around 10-15% of the potential revenue.

However, all metal components (after metallurgical recovery has been applied) are used in the Reserve validation process (see sub-headings on each mine for 'Financial Test of Design' sections).

4.2 Costs and Assumptions for Open Pit Optimisations

Figure 4.1 – Open Pit Mining Unit Cost



The mining costs were composed of an assumed drill & blast cost per bcm (for either Oxide, Transitional or Fresh) and a load and Haul component based on bench elevation/haul distance. This was typically around $3.50/t at surface level, increasing to $5.00/t from a bench 200m below surface.

Process costs were assumed at $19.81/t and an overhead, grade control and surface haulage cost were applied to bring the total to $27.45/t.

4.2.1 SMU Modelling

ENTECH formed the view that due to the nature of the orebody (relatively narrow and steeply dipping), that a Smallest Mining Unit (SMU) would be an appropriate approach.

This approach uses optimisation software to prepare shapes according to a set of geometric and cut-off parameters. Using a proportional field, the block model was flagged, based on material that was in/out of wireframe shapes.

Three geometric scenarios were evaluated at 3, 4, and 5 m wide using a cut-off grade of 0.6% Cu in the oxide and 0.4%Cu in the fresh rock.

The 4 m minimum mining width (MMW) was adopted as the base case and the 3 m and 5 m iterations were considered as sensitivities.

Dilution was assumed at 0.5 m on both the hangingwall and footwall (contained within the SMU blocks). Recoveries were accounted for in the optimisation process and revenues from Au and Ag

were ignored. As these could contribute an additional 10% of revenue, the optimisations are considered to be relatively conservative.

4.3 Costs and Assumptions for Underground Mine Stope Optimisation

ENTECH developed a mining cost estimate applying the costs shown in Table 4.2.

These are based on a Long Hole Open Stoping (LHOS) method, leaving pillars where required. Cemented Rock Fill would then be placed in the primary stopes to allow the recovery of the secondary stopes. However, some areas may allow LHOS (top down) without fill which relies on in-situ pillars providing adequate support.

This is a reasonable assumption at PFS level, although as more knowledge is gained there may be opportunities to optimise the fill system. If the trend of more well defined, structurally controlled, higher grade mineralisation continues, paste fill might be considered.

Table 4.2 – Underground Mining Activity Cost Assumptions

Mining Activity Cost (per stope tonne)	Unit	Fully Costed Fill	Total Op Cost Fill	Incremental Fill	Total Op Cost No Fill	Incremental No Fill
Capital Lateral and Vertical Development cost component	$/t ore	15				
Operating Lateral Development Component	$/t ore	15	15		15	
Stoping direct cost	$/t ore	50	50	50	40	40
Mine Services	$/t ore	15	15		15	
Geology/Grade control Cost	$/t ore	5	5		5	
Total Mining Operating Cost	$/t ore	100	85	50	75	40
Operating stope cut-off grade	% Cu	1.87%	1.64%	1.12%	1.50%	0.97%

Mining assumptions also include:

- minimum mining width of 3 m
- maximum stope width of 30 m
- 0.5 m of dilution on both hangingwall and footwall surfaces
- Additional 1% of dilution (fill) on stopes mined against filled stope boundaries
- Mining Recovery at:
  - 95% in Cemented Rock Fill (CRF) stopes;
  - 50% in open stoping areas underneath CRF Pillar.

Additional assumptions for specific mines are given in the sections corresponding to those deposits.

Underground methods and trade-off between open stoping and fill options have not been carried out. This should be done in the next phase of study.

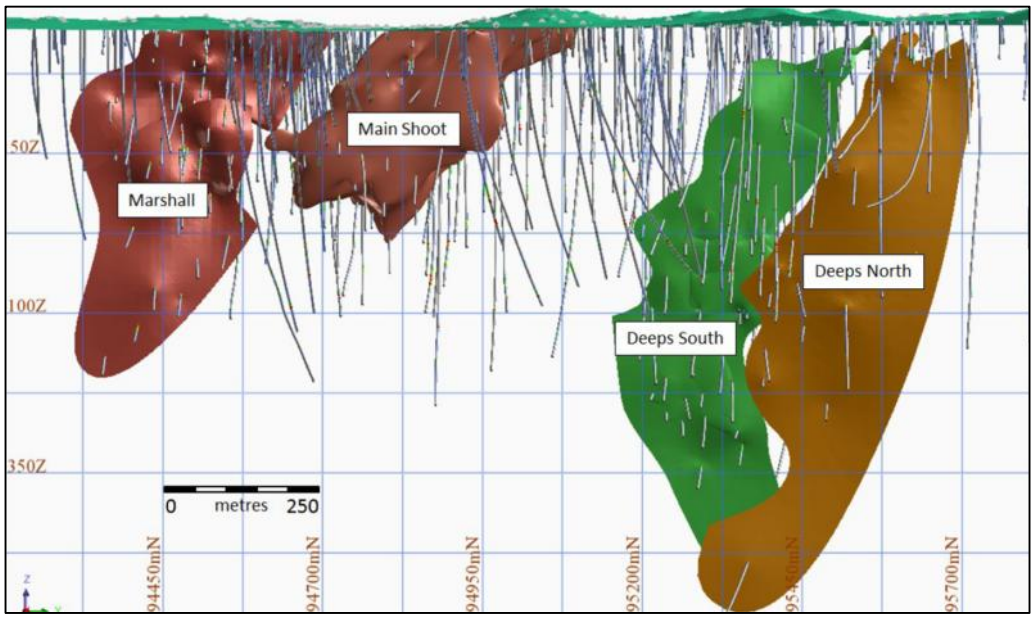
5 RESERVES

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 well drilled and there are multiple mineralised zones. A long section is shown in Figure 5.1 below.

Figure 5.1 – Long Section at Reward



The Resources for the Reward open pit are shown in Table 5.1 below.

Table 5.1 – Reward Open Pit Resources

Category	Mt	% Cu	kt Cu	g/t Au	kOz Au	g/t Ag	kOz Ag
Indicated	3.34	1.86	62.1	0.44	47.2	41.8	4,489
Inferred	0.76	0.93	7.1	0.06	1.5	9.5	225
Total	4.1	1.69	69.2	0.40	48.7	38.5	4,713

5.1.2 Optimisation Inputs

The commodity prices, costs and dilution assumptions used in the optimisation are given in Chapter 4 (4.1 Financial Assumptions, and 4.2 Costs and Assumptions for Open Pit Optimisations).

Reward open pit slope design criteria are shown in Table 5.2 below.

Table 5.2 – Reward Pit Slope Design Parameters

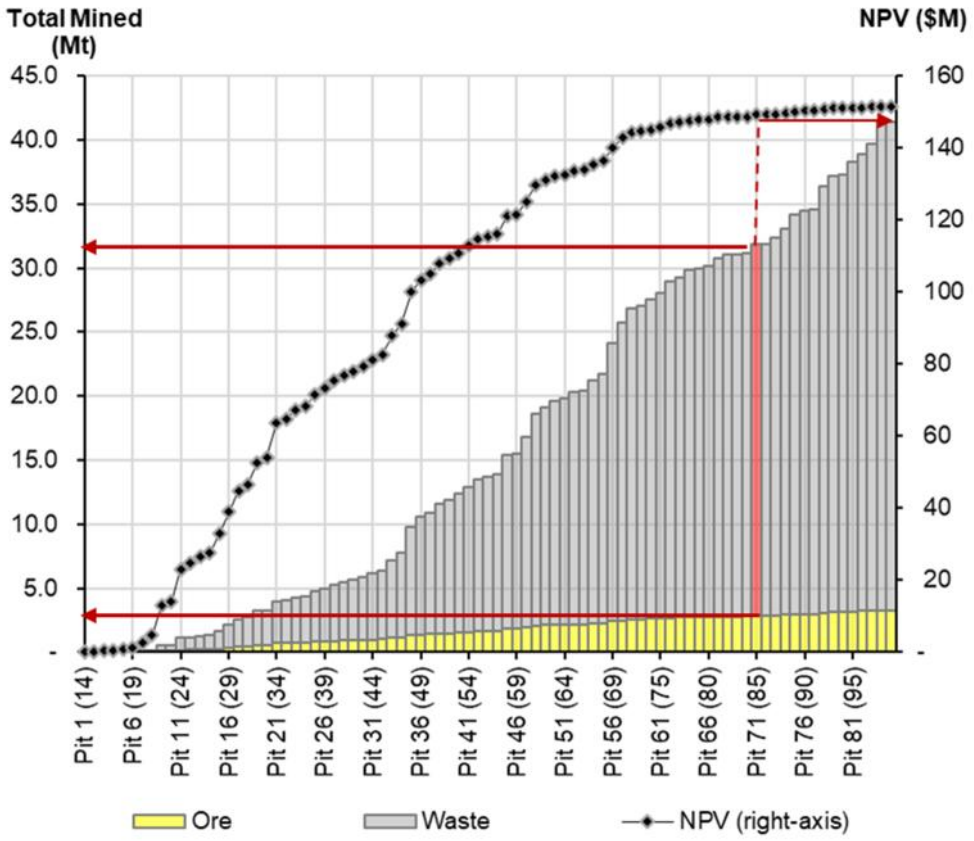
Domain	Inter Ramp Height (m)	Inter Ramp Angle (^{0})	Bench Height (m)	Bench Face Angle (^{0})	Single Bench width (m)	RL
East Wall Transitional	30	40^0	10	55	5	350-320
East Wall Fresh	100	55.9^0	20	80	10	320-210
West Wall Transitional	30	40^0	10	55	5	350-320
West Wall Fresh	100	55.9^0	20	80	10	320-210
North/South Transitional	40	40^0	10	55	5	350-320
North/South Fresh	100	55.9^0	20	80	10	320-210

95% Mining recovery in the pit was also factored in.

5.1.3 Optimisation Results

The SMU modelling described above produced the following pit shells based on a 4 m MMW SMU.

Figure 5.2 – Reward Optimised Pit Shells



Pit shell 71 (85) (highlighted) was selected as the basis for design. Larger pit shells appear to require more waste stripping thus flattening the NPV curve after this point.

Once the design had been completed a high-level trade-off check was made, comparing the outcomes of moving the pit floor by 20 m increments and comparing with the potential revenues from underground mining of that material.

Table 5.3 – Reward Open Pit Reserves

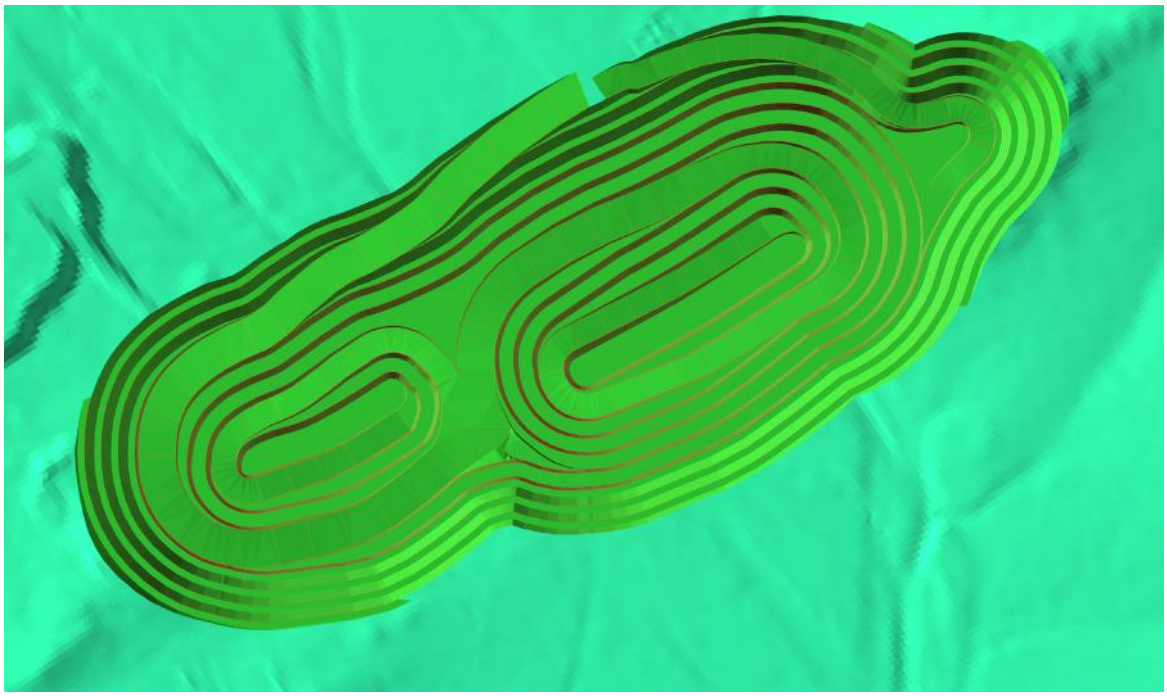
Category	Mt	% Cu	kt Cu	g/t Au	kOz Au	g/t Ag	kOz Ag
Proven							
Prob	2.6	1.90	50.0	0.48	40.9	43.5	3,670
Total	**2.6**	**1.90**	**50.0**	**0.48**	**40.9**	**43.5**	**3,670**

The value of the contained metal in this Reserve is $655M (based on Reserve pricing).

5.1.3.1 Financial Test of Design

The Reward Pit design was tested with fully allocated costs, including direct mining, processing, TCRCs and overheads (based on the financial model) with Reserve Pricing. Recovery factors were also applied. The value of recovered metal in the Probable Reserve exceeded the total (mining, processing, TCRC and overhead) costs by more than $215M.

Figure 5.3 – Reward Pit Design



The Reward open pit has been defined into stages.

Stage 1 is required to excavate down to fresh rock to facilitate the establishment of the Reward decline Portal.

Reward stage 2 pit provides early mill-feed.

Stages 3 and 4 provide millfeed for during the first 4 years of operation and allows efficient use of equipment on site. The ore scheduling and staging of pits will be revisited during the next phase of study.

Stages 1,2 and 3 can be seen in Figure 5.4 to Figure 5.6. The final pit design (stage 4) is shown in Figure 5.3, above.

Figure 5.4 – Reward Stage 1 Pit

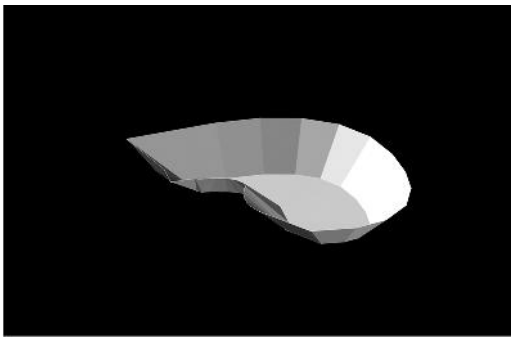


Figure 5.5 – Reward Stage 2 Pit

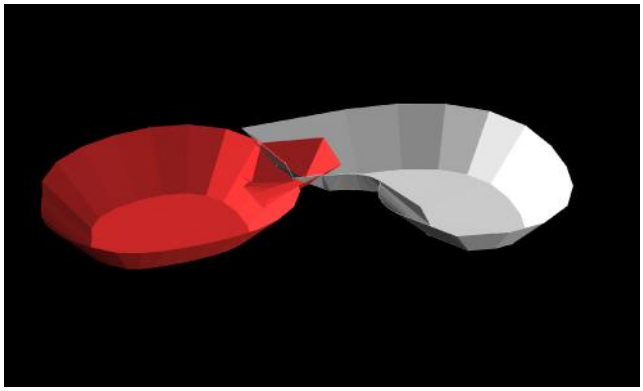
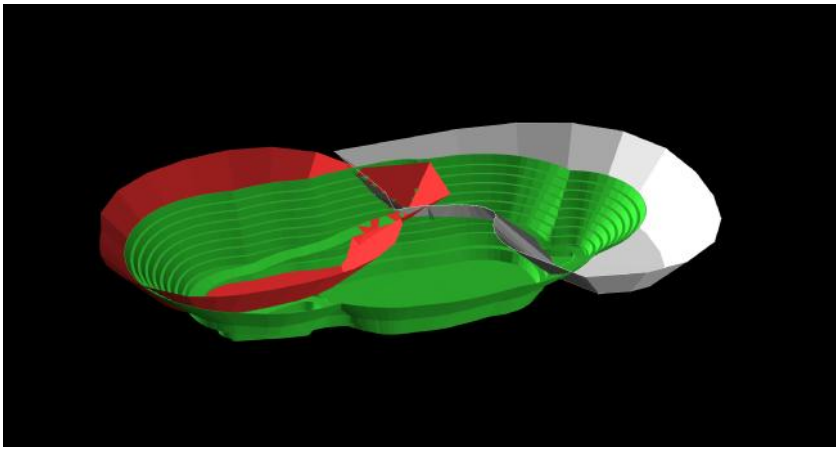


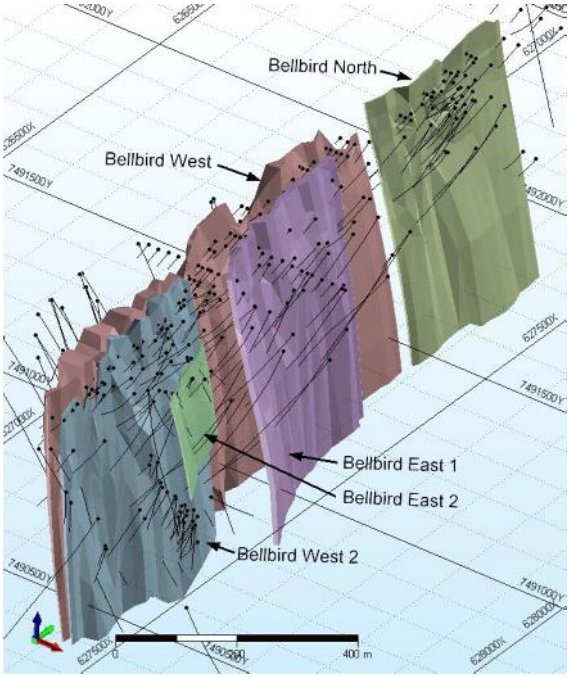
Figure 5.6 – Reward Stage 3 Pit



5.2 Bellbird Open Pit

The strike length of the mineralised zones at Bellbird, shown in Figure 5.7 below, extend for approximately 1,500 m.

Figure 5.7 – Bellbird Mineralised Zones



5.2.1 Bellbird Open Pit Resources

Bellbird Open Pit is the most Southerly in the complex, (see Figure 1.3 – Project Geology).

Table 5.4 – Bellbird Open Pit Resources

Category	Mt	% Cu	kt Cu	g/t Au	kOz Au	g/t Ag	kOz Ag
Indicated	1.3	3.08	41.0	0.23	9.8	17.4	744
Inferred	1.4	1.19	16.7	0.1	4.5	9.1	410
Total	**2.7**	**2.11**	**57.6**	**0.19**	**14.3**	**15.0**	**1,154**

5.2.2 Optimisation Inputs

The commodity prices, costs and dilution assumptions used in the optimisation are given in Chapter 4 (4.1 Financial Assumptions, and 4.2 Costs and Assumptions for Open Pit Optimisations).

Mining Recoveries were assumed to be 95%

Slope design parameters are shown in Table 5.5 below.

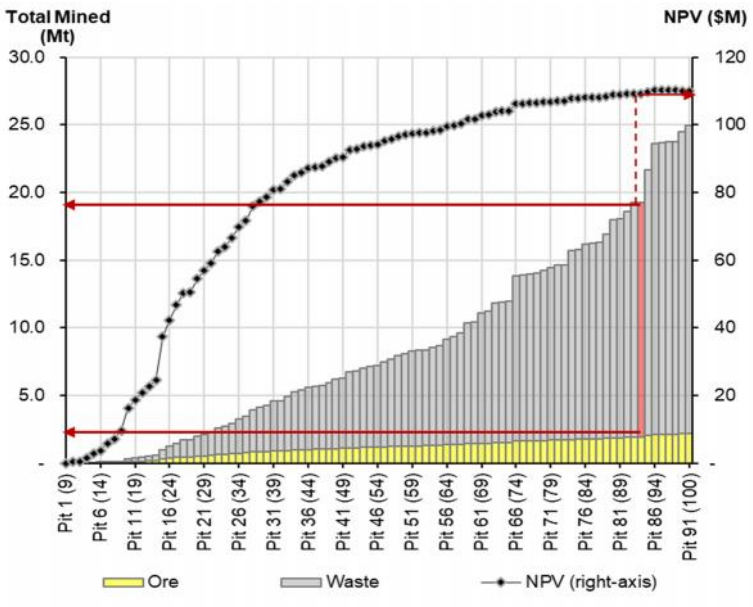
Table 5.5 – Bellbird Pit Slope Design Parameters

Domain	Inter Ramp Height (m)	Inter Ramp Angle (^{0})	Bench Height (m)	Bench Face Angle (^{0})	Single Bench width (m)	RL
East Wall Transitional	20	40^0	10	55	6	360-340
East Wall Fresh	73	55.9^0	20	80	10	340-267
West Wall Transitional	20	40^0	10	55	6	360-340
West Wall Fresh	73	55.9^0	20	80	10	340-267

5.2.3 Optimisation Results

Pit shells are shown in Figure 5.8 – Bellbird Optimised Pit Shells below.

Figure 5.8 – Bellbird Optimised Pit Shells



Pit shell 85 (93) (highlighted) was selected as the basis for design.

Once the design had been completed a high-level trade-off check was made, comparing the outcomes of moving the pit floor by 20 m increments and comparing with the potential revenues from underground mining of that material.

Table 5.6 – Bellbird Open Pit Reserves

Category	Mt	% Cu	kt Cu	g/t Au	kOz Au	g/t Ag	kOz Ag
Proven							
Prob	0.9	3.24	27.8	0.17	4.7	17.62	485
Inf	0.8	0.58	-	0.05	-	3.55	-
Total	**1.6**	**1.70**	**27.8**	**0.09**	**4.7**	**9.55**	**485**

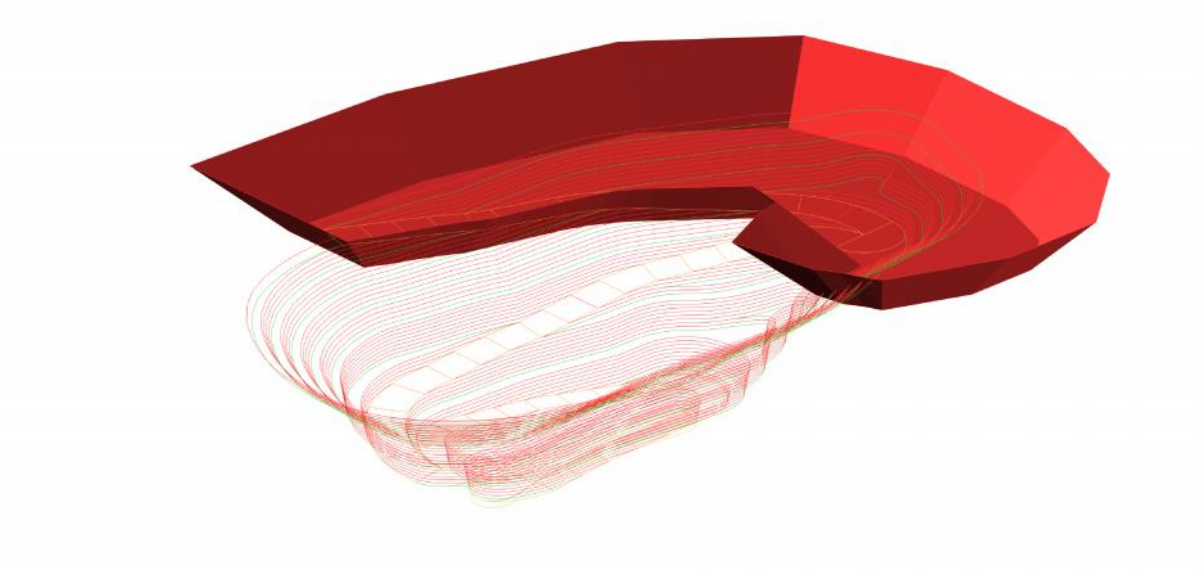
This Reserve contains 0.8 Mt of Inferred material, however no value (metal) has been ascribed to this tonnage.

The value of the contained metal in this Reserve is over $285M (based on Reserve pricing).

5.2.3.1 Financial Test of Design

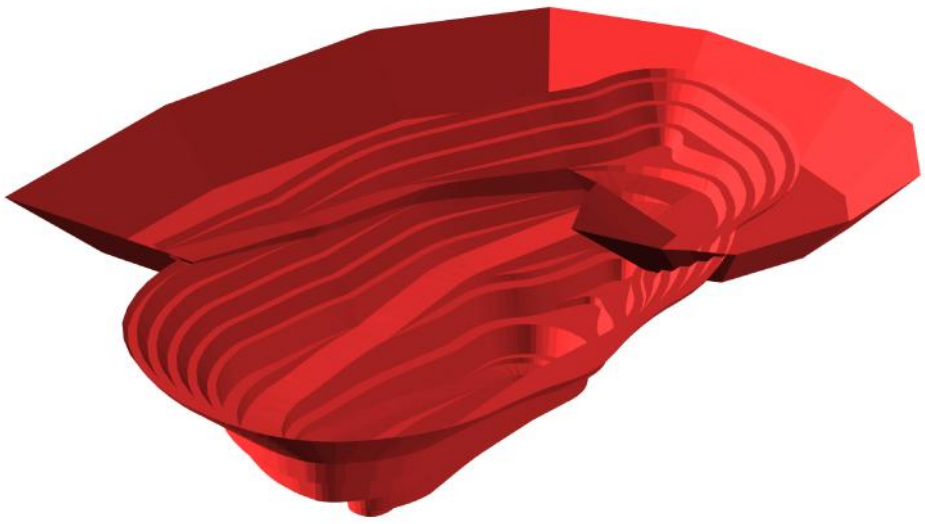
The design was tested with fully allocated costs, including direct mining, processing, TCRCs and overheads (based on the Site Financial Model) with Reserve Pricing. Recovery factors were also applied. The value of recovered metal from the Probable Reserve tonnage exceeded the total (mining, processing, TCRC and overhead) costs by more than $60M.

Figure 5.9 – Bellbird Pit, Stage 1



Stage 1 excavation is purely to allow access to commence the Rockface decline.

Figure 5.10 – Bellbird Pit, Stage 2



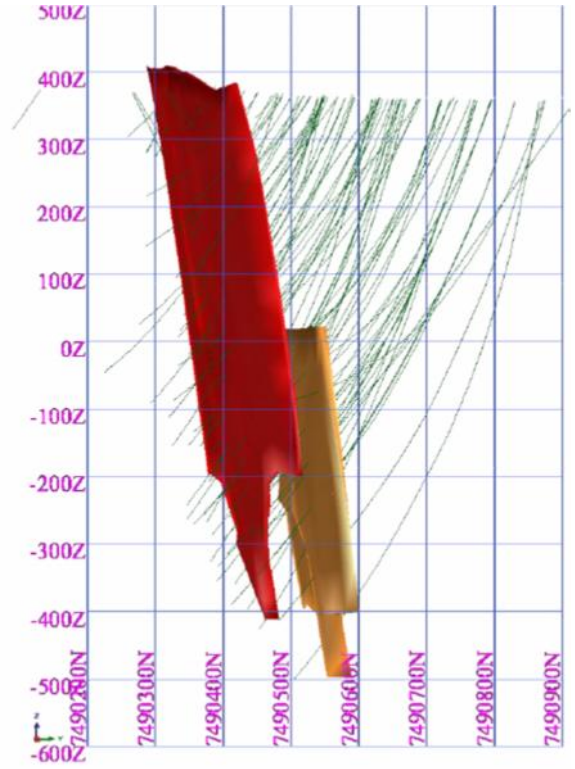
5.3 Rockface Underground

The Rockface underground mine will be accessed via a decline which will commence in fresh rock exposed in mining of the Bellbird stage 1 pit. The underground access is indicated in Figure 5.12 – Rockface Mine Design.

5.3.1 Rockface Underground Resource

There are 2 separate lodes at Rockface as can be seen in Figure 5.11, below.

Figure 5.11 – Rockface Underground Main and North Lodes



Both lodes are dipping at around 80 degrees with the North lode having the larger Resource.

Table 5.7 – Rockface Underground Resources

Category	Mt	% Cu	kt Cu	g/t Au	kOz Au	g/t Ag	kOz Ag
Indicated	2.45	3.54	86.7	0.25	19.7	19.8	1,560
Inferred	0.84	2.07	17.4	0.18	4.9	15.6	421
Total	**3.29**	**3.16**	**104.1**	**0.24**	**24.6**	**19.1**	**1,981**

The value of contained metal within the Resource is approximately $1.1 billion.

5.3.2 Optimisation inputs

The commodity prices, costs and dilution assumptions used in the optimisation are given in Chapter 4 (4.1 Financial Assumptions, and 4.3 Costs and Assumptions for Underground Mine Stope Optimisation).

Mining methods applied included bottom up, long-hole stoping with cemented rock fill (CRF). Geotechnical guidelines indicated that strengths of CRF should require between 3-8% cement. In addition, top-down long-hole stoping with pillars was also used, and the pillars in open stoping areas are allowed for in the design (see Figure 5.12).

A 30 m level spacing was adopted.

A mining recovery factor of 90% was applied to open stopes with pillars (5% losses in loading recovery and 5% additional pillar losses in wider areas).

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

5.3.3 Optimisation Results

Mine Stope Optimiser (MSO) runs on cut-off grades of 1%, 1.25% and 1.5% Cu grades were completed.

The final stope inventory was selected on a basis of cut-off grade (CoG) and overall Cu grade. Stoping extents along strike were trimmed to a 1.5%Cu CoG, with the majority of 1.25%Cu CoG MSO shapes used (and infilled with a small number of 1% CoG shapes).

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.

Further geotechnical analysis is recommended to assess stope support requirement in the Rockface lower zones.

The Main and North Lodes, looking along strike, are shown in Figure 5.13, below

Table 5.8 – Rockface Underground Reserves

Category	Mt	% Cu	kt Cu	g/t Au	kOz Au	g/t Ag	kOz Ag
Proven							
Probable	1.8	3.74	68.5	0.27	15.9	20.8	1,227
Total	**1.8**	**3.74**	**68.5**	**0.27**	**15.9**	**20.8**	**1,227**
Inferred	*0.9*	*0.78*	*6.8*	*0.08*	*2.3*	*6.22*	*175*

The inferred material in the underground design has been excluded from the Reserves. Further definition drilling will be carried out and the results of that drilling can inform the stope design. Thus, 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.

5.3.3.1 Financial test of mine design

The underground Reserves are based on the Indicated tonnage only. The mine design (and the LoM forecast) include the Inferred material (0.9 Mt). The value of the metal contained within the Probable Reserve is ~$720M.

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. The value of recovered metal in the 1.8 Mt of Probable Reserve exceeded the total (mining, processing, TCRC and overhead) costs for the entire 2.7 Mt mine design tonnage, by ~$145M.

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

Figure 5.12 – Rockface Mine Design

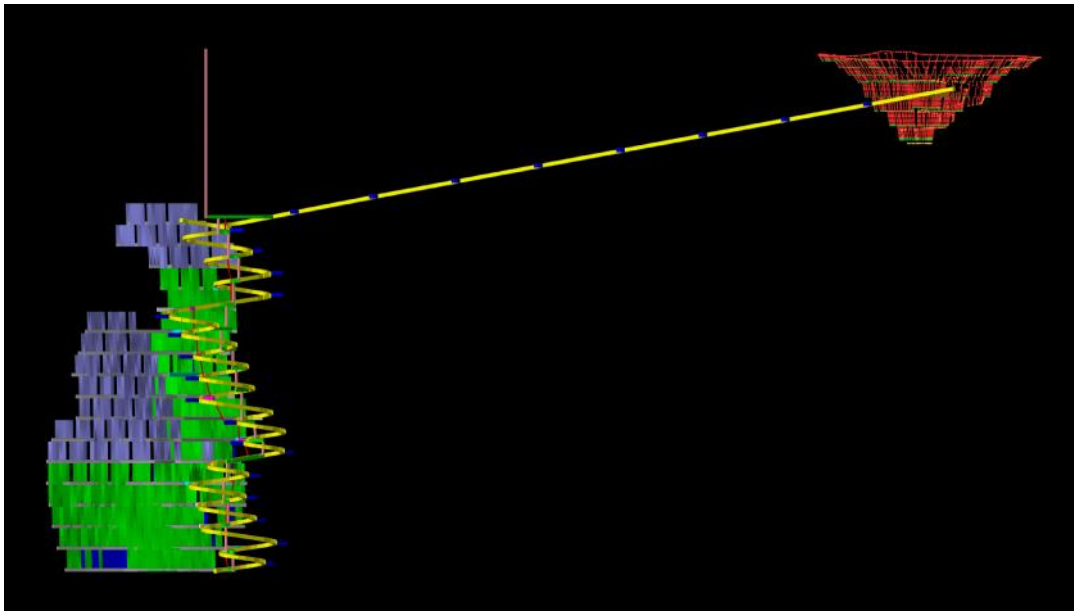
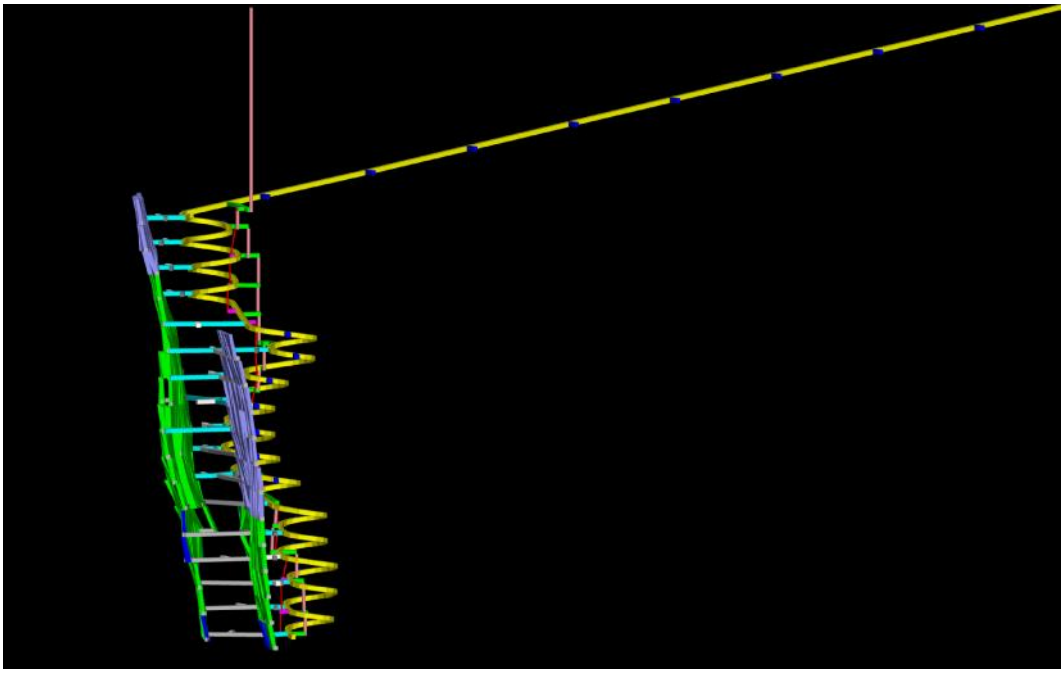


Figure 5.13 – Rockface Mine Design, view along strike



5.4 Reward Underground

The Reward decline will commence from within the Reward stage 1 pit. This allows the decline will start during the first year of operations.

5.4.1 Reward Underground Resources

The Resources are shown in the Table 5.9, below:

Table 5.9 – Reward Underground Resources

Category	Mt	% Cu	kt Cu	g/t Au	kOz Au	g/t Ag	kOz Ag
Indicated	3.69	2.22	81.8	0.51	60.5	42.8	5,078
Inferred	3.5	1.48	51.7	0.18	20.3	26.8	3,016
Total	**7.19**	**1.86**	**133.4**	**0.35**	**80.8**	**35.0**	**8,093**

The value of contained metal within the Resource is over $1.5 billion.

5.4.2 Optimisation inputs

The commodity prices, costs and dilution assumptions used in the optimisation are given in Chapter 4 (4.1 Financial Assumptions, and 4.3 Costs and Assumptions for Underground Mine Stope Optimisation).

The stope design parameters are shown in Table 5.10.

Table 5.10 – Reward Stope Design Parameters

Area	Parameter	Hanging Wall	Stope Backs
Reward Main Upper	Strike Length	30-35 m	30-35 m
Reward Main Lower	Strike Length	25m	25m
Reward South	Strike Length	25m	30-35m

Mining Methods selected for Reward include bottom up long-hole stoping with CRF (strength ranging 3-8% as per Geotechnical guidelines) and top down long-hole stoping with pillars.

An 80% recovery factor was used for open stopes with pillars.

A 50% recovery was assumed for the crown stopes.

5.4.3 Optimisation Results

MSO runs were performed on 1.25% and 1.5% Cu cut-off grades. Stope strike extents were trimmed to a 1.5% Cu CoG and then incremental material was added at 1.25% CoG.

The stoping sequences are based on primary & secondary stopes with the primaries being filled with cemented rock fill (CRF). ENTECH mining consultants completed a geotechnical assessment of the underground Resources in June 2020 and rock mass conditions were assessed for Reward as being "very good".

A 30m level spacing was adopted. Where geotechnical conditions permit, the secondaries will be simple open stopes.

The underground layout is seen in Figure 5.14 – Reward Underground Stopes and Development Design.

The Reserves for Reward underground mine are shown in Table 5.11, below.

Table 5.11 – Reward Underground Reserves

Category	Mt	% Cu	kt Cu	g/t Au	kOz Au	g/t Ag	kOz Ag
Proven	0		0		0		0
Probable	2.9	2.27	64.8	0.54	49.5	42.6	3,907
Total	**2.9**	**2.27**	**64.8**	**0.54**	**49.5**	**42.6**	**3,907**
Inferred	*0.7*	*1.09*	*7.2*	*0.27*	*5.8*	*21.5*	*458*

Note: The inferred material in the underground design has been excluded from the Reserves.

Further definition drilling will be carried out and the results of that drilling can inform the stope design. Thus, 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.

5.4.3.1 Financial test of mine design

The Reward underground Reserves are based on the Indicated tonnage only. The mine design (and the LoM forecast) include the Inferred material (0.7 Mt). The value of the metal contained within the Probable Reserve is approximately $820M.

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. The Reward mine design tonnage (2.9 Mt Probable and 0.7 Mt Inferred) still produced a positive contribution of over $130M, ignoring any value from Inferred material.

Figure 5.14 – Reward Underground Stopes and Development Design

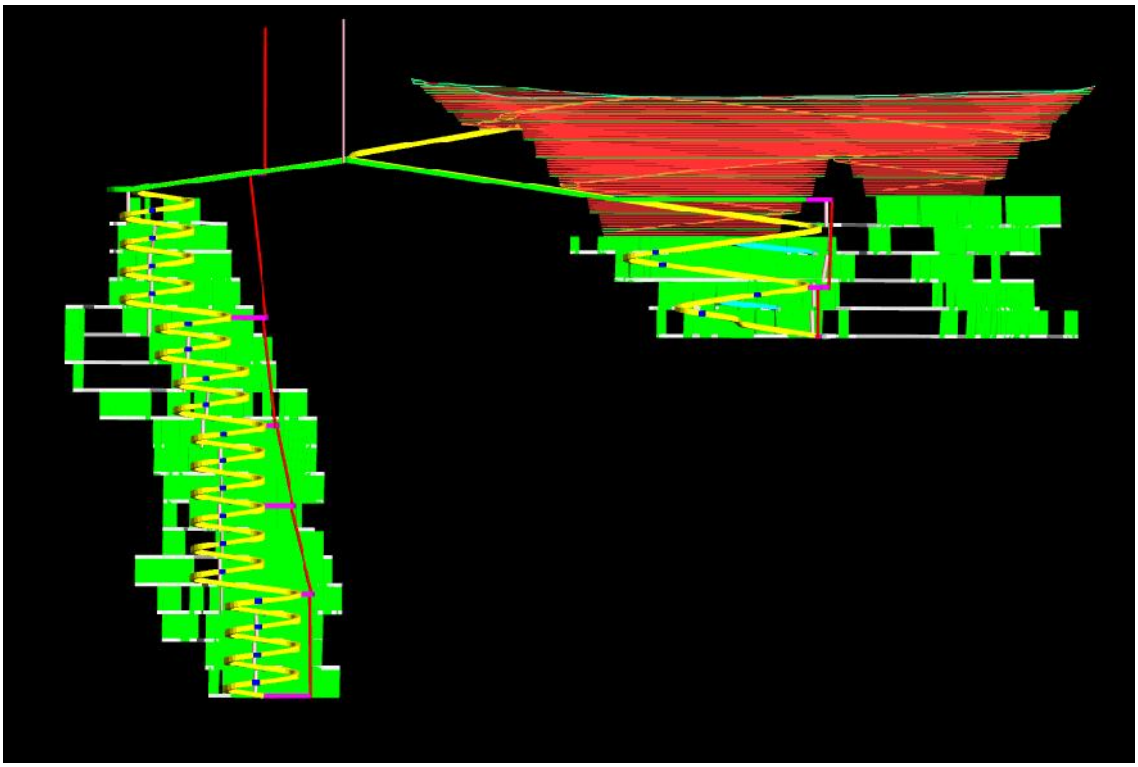
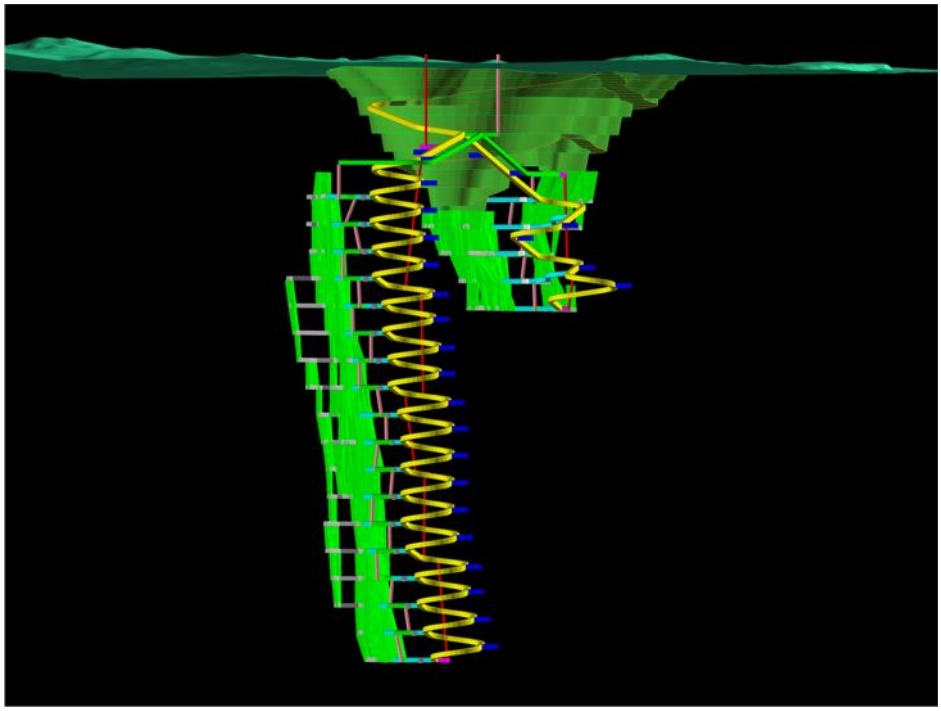


Figure 5.15 – Reward UG Looking Along Strike



5.5 Bellbird Underground

The initial plan for the accessing Bellbird underground was that the decline would start from the Bellbird pit once it has been mined. However, to gain earlier access it has been decided to gain access to Bellbird underground via the Rockface Decline (which starts from the Bellbird stage 1 pit).

This will allow underground mining to commence, below the crown pillar, prior to open pit completion. The distance from the Rockface decline back to the Bellbird underground stopes is similar to what it would be declining from the Bellbird stage 2 pit. There is negligible difference in costs for this change in approach.

Current strategy involves the establishment of "scavenging ore drives" into the stopes planned in the ore in the pit walls towards the end of underground operations at Bellbird. The crown pillar is not planned to be recovered at this stage.

Further work on mining sequencing and options for pillar extraction will be investigated in the next phase of study.

5.5.1 Bellbird Underground Resources

The mineralised envelopes are shown in Figure 5.7 – Bellbird Mineralised Zones.

Table 5.12 – Bellbird Underground Resources

Category	Mt	% Cu	kt Cu	g/t Au	kOz Au	g/t Ag	kOz Ag
Indicated	0.2	1.85	3.7	0.12	0.8	11.9	77
Inferred	1.7	2.02	34.3	0.12	6.6	12.7	694
Total	**1.9**	**2.00**	**38.0**	**0.12**	**7.3**	**12.6**	**771**

5.5.2 Optimisation Inputs

The commodity prices, costs and dilution assumptions used in the optimisation are given in Chapter 4 (4.1 Financial Assumptions, and 4.3 Costs and Assumptions for Underground Mine Stope Optimisation).

Due to the narrower nature of the bellbird deposit, a minimum mining width of 2.0m has been applied in conjunction with a narrower level spacing (20 m). This is consistent with smaller, narrow stopes that rely on better drilling accuracy (over shorter distances) to reduce dilution.

Mining method is top down, long-hole open stoping with pillars. Pillars have been allowed for in the mine design (see Figure 5.16 – Bellbird Underground Mine Design).

5.5.3 Optimisation Results

MSO runs were performed on 1.0% and 1.25% Cu cut-off grades.

Stope strike extents were trimmed to a 1.25% Cu CoG and then incremental material was added at 1.0% CoG.

95% recovery factor for open stopes applied.

Table 5.13 – Bellbird UG Reserves

Category	Mt	% Cu	kt Cu	g/t Au	kOz Au	g/t Ag	kOz Ag
Proven	0		0		0		0
Probable	0.4	3.55	15.0	0.18	2.4	22.4	304
Total	**0.4**	**3.55**	**15.0**	**0.18**	**2.4**	**22.4**	**304**
Inferred	*0.4*	*1.03*	*4.4*	*0.04*	*0.5*	*6.73*	*29*

Note: The inferred material in the underground design has been excluded from the Reserves.

Further definition drilling will be carried out and the results of that drilling can inform the stope design. Thus, 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.

5.5.3.1 Financial test of mine design

The Bellbird underground Reserves are based on the Indicated tonnage only. The mine design (and the LoM forecast) include the Inferred material (0.4 Mt). The value of the metal contained within the Probable Reserve is ~$156M.

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. The Bellbird underground mine design tonnage (0.4 Mt Probable and 0.4 Mt Inferred) still produced a positive contribution of over $30M, ignoring any value from Inferred material.

Figure 5.16 – Bellbird Underground Mine Design

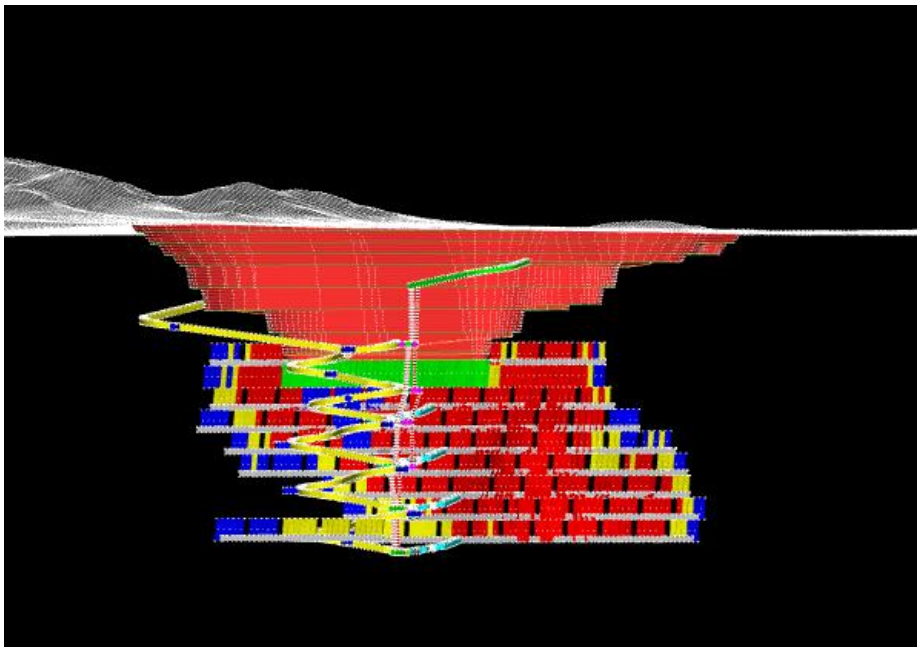
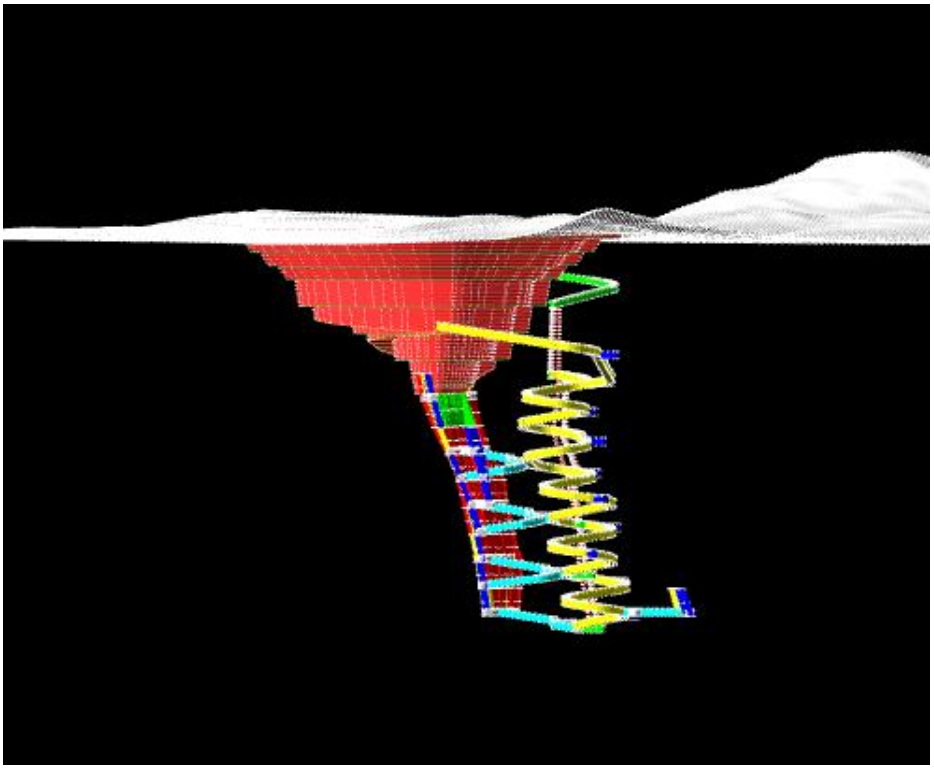


Figure 5.17 – Bellbird UG Looking Along Strike



Note: The Bellbird UG designs above do not have the updated decline design (from the Rockface decline).

6 SUMMARY OF JERVOIS RESOURCES AND RESERVES (25 NOVEMBER 2020)

The stated Resources are inclusive of Reserves.

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

Table 6.1 – Jervois Project Resources by Mine/Source

	Mt	%Cu	kt Cu	Au (g/t)	Au (kOz)	Ag (g/t)	Ag (kOz)
Reward OP	4.1	1.69	69.2	0.38	48.7	37.0	4,713
Bellbird OP	2.7	2.11	57.6	0.17	14.3	13.6	1,154
Sub-total OP	*6.8*	*1.86*	*126.8*	*0.30*	*63.1*	*27.6*	*5,867*
Rockface UG	3.3	3.16	104.1	0.24	24.6	19.4	1,981
Reward UG	7.2	1.86	133.7	0.36	80.8	36.2	8,093
Bellbird UG	1.8	2.58	45.7	0.12	6.6	18.3	1,008
Sub-total UG	*12.3*	*2.31*	*283.6*	*0.29*	*111.9*	*29.1*	*11,082*
Total	**19.1**	**2.15**	**410.4**	**0.29**	**174.9**	**28.6**	**16,949**

Resources include Indicated and Inferred.

The value of the metal contained within the estimated Mineral Resources is ~$4.7 billion.

Table 6.2 – Jervois Probable Reserves by Mine/Source

	Mt	%Cu	kt Cu	Au (g/t)	Au (kOz)	Ag (g/t)	Ag (kOz)
Reward OP	2.6	1.90	50.0	0.48	40.9	43.5	3,670
Bellbird OP	1.6	1.7	27.8	0.10	4.7	9.6	485
Sub-total OP	4.3	1.83	77.7	0.34	45.5	31.4	4,156
Rockface UG	1.8	3.74	68.5	0.28	15.9	21.5	1,227
Reward UG	2.9	2.27	64.8	0.56	49.5	44.0	3,907
Bellbird UG	0.4	3.55	15.0	0.2	2.4	23.1	304
Sub-total UG	*5.1*	*2.90*	*148.3*	*0.43*	*67.9*	*34.2*	*5438*
Total	**9.4**	**2.41**	**226.0**	**0.39**	**113.4**	**32.9**	**9,593**

Note that all Reserves are Probable and have been converted from Indicated Resources only. Any inferred material contained within the mine designs has had all metal content removed from the Ore Reserve Statement.

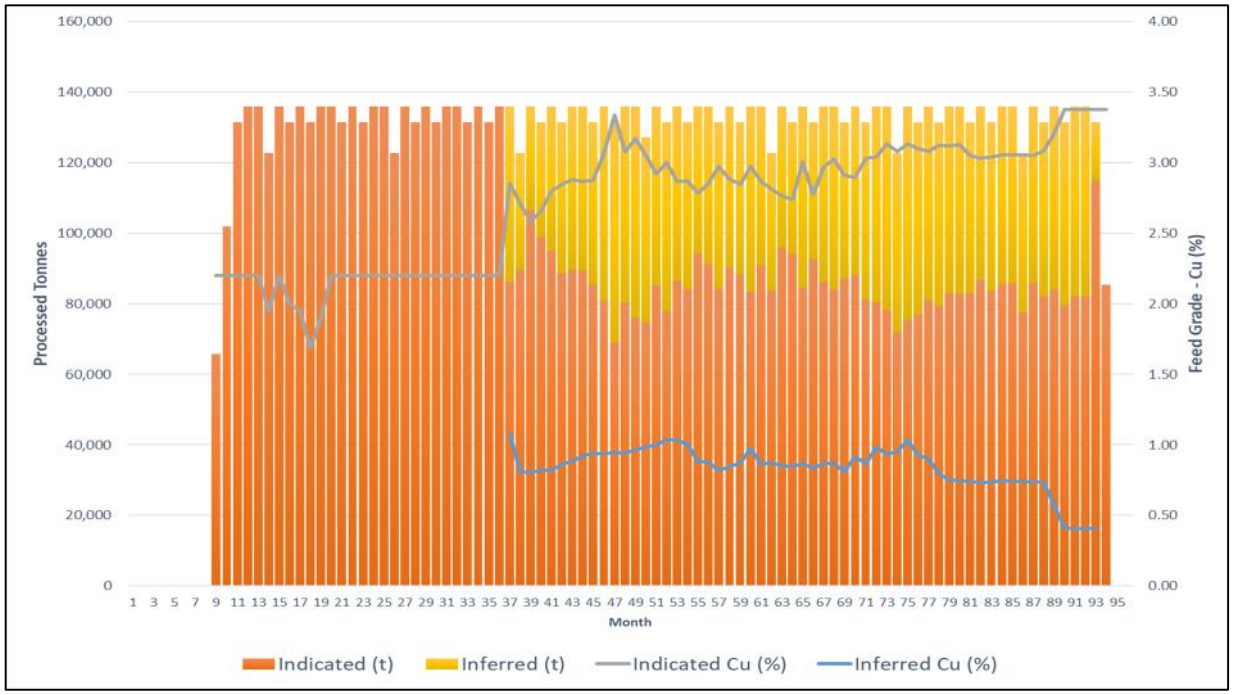
The value of the metal contained within the Reserve is ~$2.6 billion.

Any future infill or definition drilling programme is likely to increase the value further, even if no new deposits are discovered.

6.1 Inferred Material

It is clear that Inferred material does not drive the schedule, and the bulk of it is only processed in the second half of Mine Life. Some minor quantities of inferred material are mined in the early part of the schedule but the current schedule stockpiles this material until later in the mine-life. The grades from the Inferred material are substantially lower than the Indicated material (Probable Reserve) grades.

Figure 6.1 – Resource Category of LoM Mill Feed



Note:

It is important that high grade areas scheduled for underground production in the first few of years should be firmed up to provide confidence. Early decline development can be used for definition drilling, reducing the length of drill holes and improving the angles of intersection with the ore.

That said, with a better overall grasp of the potential in the different deposits, the scheduling options provide the opportunity to add more value. This may reduce the amount of inferred in the earlier years. Recognising that options may change, as new information is gained, is important.

It is easier to make Schedule changes early in the study rather than later – but early decisions could be based on incomplete information.

The most logical way to reduce risks in an underground project is to gather as much information as early as possible. Many operators have recognised the value of putting in "exploration declines", which also serve the ultimate purpose of mine access. These declines can serve as drill platforms for definition drilling as well as providing opportunities to better understand the rock properties and structures.

All information obtained from such declines can facilitate informed decision making at early stages of the project.

7 REVENUE FACTORS

7.1 Concentrate Transport

Once the Concentrate has been produced at the process plant, the costs of transporting it to a smelter are not insignificant. Shipping concentrate in half height shipping containers with lids is standard practice. This makes it relatively easy to transfer from road to rail and reduces losses of concentrate associated with re-handling.

A logistics consultant (Balance Advisory) has examined options for transporting to several ports, including Darwin, Adelaide and Townsville. There could be various combinations of road and rail, but the two most likely routes will cost between $150 and $175/t of concentrate based on 120ktpa of concentrate.

7.2 Treatment Costs and Refining Charges (TCRCs)

These are the cost per ton to treat the Concentrate and a charge per unit of metal that Is refined. For example, a treatment charge of US$75/tonne of concentrate and a refining charge of US$0.075/lb of copper would be expressed as 75 & 7.5. This is a fairly typical rate in a moderate (balanced supply) market. When smelters are needing feedstock (times of shortage), rates can reduce to around 35 & 3.5. If the market is in surplus, it can rise to over 110 & 11.

A mid-range cost has been modelled (76 & 7.6). The credits for other metals depend on the smelters & refineries. Many only pay a percentage of the value. Some pay nothing.

Penalties are payable on impurities or penalty elements. Typical examples are Arsenic and Fluorine. Jervois has Bismuth which is also a penalty element. This has been factored into the model.

All of the factors above need to be considered when negotiating supply agreements with smelters.

8 ECONOMICS

The Life of Mine forecast and financial model has projected net cashflows as shown in Figure 8.1.

Figure 8.1 – Project Net Cashflows

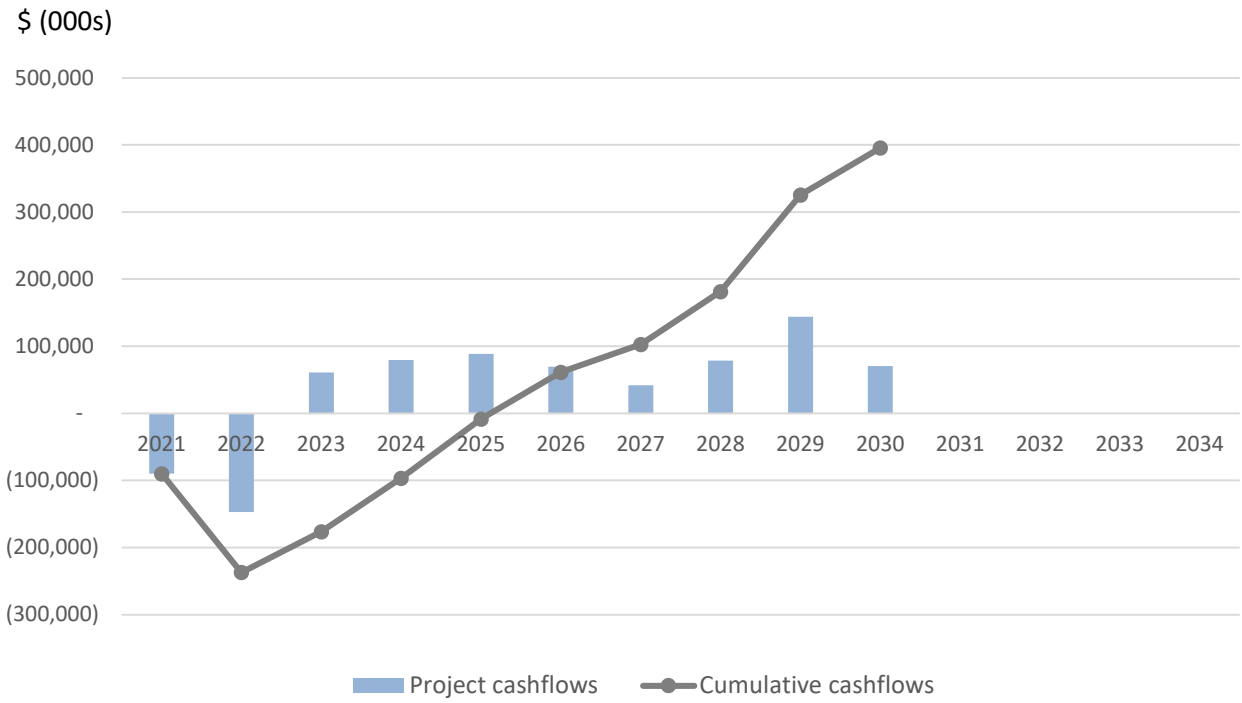
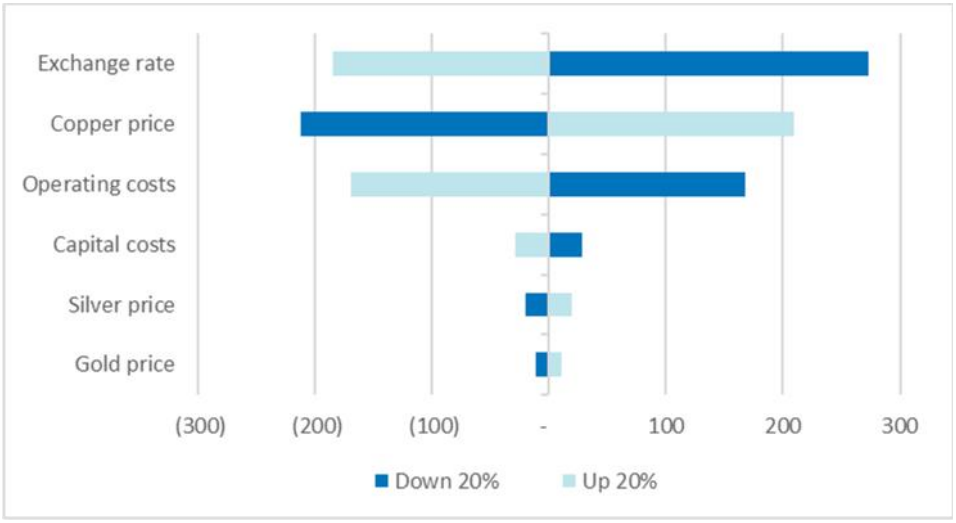


Figure 8.2 – Sensitivity Chart (+-20%) Relative to NPV_8



As Copper is the biggest single revenue for the project, it is logical to expect that the project value would be sensitive to Copper Price.

Some sensitivities are shown in Figure 8.2 – Sensitivity Chart (+-20%) Relative to NPV_8.

Table 8.1 – Project NPV_8 Sensitivity to Cu Price

In AU$ M	NPV: 8%
Base	$ 186
Cu price -20%	-$ 26
Cu price -10%	$ 81
Cu price +10%	$ 291
CU price +20%	$ 396

Figure 8.2 – Sensitivity Chart (+-20%) Relative to NPV_8, shows the impact of 20% increase/decrease in several parameters (Commodity Prices and exchange rate, Opex and Capex). The project appears to be quite robust and not particularly sensitive to capital changes.

The three major sensitivities are:

- Exchange Rate
- Copper Price
- Opex.

Exchange rate has the biggest potential to impact on project value and beyond the control of the project team.

Copper Price is discussed above – and closely aligned with that is recovery factor.

Operating costs are important in any project. Approaching contactors for indicative pricing at an early stage has been a good strategy and has probably improved the accuracy of the operating cost estimates.

9 CONCLUSIONS AND RECOMMENDATIONS

Since 2015, the project has been systematically drilled through targeted exploration programmes. The improved level of understanding of the nature of mineralisation has led to measurable improvements in definition of the various deposits.

It is not necessary to increase drill density to define Measured Resources in the short term. It is recommended that definition drilling for early production areas be undertaken when schedules are finalised.

The "conservative" optimisations are appropriate at this stage of study, allowing opportunities to improve value once more definitive data is obtained and reducing the chances of significant negative adjustments during the following phases of study.

Approximately half of the available Resources have been converted to Reserves. The only way to increase Reserves is to upgrade the Resources. That will require further drilling. There are sufficient Reserves to justify commencement of operations, although there is still significant potential for further increases in the Resource base and expanding the Reserves.

There are several opportunities to potentially add value including:

- trade-offs between different sequences of mining,
- stoping methods and support strategies,
- fill systems, including backfill plant options, and
- technologies such as;
  - ore sorting, or
  - automation.

Many of these can be addressed during the next phase of study.

Some of this work may require additional information (including more geotechnical data).

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APPENDIX A. JORC TABLE 1

SECTION 4 – ESTIMATION AND REPORTING OF MINERAL 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 June 2020 Resource Estimate and was compiled by Mining Associates (Ian Taylor). • Resources are reported inclusive of 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, (accompanied by the Resource CP, Mr Ian Taylor of Mining Associates) from 1st to 3rd November 2020. • All deposits (outcrops) were inspected along with the 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 Pre-Feasibility Study level, and only Probable Reserves have been declared. • A Life of Mine plan has been prepared which has been financially modelled. The assumptions in the plan appear reasonable and most of the costs have been sourced from suppliers, contractors or agents. • The mining sequence has been established and follows reasonable assumptions regarding mining rates and durations. The sequence may change with future Resource upgrades and further optimisation. • 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, leasing, accommodation, power supply and logistics have all been considered and costs have been allowed for in the 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 200m RL and 1.0% Cu below.

Criteria	JORC Code Explanation	CP Comments
		• Using the price assumptions for Reserves and 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, the material below 200m RL above cut-off would cover typical underground mining and processing costs. Recovered metal would contribute towards overheads. The cut-offs are appropriate at this level of study and further refinement in subsequent studies would probably improve optimisation outcomes.
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 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.*	• The assumptions used in the PFS 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 PFS chapters relating to the individual deposits. • Any geotechnical recommendations regarding pit wall slopes or stope dimensions have been applied and are covered in the relevant chapters. • Minimum mining widths underground are 3m and maximum stope width is 30m. • The optimisations include 0.5m dilution on both hangingwall and footwall (on both open pit and underground). • A further 1% dilution (of fill) is applied when mining against a filled stope boundary. • Mining recoveries applied in open pits are 95%. The mining recoveries applied in underground mines vary depending on mining methods and anticipated conditions. They vary from 95% down to 50%. • Any Inferred material in open pit designs is included in the Reserve (with zero value ascribed). Checks were made that the pits were still economically viable. 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

Criteria	JORC Code Explanation	CP Comments
		of mining the inferred material (at zero value). However, the inferred tonnages and grades remain in the LoM forecast • Inferred Resources in the LoM forecast do not drive the mining plan and only appears to be treated at the beginning of the 4th year of operation at substantially lower grades than the Indicated material.
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 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?*	• The process planned is a standard approach widely used in industry. • Test-work has been completed and predictive algorithms developed and verified. This is appropriate for a PFS level of confidence. • The presence of Bismuth (deleterious element) has been factored into the financial model as a penalty element. • Composite samples (to represent potential head-feed blends over the first 3 years of operation) have been tested for potential recovery levels. This should probably be revisited in future stages of study as the schedules and mix may change during optimisation processes.
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 has been completed for the Jervois project and all relevant studies carried out and plans developed.
Infrastructure	) *The existence of appropriate infrastructure: availability of land for plant development, power,*	• Infrastructure is planned and BOO systems for both the accommodation village and power station have been factored in.

Criteria	JORC Code Explanation	CP Comments
	water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.	• Changes that may be required due to Covid/isolation requirements have not been factored in.
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 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.*	Mining Contractors have provided indicative rates for the designs, methods and mining rates proposed. The process plant has been designed and costed by appropriate consultants. This will be detailed further in the next study phase. Commodity prices have been assumed in line with recent reputable studies (e.g. Rio Tinto's Oyu Tolgoi) and consensus pricing. Copper Price US$6788/t, Gold US$1474/oz, Silver US$17.85/oz and 0.71$US/AU$. Transport charges have been based on a study of alternative routes by a logistics consultant. The two most likely routes have similar projected costs which have been the basis of the costs in the model. Presence of typical penalty elements has been assessed and where levels are likely to incur penalties, these have been accounted for in the financial model.
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.*	• See section on costs.
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.*	Analysts reports and price forecasts from Finance houses 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 term.

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	) *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.*	
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.*) *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	) 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 optimisations have focussed on the value generated by Cu.
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 also progressing on a sound footing.
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.) No marketing agreements are in place. Several expressions of interest have been received. There does not appear any issues with finding potential customers.) Approvals are in place ahead of progressing to Feasibility.
Classification	) *The basis for the classification of the Ore Reserves into varying confidence categories.*	• Due to the nature of the project and the drilling programmes followed, all Reserves

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	) *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).*	are classified as Probable Reserves as there are no Measured Resources. • This is appropriate for the PFS stage of the project. • It is unlikely that Measured Resources will be available for the underground mines until stope definition drilling is carried out. This may be only one to three months ahead of stoping operations. • Some early open pit Resources may achieve Measured status prior to commencement of mining. This may be advisable to ensure the confidence in the material grades in the early months of production.
Audits or reviews	) *The results of any audits or reviews of Ore Reserve estimates.*	) None at this time.
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.*	) The PFS study estimates accuracy to be within 25-30%. In some areas more work has been done and the accuracy may be better than these figures (may be close to FS level).) However, there are still several opportunities to re-look at some of the scheduling/sequencing and mine design options. Several trade off studies should form part of the next phase of study which may afford opportunities to improve the robustness and value of the project.

Criteria	JORC Code Explanation	CP Comments
	) *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	

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