

KGL Resources

Simple Copper Story

We initiate research coverage on KGL Resources with a Speculative Buy recommendation and \$0.80/sh target price. KGL is developing the high-grade copper project Jervois in the Northern Territory. It has previously flown under the radar with investors, but we see a simple copper story emerging over 2022. Risks include funding, costs and project execution.

High-Grade, Fully Permitted, Simple Metallurgy

- Jervois is a fully permitted brownfield project 275km NE of Alice Springs.
- It hosts a 23mt resource across three deposits at a high 2.0% Cu grade, including the stellar Rockface underground at 3.3% Cu.
- Metallurgy is simple (95% sulphides), producing a 24% copper concentrate at a high 89% recovery along with gold and silver credits.
- The project is unique and under-explored, and we see considerable upside for both grade and mine life. All primary deposits are open at depth, and DHEM provides good indicators of further extensions.
- Historically, KGL appears to have escaped investor attention. We expect the stock to re-rate during 2022 as exploration news trickles in and the new executive team progresses toward FID.

High Margin, Generates ~\$100m pa

- We estimate an NSR ore value at A\$160/t at an all-in cost of A\$100/t, implying a high margin of 38% compared to peers at ~25%.
- We model a conservative development scenario that assumes construction starts in 2023 at an initial cost of A\$330m.
- Once ramped up to its 1.6mtpa capacity by 2026, we expect copper in concentrate to average ~30ktpa over an initial ten-year life.
- Project economics are robust, generating \$100m in cash annually, with an IRR of 20% and a post-tax NPV of A\$240m (\$0.61/sh).
- We see several opportunities to enhance economics, including selling concentrate to Mt Isa, bringing forward underground early, adding mine life, and building a Pb/Zn circuit.

Initiate with a Speculative Buy; \$0.80/sh Target

- Our valuation is based on a sum of the parts DCF with 8% WACC, US\$3/lb copper price and AUD of 0.70.
- KGL has cash of \$18m, no debt and 392m shares on issue.
- Key risks include funding, delays, low free float (~55%), delays, project execution, costs and valuation.
- Upcoming catalysts include resource updates at Rockface and Bellbird, the DFS (Mid '22), offtake agreement and ongoing exploration.

Year-end December (\$)	FY20A	FY21A	FY22E	FY23E	FY24E
Revenue (\$m)	-	-	-	-	128.0
EBITDA (\$m)	0.6	(0.8)	(2.0)	(2.0)	36.2
EBIT (\$m)	(0.0)	(1.4)	(2.0)	(2.0)	(72.3)
Reported NPAT (\$m)	(1.2)	(1.4)	(7.5)	(19.4)	(72.1)
Reported EPS (c)	(0.3)	(0.4)	(1.9)	(4.9)	(18.3)
Normalised NPAT (\$m)	(1.2)	(1.4)	(7.5)	(19.4)	(72.1)
Normalised EPS (c)	(0.3)	(0.4)	(1.9)	(4.9)	(18.3)
Dividend (c)	-	-	-	-	-
Net Yield (%)	-	-	-	-	-
EV/EBITDA (X)	-	-	-	-	13.8
Normalised ROE (%)	-	-	-	-	-

Source: Ords, Iress, KGL Resources Limited

INITIATION

Last Price

A\$0.62

Target Price

A\$0.80

Recommendation

Speculative Buy

Risk

Higher

Metals and Mining

ASX Code	KGL
52 Week Range (\$)	0.26 - 0.85
Market Cap (\$m)	241.3
Shares Outstanding (m)	392.3
Av Daily Turnover (\$m)	0.0
3 Month Total Return (%)	21.8
12 Month Total Return (%)	133.5
Benchmark 12 Month Return (%)	11.2
NTA FY22E (¢ per share)	47.3
Net Debt FY22E (\$m)	62.3

Relative Price Performance



Source: FactSet

Consensus Earnings

	FY22E	FY23E
NPAT (C) (\$m)	-	-
NPAT (OM) (\$m)	(7.5)	(19.4)
EPS (C) (c)	-	-
EPS (OM) (c)	(1.9)	(4.9)

Source: OML, Iress, KGL Resources

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Production & Valuation Summary						
Ords Base Case			Scenario Analysis			
Valuation	A\$m	A\$/sh	A\$/sh			
Sum of the Parts NPV						
Jervois	238	0.61	Spot	Concs		
Corporate O/H	(25)	(0.06)	2.22	1.11		
Resources	33	0.08	(0.06)	(0.06)		
Exploration	50	0.13	0.08	0.08		
Cash (Last)	18	0.05	0.13	0.13		
NPV Total	313	0.80	2.41	1.30		
Target Price	0.80					
TSR (%)	34					
Recommendation	Spec' Buy					
WACC (Real) (%)	%	8.0				
Shares on issue	mn	392				
Diluted Shares on Issue	mn	393				
Market Cap	A\$m	233				
Enterprise Value	A\$m	215				
EV/Reserve (CuEq)	A\$/t	518				
EV/Resource (CuEq)	A\$/t	253				
Valuation Sensitivity A\$/sh						
Copper Price US\$/lb						
AUD	2.75	3.0	3.5	4.0		
0.70	0.30	0.61	1.23	1.85		
0.725	0.18	0.48	1.07	1.67		
0.75	0.06	0.35	0.93	1.50		
NPV						
Jervois	65%		Resources	9%		
			Exploration	14%		
Revenue Split (LOM)						
Copper	84%		Silver	9%		
			Gold	7%		
Mineral Inventory						
	Ore	Grade	Metal			
Total	Mt	Copper % CuEq %	Kt CuEq			
Ords Model	16.0	2.4 3.0	486			
Reserve	9.4	2.4 3.1	291			
Resource	23.3	2.0 2.6	595			
Underground						
Reserve	14.2	2.3 2.8	395			
Resource	5.1	2.9 3.6	185			
Opencut						
Reserve	4.3	1.8 2.5	106			
Resource	7.2	1.6 2.1	148			
Payable Metal Production (Copper Equivalent)						
Payable Metal Produced (kt)						
Study vs Base Case						
Date		2014	2015	2020	Base Case	
Study Type		PFS	PFS	PFS		
Mine Life	Years	7.0	8.3	7.5	10.0	
Initial Capex	A\$m	189	189	200	329	
Copper Output	Ktpa	21	21	31	31	
C1 Cost	US\$/lb	1.51	1.97	1.86	1.52	
All In Unit Cost	US\$/lb			2.25	2.04	
NPV	A\$m		248	177	238	
IRR	%		35	27	20	
Annual Cash Flow	A\$m			116	100	
Project Funding						
		20A	21A	22F	23F	24F
Operating CF	A\$m	(1.0)	(2.4)	(9.9)	(25.8)	12.8
Capex	A\$m	(4)	(13)	(164)	(164)	(16)
Equity Raised	A\$m	4	24	100		
Debt Drawn	A\$m			100	200	
Cash	A\$m	12	38	47	44	87
Debt	A\$m			100	300	300
Net Cash/(Debt)	A\$m	12	38	(53)	(256)	(213)
Commodity & FX Forecast						
		FY24	FY25	FY26	FY27	LT
AUD	x	0.70	0.70	0.70	0.70	0.70
Copper	A\$/t	9,448	9,448	9,448	9,448	9,448
Silver	A\$/oz	34.3	34	34	34	34
Gold	A\$/oz	2,286	2,286	2,286	2,286	2,286
Jervois						
		FY24	FY25	FY26	FY27	LOM
Underground Ore	Mt	0.42	0.76	0.85	0.85	8.48
Opencut Ore	Mt	0.38	0.68	0.75	0.75	7.52
Ore Milled	Mt	0.8	1.4	1.6	1.6	16.0
Copper Grade	%	1.9	2.2	2.4	2.6	2.4
Silver Grade	g/t	24.0	27	30	33	29.9
Gold Grade	g/t	0.31	0.35	0.39	0.43	0.39
Copper Recovery	%	85.0	85.0	85.0	85.0	85.0
Copper in Con	kt	13.1	26.4	32.6	35.9	324.8
Silver in Con	koz	395	800	988	1,086	9,827
Gold in Con	koz	4.3	8.6	10.6	11.7	106
Copper Con Shipped	kt dry	48	98	121	133	1,203
Payable Copper Sold	kt	12	25	31	34	310
Gross Payable Metal	CuEq kt	15	30	37	41	367
NSR	A\$/t	128	145	161	177	160
All in Cost	A\$/t	103	98	97	97	98
Margin Per tonne	A\$/t	25	47	63	79	62
Ebitda	A\$m	37	91	128	153	1,259
Capex	A\$m	16	24	26	26	598
Free Cash Flow	A\$m	20	67	101	127	661
Project Cash Flows						
Annual Cash Flow (A\$m)						
Cumulative Cash Flow (A\$m)						

Summary

We initiate research coverage on 'KGL Resources Limited' ('KGL') with a Speculative Buy recommendation and a \$0.80/sh target price. Our valuation is based on a sum of the parts DCF assuming an 8% WACC (Real), US\$3/lb copper price and AUD of 0.70.

Jervois is a simple copper story. It's a fully permitted brownfield development project with significant exploration upside. It boasts high copper grades of 2.0% and simple metallurgy (mostly sulphides), producing a copper concentrate with minor credits from silver and gold.

We model a 1.6mtpa capacity mill producing 30ktpa of copper in concentrate over a 10-year life. We estimate an initial capex of A\$330m, NSR ore value of A\$160/t at an all-in cash cost of A\$100/t. With margins of 38%, project economics are robust, with a 20% IRR and generating A\$100m in annual cash flow.

We see several opportunities to enhance valuation including, selling concentrate to Mt Isa, bringing forward high grade underground, adding mine life and building a lead/zinc circuit.

Several catalysts lay ahead. In 1H22, we see an updated resource and reserve, followed by the DFS by mid-year. In 2H22, we expect a funding package to be arranged, followed by early FEED works ahead of a final investment decision ('FID'). We anticipate construction to start in 2023, then first production in 2024 and full capacity by 2026.

Risks over the next 12 months include funding, low free-float, cost inflation (capex + opex), valuation and project execution. Our valuation is most sensitive to delays, AUD, copper price, metal grades and metallurgical recoveries.

Initiate coverage

Speculative Buy

A\$0.80/sh target

Simple copper story

~30ktpa copper in concentrate

High grade

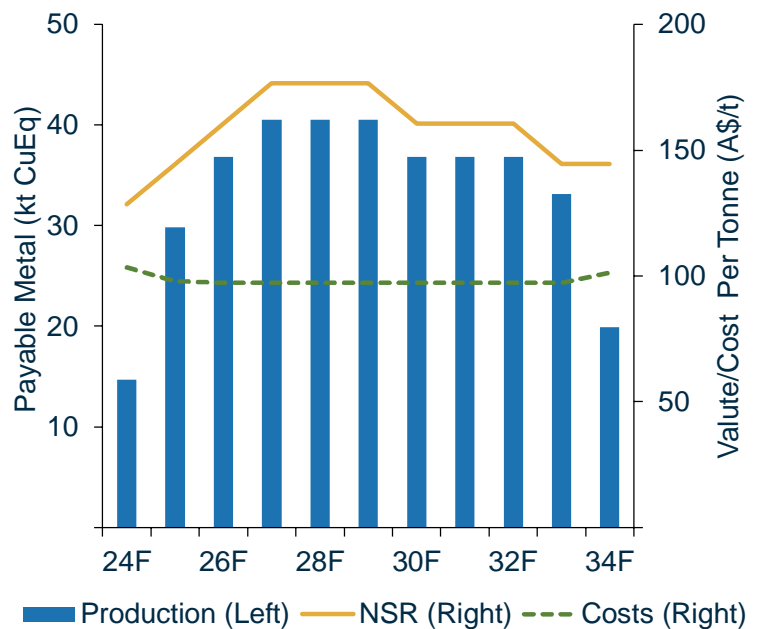
Several catalysts in 2022

Figure 1: Project Location



Source: Company with Ords edits

Figure 2: Jervois Production Profile, Revenue and Costs



Source: Company with Ords edits

Company Overview

Formerly known as 'Kentor Gold', KGL is an ASX listed mining company headquartered in Brisbane. It owns 100% of the 'Jervois' copper project in the Northern Territory ('NT') 275km northeast of Alice Springs.

Since acquiring the project in 2011, KGL has developed it to its near shovel-ready status. The September 2020 Mineral Resource statement defined:

- **Resource 23.3mt** at 2.0% Cu, 31g/t Ag, 0.24g/t Au (2.6% CuEq)
- **Reserve 9.4mt** grading 2.4% Cu, 33g/t Ag, 0.39g/t Au (3.1% CuEq)
- **Three deposits:** have been defined across the 6km J-shaped outcrop:
 - **Rockface** is an underground development with 3.3mt resource at a high grade of 3.2% Cu and reserves of 1.8mt at 3.7% Cu. Mineralisation is open at depth, and recent resource drilling intercepted 1 meter at 61.4% Cu.
 - **Bellbird and Reward** deposits represent the bulk (~80%) of the projects tonnage at a grade of 1.8-2.2%. Both are initially developed via opencut at a strip ratio of 7:1 (waste : ore). Mineralisation extends underground and plans to be developed later in the mine life.

ASX listed

Developing Jervois project

275km northeast of Alice Springs

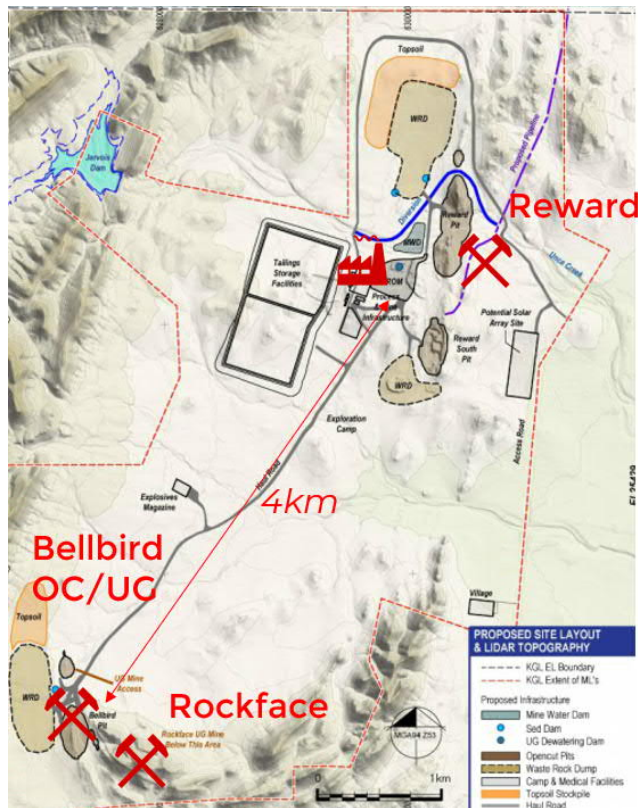
High grade copper resources

3 Deposits

Resource 23mt @ 2.0% Cu

Reserve 9mt @ 2.4% Cu

Figure 3: Project Overview and Primary Deposits



Source: Company with Ords edits

Figure 4: Mineral Inventory

	Ore Mt	Grade Cu %	Grade CuEq %	Metal Kt CuEq
Underground				
Reserve	5.1	2.9	3.6	185
Resource	14.2	2.3	2.8	398
Opencut				
Reserve	4.3	1.8	2.5	106
Resource	7.2	1.6	2.1	148
Total				
Reserve	9.4	2.4	3.1	291
Resource	23.3	2.0	2.6	595
Ords Base Case	16.0	2.4	3.0	486

Source: Company with Ords edits and estimates

Valuation

Our A\$313m or \$0.80/sh valuation is based on a sum-of-the-parts discounted cash flow consisting of:

- **Jervois: A\$238m (\$0.61/sh):** life of mine ('LOM') post-tax DCF assuming a ten-year life at reserve grades applying some conservative assumptions.
- **Resources A\$30m (\$0.08/sh):** We assume A\$300 per tonne of copper equivalent metal in resource (~600kt) not recovered as part of our mine plan (~500kt).
- **Exploration \$50m (\$0.13/sh):** we apply a notional value for the exploration potential of the project (see *Thesis Section on Exploration Upside on page 13*)
- **Corporate Overhead -A\$25m (\$0.06/sh):** a DCF for the minimal corporate overheads of A\$2m annually.
- **Cash A\$18m (5cps):** last reported cash position (no debt).

Key assumptions include a long-term copper price of US\$3.0/lb, AUDUSD of 0.70 and 8% WACC (real). Project funding, we assume a A\$300m debt facility plus \$100m in new equity.

Figure 5: Valuation Summary

	A\$m	A\$/sh
Jervois	238	0.61
Exploration	50	0.13
Resources	33	0.08
Corporate O/H	(25)	(0.06)
Cash (Last)	18	0.05
Total	313	0.80
Target Price		0.80

Source: Ords Estimates

Figure 6: Valuation Sensitivity A\$/sh

AUD	Copper Price US\$/lb			
	2.75	3.0	3.5	4.0
0.70	0.30	0.61	1.23	1.85
0.725	0.18	0.48	1.07	1.67
0.75	0.06	0.35	0.93	1.50

Source: Ords Estimates

Development Scenario

Our base case differs significantly from KGL's PFS and publicly stated plans. We model a conservative development scenario that assumes it will take longer and cost more to build and ramp-up. Key differences include:

- Higher initial capex of A\$330m (vs \$200m)
- Slower ramp-up to full capacity by 2026 (vs 2024)
- Assume reserve grade for copper 2.4% (vs 2.2%)
- Initial Copper Recovery of 85% (vs 89%)

'What if' Scenario

We ran two 'what if' scenarios to identify a Bull and Bear case valuation:

- **Bull Case \$593m (\$1.51/sh):** no construction or ramp up delays, high recovery rates, fourteen-year mine life, Mt Isa offtake, and produces a Pb/Zn Concentrate in Y12. At spot prices, this scenario increases to ~A\$1,040mn or \$2.6/sh.
- **Bear Case \$145m (\$0.37/sh):** 12 months delay to first cash flow, higher opex/capex, lower recoveries.

A\$0.80/sh target

Sum of the parts DCF

Assume \$3/lb copper and 70¢ AUD

Model funding at 75%/25% Debt/Equity

Assume a more conservative development scenario vs PFS

Model longer build time and high cost

Bull case: \$1.5/sh (spot \$2.6/sh)

Bear case: \$0.37/sh

Figure 7: Jervois Project Scenario Analysis

	NPV		NSR	Cost A\$/t	Margin	Cost US\$/lb
	A\$m	A\$/sh				
Base Case	239	0.61	160	98	62	2.04
Spot	686	1.75	231	98	133	2.20
Consensus	438	1.12	204	98	106	2.37
Bull Case	593	1.51	165	90	75	1.74
Bear Case	145	0.37	135	110	25	2.40

Source: Ords Estimates, Costs per pound reflect 'all in costs'

Capital Structure

As of September 30, 2021, KGL had A\$18m in cash and no debt. It currently has 392.3m shares on issue with a few 0.45m performance rights for a diluted share count of 393m.

Current market capitalisation is ~A\$240m with an enterprise value of A\$220m. The group currently has accrued tax losses of A\$126m. KGL reports in Australian dollars and has a December year-end for financial reporting.

The share register appears tightly held with a free-float of ~55%. Major Shareholders Include:

- **Salim Group: 24.5%:** 96m shares held via a Singapore subsidiary, 'KMP Investments'. Salim is one of Indonesia's largest conglomerates.
- **Dennis Wood 9.1%** –36m shares. Former Executive Chairman (2015-2021)
- **Paradice Investment Management 7.5%**
- **Marshall Plenty Investments 7.2%**

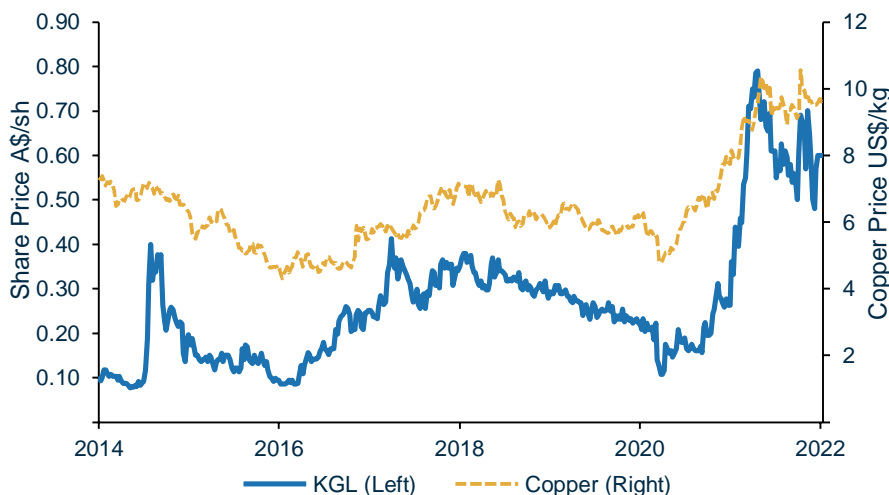
Diluted share count of 393m

\$18m cash, no debt

Tightly held register

Small 55% freefloat

Figure 8: KGL Resources Share Price History vs Copper Price



Source: Iress with Ord edits

Share Price beta to copper is 0.80

**Beta to index:
ASX200 0.75
Metals & Mining 0.65**

Catalysts & Timeline

2022 appears set for a watershed year for the development of Jervois. Key upcoming events in the first half of 2022 include:

- **Updated resource:** following an extensive drilling campaign in 2021, we expect higher resource confidence and a potential grade bump at Bellbird and Rockface. We also hope to see a significant increase in reserves to underpin a ten-year mine life.
- **Definitive Feasibility Study:** The company has previously indicated plans to extend the mine life to over ten years (from seven and a half). The A\$200m capex cost also needs an update.
- **Offtake Agreement:** following the DFS, we expect initial customer offtake. Previously commentary indicated there were several interested parties. Offtake is crucial for debt funding and lowering project logistics costs (see *Opportunity section below*).

In the second half of 2022, we expect a funding package to be arranged, 'Front End Engineering and Design' ('FEED'), and 'Final Investment Decision' ('FID') by year-end. By the start of 2023, we expect construction to commence, with first production by 2024 and full ramp up by 2026.

Figure 9: Jervois Feasibility Study Summary vs Ords Base Case

Year		PFS			Ords
		2014	2015	2020	
Mine Life	Years	7.0	8.3	7.5	10.0
ROM	Mtpa	25.3	30.5	11.3	16.0
Mill Capacity	Mtpa	2.0	2.3	1.6	1.6
Cu Headgrade	%	1.1	1.1	2.2	2.4
Initial Capex	A\$m	189	189	200	329
Copper Output	Ktpa	21	21	31	31
C1 Cost	US\$/lb	1.51	1.97	1.86	1.52
NPV	A\$m		248	177	238
IRR	%		35	27	20
Cash Flow	A\$m pa			116	100

Source: Company with Ords estimates and edits

Figure 10: Jervois PFS Project Schedule December 2020

Summary Project Schedule	Year									
	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									█	█

Source: Company Reports

Several catalysts ahead

DFS mid 2022

Updated resource

2H22

Offtake and financing

Expect FID by y/e 2022

Construction to start 2023

First production 2024

Full ramp up 2026

Opportunities

We see several opportunities to de-risk and optimise the project. Compared to our base case, each scenario could lower unit costs by ~5% and lift our NPV by +15%. The most significant potential comes from:

- **Mt Isa Offtake** – Due to the projects remote location, logistics costs make up a disproportionate amount of opex. Currently, the project expects to haul 130ktpa of wet concentrate some 1800km to the closest port (Darwin/Adelaide) for onward shipping to Asia/EU customer smelters. In our view, the optimal outcome is trucking a copper concentrate 500km northeast to Glencore's smelter in Mt Isa. We roughly estimate a transport savings of 30-50% from our base case of A\$285/t (FOB A\$200 + Shipping of US\$60/t), that could boost our NPV \$60-80m and lower costs by ~6%.
- **Optimise Mine Plan:** bringing forward high-grade underground ore (2.9%) earlier into the mine life could enhance our NPV by \$46m.
- **Longer Mine Life:** each additional year of mine life after ten years at reserve grade increases our NPV by \$40m.
- **Lead/Zinc Circuit:** there is a small resource at 'Reward South', which was defined in 2015 as hosting a few million tonnes at high base metal grades with lead at 4.0%, 1.5% zinc and 0.7% copper. While the option was discarded several years ago, we see future economic potential. We roughly estimate a \$50m mill modification at the end of mine life could boost our NPV by \$38m and trim unit costs by ~3%.

Figure 11: Jervois Project Scenario Analysis

	NPV		Unit Cost
	A\$M	A\$/sh	US\$/lb
1. Mt Isa Offtake	60-80	0.15-0.20	(0.10-0.15)
2. Optimise Mine Plan	46	0.12	
3. Mine life (+1yr)	41	0.10	
4. Pb/Zn Con	38	0.09	(0.07)

Source: Ords Estimates, Unit costs defined as "All In" sustaining.

We also ponder if the scale could be reviewed. Previous project studies in 2014/15 were based on a mill capacity of ~2.0-2.3mtpa, some 25-45% above the planned 1.6mtpa. In our view, in the past six years, the resource confidence level and size has increased substantially. We ponder a scenario of a larger mill at a lower cut-off grade that could be evaluated later in the mine life.

Cost and valuation upside from several projects

Mt Isa offtake lowers costs substantially

Early underground boosts initial cash flow

Additional mine life is highly value accretive

Adding a Pb/Zn circuit cuts costs by 3%

We ponder if scaling the project up is a longer dated option

Risks

Jervois is a late-stage development project which faces a range of risks categories and several years before generating cash flow. Our valuation is most sensitive to grade and recovery assumptions ($\pm 1\%$ Δ NPV 7%), AUD and copper prices ($\pm 1\%$ Δ NPV 6%). Operating and capital costs are less sensitive ($\pm 1\%$ Δ NPV 3%),

12 Month Outlook

Rather than provide an exhaustive list, we've highlighted what we see as the critical path items to overcome over the next 12 months:

Delays: Our valuation is highly sensitive to project timing. A 12-month delay in initial cash flows reduces our NPV by \$50m (-20%). **Ords View: To mitigate, we assume construction starts in 2023 (vs 2022) and delay ramp-up into 2026.**

Valuation: the PFS outlined a pre-tax DCF valuation of Jervois at A\$177m (A\$0.45/sh), which sits below the current market capitalisation of the group. There is a risk that the upcoming DFS will contain a lower valuation. **Ords View: We flag that development projects typically trade at a discount to their implied valuation, narrowing as the project is de-risked. Additional**

Funding: in our view, the project needs to fund an initial ~A\$400m of capital, including capex, working capital and debt servicing. This is a significant funding size relative to the current market capitalisation and DCF. The company needs to ensure access to debt and equity markets, maintain debt repayments and ensure compliance with debt covenants. **Ords View: we believe the project should attract debt and equity funding based on our thesis points, plus its tier 1 jurisdiction and strong commodity demand.**

Project Execution: Building and commissioning a mine in a remote location is subject to several risk categories: delays, commissioning and EPC/EPCM conflicts. We have assumed a slower development timeline than currently envisaged. **Ords View: We take a materially longer ramp-up at a higher cost before reaching nameplate capacity.**

Operating: underground and opencut mining development is subject to several risk factors. Difference between mine plans estimates and final material delivery resulting in significant differences in required production and costs. The volume of ore and waste may be different than expected. Head grades may be more or less than anticipated by the geological model due to several factors, including dilution, insufficient grade control drilling. Metallurgical recovery rates may differ from what test work was initially based upon. **Ords View: We assume a slower ramp-up at lower initial head grades and lower recoveries.**

COVID-19: exploration and project development in regional Australia rely on consistent availability of workers, logistics and transport links. Disruption to any of the above due to the COVID-19 pandemic poses a risk to delivering critical path items.

Costs: Jervois unit costs in the PFS were US\$1.6/lb on a C1 basis and US\$2.25/lb on an 'All in Sustaining Cost' ('AISC'). This indicates costs are in the middle or 2nd to 3rd quartile of global cost curves. **Ords View: the cost curve location is not ideal but likely realistic and could be improved considerably over time (See Opportunities section on page 9).**

Capex: the PFS capital cost estimate of A\$200m is at risk of increasing due to several factors, including cost inflation, labour shortages limited equipment availability. We highlight that the project implies a low capital intensity of US\$5 per kilo (\$/kg) of annual copper production vs the world project average of US\$7-15/kg. **Ords View: we model a high initial cost of A\$330m (~US\$7/kg), which includes higher contingency, mobilisation, and logistics costs.**

Several risk categories to consider over the next 12 months

Most sensitive to
1. Grade & Recovery
2. Copper price & AUD

Delays hurt DCF

PFS valuation \$177m

Needs to fund \$400m

Execution risk in current environment

Don't forget covid

Usual operational factors

Project is higher cost

Capex forecast likely to increase

Investment Thesis

KGL is a simple copper story. Jervois is a fully permitted, high-grade brownfield development with simple metallurgy. The region is remote and under-explored, and we see upside for both grades and mine life. The project has flown under the radar in recent years, but post a management and board re-shuffle, we see the potential for the story to re-rate.

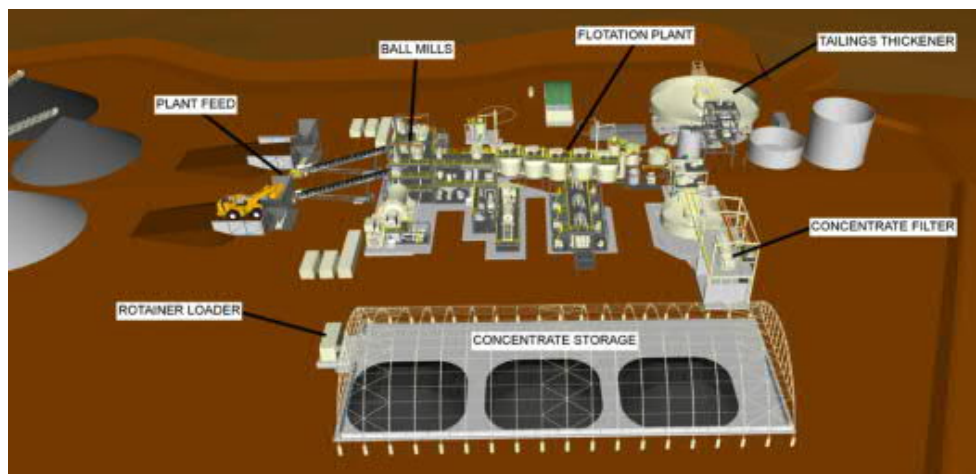
Thesis Key Point 1: Simple Story

The Jervois project is a simple story for investors.

- **Fully Permitted:** all key approvals and permits to commence mining are in place, including: Environmental Impact Statement ('EIS'); Mining Management Plan ('MMP'); Native Title Land Use Agreement with the Central Land Council; Water licenses.
- **Tier 1 Location:** according to the Frazer Institute's annual Mining Survey, Australia consistently ranks as the world's premier mining investment location. The NT, ranks in the top 20 jurisdictions across three categories: Investment Attractiveness, Policy Perception, Best Practice.
- **Simple Metallurgy:** It appears the orebodies have been extensively tested over the years, with multiple composite samples from drill core. The orebody is 95% sulphides and 5% oxides which simplifies the complexity and cost of operations. The flowsheet assumes conventional processing methods and equipment via six stages:
 - Primary Crusher via a SAG mill to a P80 size of 120 micron.
 - Regrinding circuit via a smaller ball mill to a P80 size of 53 micron.
 - Three-stage flotation circuit of roughing, cleaning, and re-cleaning stages.
 - Concentrate will be dewatered through a filter press.

PFS assumes a mean copper head grade of 2.2%, achieving a ~89% recovery and a 27% copper concentrate. Bismuth is the main penalty element, which we notionally assume a cost of US\$50/dmtu.

Figure 12: Process Plant Overview



Source: Company Reports

KGL is a simple copper story

Fully permitted

Tier 1 jurisdiction

Brownfield

Metallurgy is well tested,

95% sulphides

6 stage flow sheet

Crush, flotation, regrind & filter press

Small grind size

Simple and conventional flow sheet

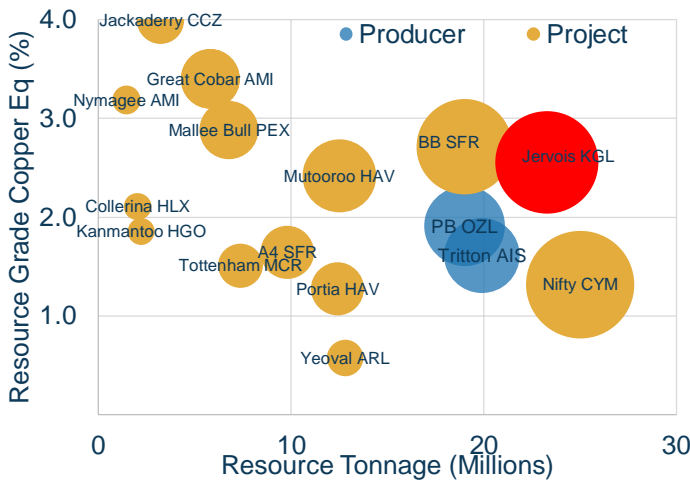
Thesis Key Point 2: High Grade

Jervois boasts an unusually high copper grade with resources at 2.0% (2.6% CuEq) and a reserve at a higher 2.4% (3.1% CuEq). Compared to 15 other ASX listed copper projects, Jervois screens favourably due to:

- **High Grade:** 17-20% above the average.
- **Contained Metal:** 595kt CuEq, 2nd largest deposit by in-situ metal.

While grade is essential, we caution investors to not focus on the measure in isolation, but rather on its recoverable economic value.

Figure 13: Resource Grade Comparison



Source: Company Reports with Ords edits bubble size denotes contained CuEq

Figure 14: Ords Key NSR Assumptions by Metal

	Grade %	Recovery %	Payability %
Copper	2.40	88.9	95.5
Silver	30	64.2	90.0
Gold	0.39	54.4	95.0

Source: Ords Estimates

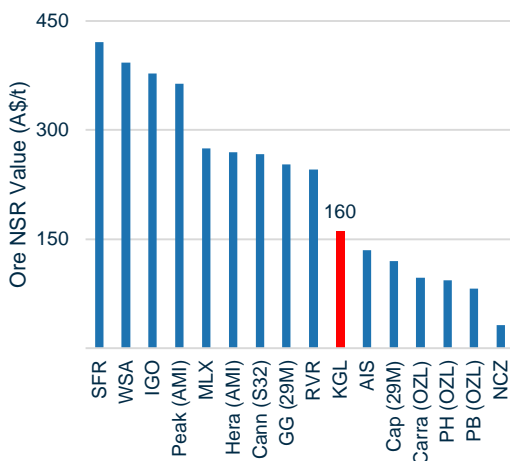
Grade Needs to Adjust for NSR

KGL plans to sell a copper concentrate product with minor credits of gold and silver. We assess concentrate projects via a 'Net Smelter Return' ('NSR'), a measure of net revenue received from customers less the cost of revenue realisation via the formula:

$$NSR = [grade \times recovery \times payability \times metal\ price] \text{ less } [CIF \text{ Transport costs, Treatment and Refining charges, royalties}]$$

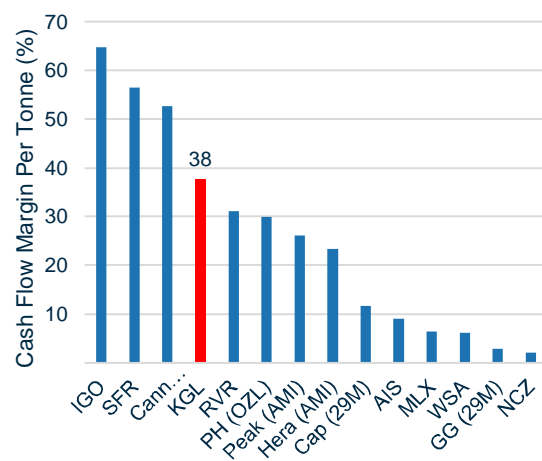
We estimate Jervois NSR ore value to be ~A\$160/t, which is well below its peer group average of A\$230/t. However, with an 'all-in' cost of A\$100/t, the 38% margin is well above peers at ~26%. A \$60/t margin at a 1.6mtpa capacity mill implies the project will generate ~A\$100m in cash flow annually.

Figure 15: NSR of ASX Concentrate Producers



Source: Company with Ords edits

Figure 16: Margin vs ASX peer group



Source: Company with Ords edits

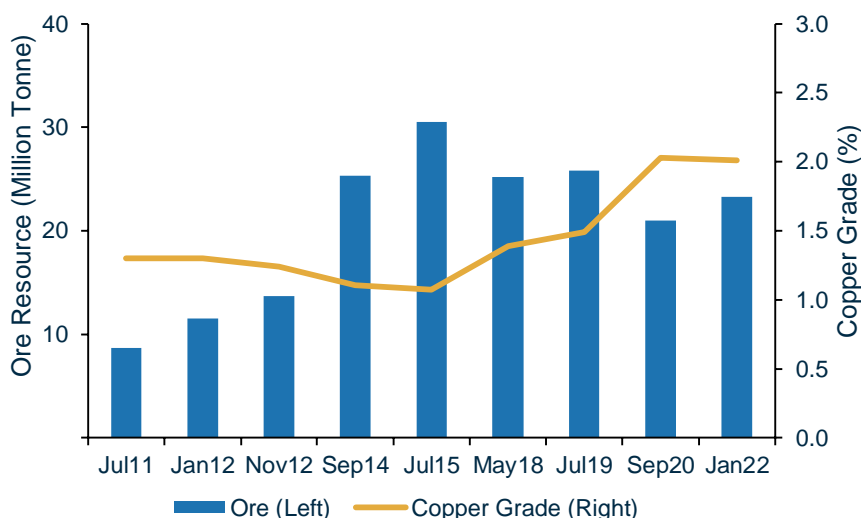
Thesis Key Point 3: Exploration Upside

KGL acquired the Jervois Project in 2011 and have since defined a current JORC Mineral Resource containing 23.3mt at 2.0% Cu and 31.9g/t Ag. The resource includes three primary deposits for development: Reward, Rockface and Bellbird.

The deposits occur within a folded succession of meta-sedimentary and meta-volcanic. The exact origin of mineralisation is still debated and ranges from a metamorphosed and deformed sedimentary-exhalative deposit to a completely hypogene hydrothermal system.

The current resource is based on 172km of drilling. Importantly, ~57% of the current resource is in the indicated resource category (higher geological confidence). The current resource is reported above a depth of 200mRL using a 0.5% Cu cut-off and below 200mRL at a 1% Cu cut-off.

Figure 17: Jervois Resource and Grade Timeline



Source: Company with Ords Edits

Drilling is ongoing at Jervois, primarily to infill and expand known deposits. However, we believe that significant exploration remains within the exploration tenements.

Resource development drilling

Drilling at Jervois resumed in February 2021 following a 12 month COVID induced hiatus. Since resumption, 39 holes have been drilled, and according to management commentary, the results correlate well with the mineral resource model. Drilling has been largely focused on Reward and Bellbird – designed to improve the classification of Inferred material into Indicated.

We see considerable exploration upside

Resource is high confidence, with 57% at Indicated

Cut off grade: 1% for opencut 0.5% for underground

Resource grade improved in recent years following discovery of Rockface

Resource of 23mt at 2.0% copper 32g/t silver 0.29g/t gold

Contains 468kt copper 22.9Moz silver 182koz gold

Or 595kt CuEq

Drilling is ongoing

September 2020 Resource based on 172km of drilling

9 month hiatus during Covid

Figure 18: Jervois Resource Estimate

Deposit	Category	Ore Mt	Grade			Metal		
			Copper %	Silver g/t	Gold g/t	Copper kt	Silver koz	Gold koz
Reward	Indicated	8.6	2.0	41	0.39	171	11,410	107
	Inferred	5.0	1.5	18	0.18	73	2,910	29
	Total	13.6	1.8	33	0.31	244	14,320	137
Rockface	Indicated	2.5	3.5	20	0.25	87	1,560	20
	Inferred	0.8	2.1	16	0.18	18	420	5
	Total	3.3	3.2	19	0.23	104	1,980	25
Bellbird	Indicated	1.7	3.2	18	0.22	53	980	12
	Inferred	2.8	1.8	13	0.10	50	1,170	9
	Total	4.5	2.3	15	0.15	103	2,170	22
Total Cu,Au,Ag	Indicated	12.7	2.4	34	0.34	310	13,950	139
	Inferred	8.6	1.6	16	0.15	141	4,500	43
	Total	21.4	2.1	27	0.27	451	18,450	182
Reward South*	Indicated	0.5	1.0	64		5	1,060	
	Inferred	1.4	0.8	78		11	3,440	
	Total	1.9	0.9	74		16	4,500	
Total Jervois	Indicated	13.2	2.4	35	0.33	315	15,010	139
	Inferred	10.0	1.5	25	0.13	152	7,940	43
	Total	23.3	2.01	31	0.24	468	22,950	182

Source: Company with Ords Edits; * Reward South is a Pb/Zn resource from 2015 that did not include gold and is not the focus of the current study

Bellbird and Reward resource drilling to increase confidence levels

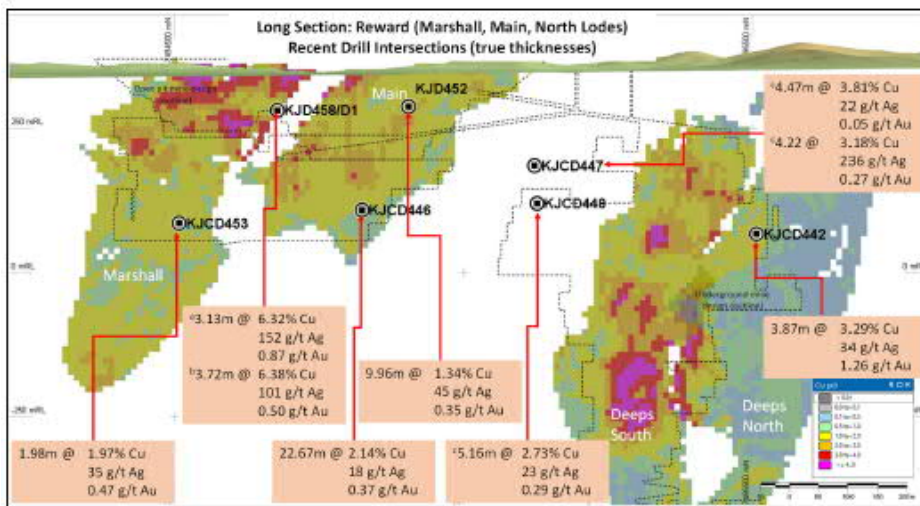
Recent drilling hit 61% copper in Bornite

Recent drilling highlights further significant upside

Recent drill results, specifically at Rockface, indicate to us the potential for significant upside beyond current resource development drilling, which will be included in the upcoming Feasibility Study (due mid-2022). Recent drilling at Rockface has intersected intervals of massive sulphides, which extends the up-down plunge extent of the Rockface North massive sulphide shoot to at least 160m. Of particular interest was drill hole KJCD481D3 which returned a record assay of 61.4% Cu within a mineralised zone grading 20.5% Cu over an estimated true width of 4.21m.

Exciting drill results from late 2021 now incorporated into the delayed DFS

Figure 19: Reward long section highlights recent drilling highlight



Source: Company Reports

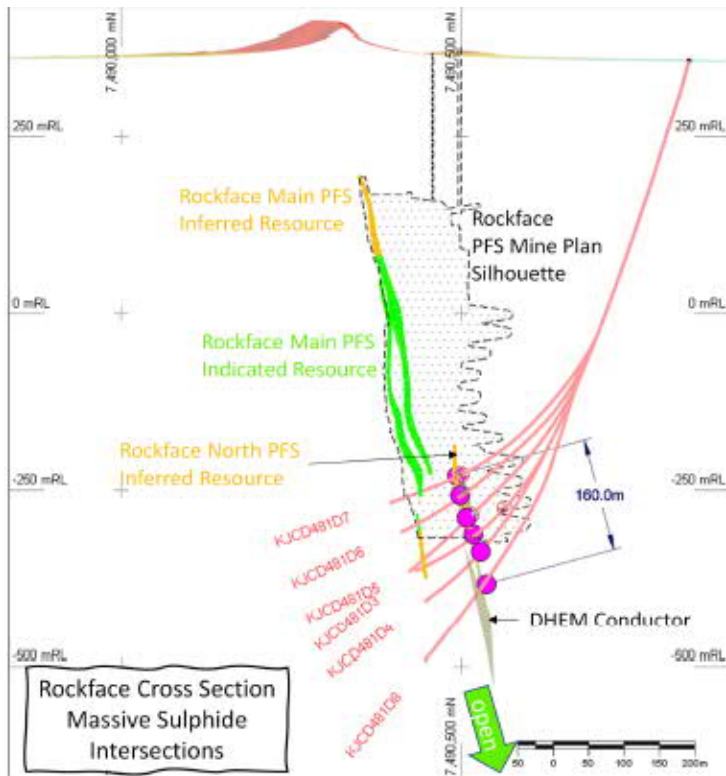
Rockface massive sulphide intersections highlight continuity of mineralisation at depth

Conductors a good indicator of more to come

Downhole Electro Magnetics (DHEM) is a geophysical surveying tool that provides data on subsurface resistivity and can confirm and delineate surface E.M. anomalies at depth. It provides a greater spatial resolution of closely spaced conductors than surface or airborne geological surveys. By providing accurate resistivity data, downhole E.M. allows for mapping of lithology and structure. In this

instance, DHEM is significantly important for Jervois because it can easily identify areas with highly magnetic mineralisation (i.e. chalcopyrite and bornite).

Figure 20: Rockface Cross Section & Sulphide Intersections



Downhole EM works a treat

Iron in chalcopyrite and bornite light up

Rockface open down dip

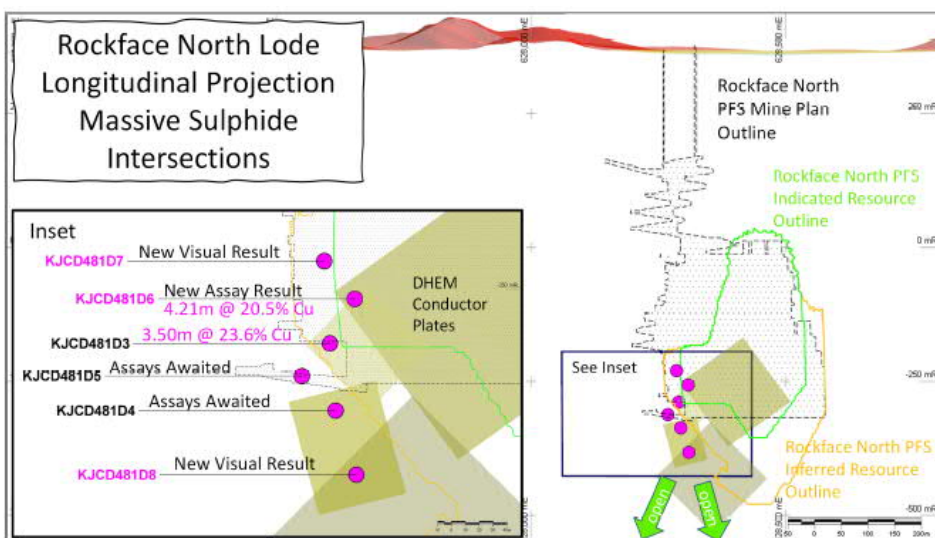
Several conductors at depth

Rockface reserve: 1.8mt at 3.7% Cu

Source: Company with Ords Edits

Specifically, at Rockface, recent results showed a strong in-hole response from high-grade bornite and chalcopyrite intersected in the holes, combined with an off-hole response from the distal part of the Rockface North lode. Commentary from KGL's consulting geophysicist, Kate Hine, indicate that the Rockface North is not closed at depth and confirms the potential for significant extensions to Rockface.

Figure 21: Conductors a good indicator that mineralisation continues at depth



Walk up drill targets along strike to the north

Within cooe of pit shell

Source: Company Reports

Regional upside

In March 2017, KGL acquired 72.7km² exploration tenement EL28082, known as the Unca Creek Project. The tenements have considerable strategic value, as they surround the existing 3x Jervois mining lease to the east, north and south. The acquisition almost trebled the size of the Jervois project area from 37.9 km² to 110.8km².

Unca Creek offers geological similarities to Jervois. Although relatively under-explored, work undertaken by previous tenement holders (including MIM, Normandy Poseidon) has demonstrated the tenement's exploration potential. This includes the northern strike extension of the sequence of rocks that host the Marshall-Reward deposits, which represent a substantial part of KGLs current Resource at Jervois.

Total Jervois tenements 110km²

Mining Lease area 39km²

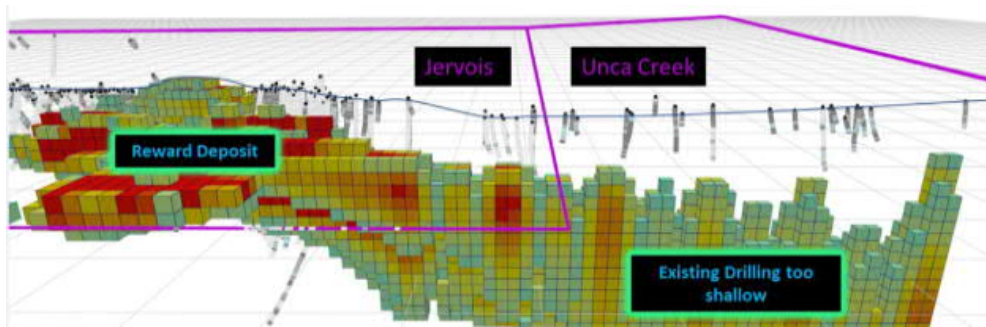
Unca Creek acquired in 2017 added 73km²

Underexplored

Process Plant at Reward (north)

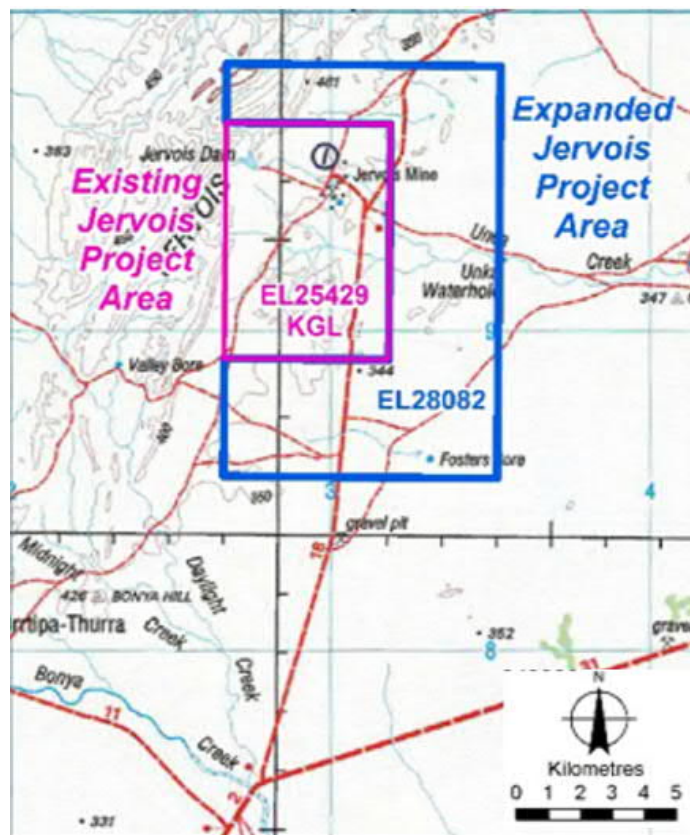
Trucking ore 6km from Bellbird and Rockface in the south

Figure 22: IP Chargeability Model of Reward vs Unca Creek



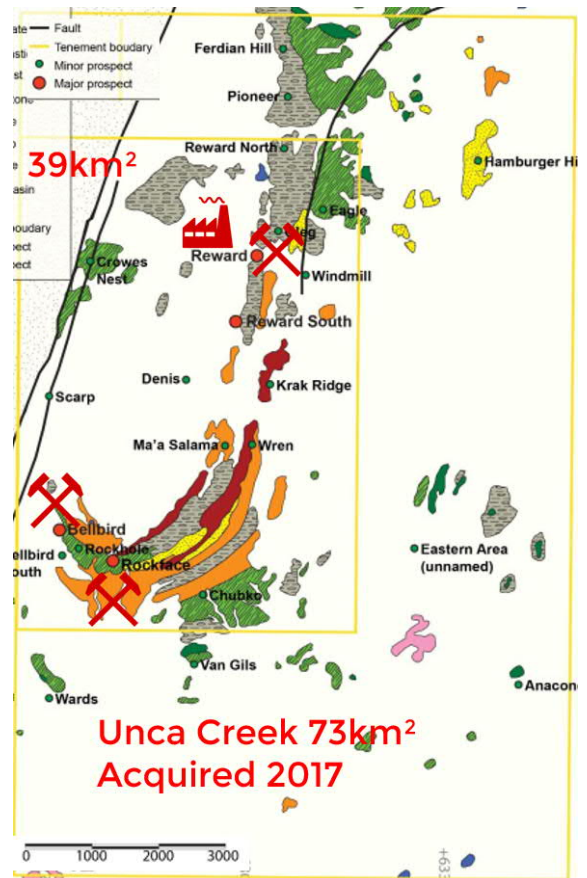
Source: Company with Ords Edits

Figure 23: Regional Tenement Overview



Source: Company with Ords edits

Figure 24: Jervois Tenement Outcrop Map



Source: Company with Ords edits

Thesis Key Point 4: Flown Under the Radar

KGL appears to have historically escaped investor attention due to several factors. Following the recent board and management shake-up, we expect the story to re-rate.

Kentor Gold – Dim History

KGL’s previous entity ‘Kentor Gold’ appears to have had a poor track record. Since its inception in 1998, the group accumulated \$124m in tax losses via several strategic and operational missteps, including:

- Kentor had a portfolio of early-stage projects in a range of commodities and locations, including gold exploration in Kyrgyzstan and Geothermal energy in the Solomon Islands.
- The Murchison Gold Project in WA was small and cost \$15m to restart. Within 2-years, the subsidiary was placed in administration.
- Jervois at the time also screened poorly due to its limited mine life, low grade, higher cost and small copper output of 20ktpa.

Strategy Overhaul

Following the appointment of Denis Wood as Executive Chairman in 2016, KGL saw a complete overhaul of its operational and strategic focus. This included :

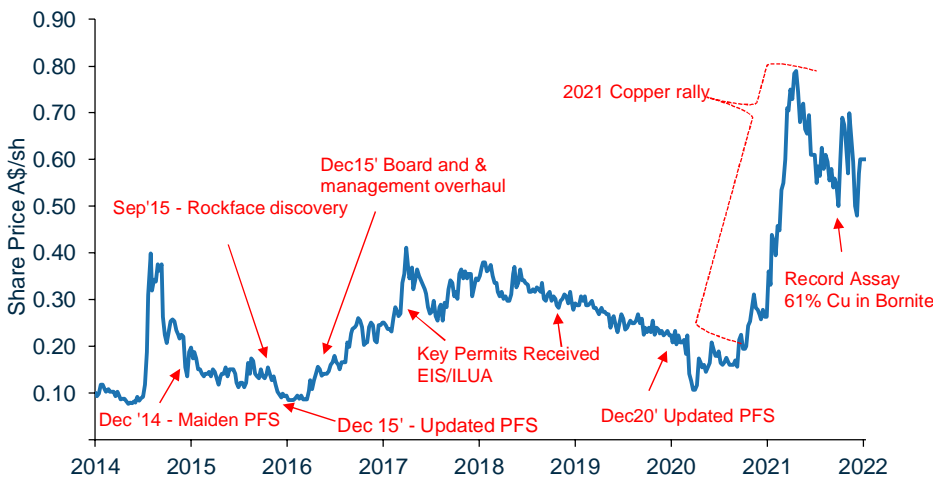
- Changed its name to ‘KGL Resources’.
- Closed WA offices, reduced the number of directors.
- Divested the noncore assets (Kyrgyzstan/Solomon’s)
- Focus purely on Jervois and improving the project via:
 - Increase the mine life to >10 years
 - Lower costs to be in the lower half of the cost curve
 - Focus on copper mineralisation, scrapped Pb/Zn.

This strategy appears to have been successful, particularly with the discovery and delineation of high-grade Rockface as well as receiving all the major permits.

New Team To Build

The past six months have seen a board and management refresh. In our view, the new executive skill set neatly reflects the changing project requirements as it transitions from feasibility to construction. We highlight that CEO Simon Finnis (appointed in July 2021) has a strong track record, having built several projects in a range of jurisdictions and commodities (See Appendix 2 – Board & Management page 21).

Figure 25: KGL Share Price History



Source: Iress with Ords Edits

KGL & Jervois has flown under the radar

Dim history under Kentor Gold

Accumulated \$124m in tax losses

Odd portfolio: Kyrgyzstan gold & Solomon geothermal

Denis Wood turned the place around in 2016

Brought Jervois to its near shovel ready status

Recent additions complement transition into production

We expect a re-rating

Best emerging copper development story

High copper grades should resonate

KGL Resources

PROFIT & LOSS (A\$m)	2020A	2021A	2022E	2023E	2024E
Revenue	-	-	-	-	128.0
Operating costs	-	-	-	-	-
Operating EBITDA	0.6	(0.8)	(2.0)	(2.0)	36.2
D&A	(0.1)	(0.0)	-	-	(108.5)
Non-operating items	(0.6)	(0.6)	-	-	-
EBIT	(0.0)	(1.4)	(2.0)	(2.0)	(72.3)
Net interest	-	-	(7.9)	(23.8)	(23.8)
Pre-tax profit	(1.2)	(1.4)	(9.9)	(25.8)	(96.1)
Net tax (expense) / benefit	-	-	2.5	6.5	24.0
Normalised NPAT	(1.2)	(1.4)	(7.5)	(19.4)	(72.1)
Reported NPAT	(1.2)	(1.4)	(7.5)	(19.4)	(72.1)
Normalised dil. EPS (cps)	(0.3)	(0.4)	(1.9)	(4.9)	(18.3)
Reported EPS (cps)	(0.3)	(0.4)	(1.9)	(4.9)	(18.3)
Effective tax rate (%)	25.0	26.0	25.0	25.0	25.0
Dividend yield (%)	-	-	-	-	-
Diluted # of shares (m)	392.8	392.8	392.8	392.8	392.8

CASH FLOW (A\$m)	2020A	2021A	2022E	2023E	2024E
EBITDA incl. adjustments	0.6	(0.8)	(2.0)	(2.0)	36.2
Income tax paid	-	-	-	-	-
Other operating items	0.6	(0.8)	-	-	-
Operating Cash Flow	(1.0)	(2.4)	(9.9)	(25.8)	12.4
Capex	(4.5)	(12.4)	(164.4)	(164.4)	(16.4)
Acquisitions	-	-	-	-	-
Other investing items	0.3	(0.2)	-	-	-
Investing Cash Flow	(4.2)	(12.6)	(164.4)	(164.4)	(16.4)
Inc/(Dec) in equity	3.7	23.6	100.0	-	-
Inc/(Dec) in borrowings	-	-	100.0	200.0	-
Dividends paid	-	-	-	-	-
Other financing items	(0.1)	-	-	-	-
Financing Cash Flow	3.6	23.6	200.0	200.0	-
Net Inc/(Dec) in Cash	(1.6)	8.6	25.7	9.8	(4.0)

BALANCE SHEET (A\$m)	2020A	2021A	2022E	2023E	2024E
Cash	5.2	12.0	37.7	47.5	43.5
Receivables	-	-	-	6.4	10.8
Inventory	-	-	-	12.8	21.6
PP & E	64.5	69.7	234.0	398.4	306.3
Other non-current assets	0.1	-	-	-	-
Total Assets	70.3	207.9	400.2	600.0	541.2
Short term debt	-	-	-	-	-
Payables	0.5	2.2	16.6	10.8	16.2
Other current liabilities	0.1	0.2	-	-	-
Long term debt	-	-	100.0	300.0	300.0
Other non-current liabilities	0.0	112.3	51.2	82.0	84.4
Total Liabilities	0.5	114.7	214.5	433.7	446.9
Total Equity	69.7	93.2	185.7	166.4	94.3
Net debt (cash)	(5.2)	(12.0)	62.3	252.5	256.5

Speculative Buy

DIVISIONS	2020A	2021A	2022E	2023E	2024E
KEY METRICS (%)	2020A	2021A	2022E	2023E	2024E
EBITDA growth	-	-	-	-	-
EBIT growth	-	-	-	-	-
EBITDA margin	-	-	-	-	28.3
OCF / EBITDA	-	187.2	100.0	100.0	100.0
EBIT margin	-	-	-	-	-
Return on assets	-	-	-	-	-
Return on equity	-	-	-	-	-
VALUATION RATIOS (x)	2020A	2021A	2022E	2023E	2024E
Reported P/E	-	-	-	-	-
Price To Free Cash Flow	-	-	-	-	-
Price To NTA	3.5	2.6	1.3	1.5	2.6
EV / EBITDA	-	-	-	-	13.8
EV / EBIT	-	-	-	-	-

LEVERAGE	2020A	2021A	2022E	2023E	2024E
ND / (ND + Equity) (%)	(8.0)	(14.8)	25.1	60.3	73.1
Net Debt / EBITDA (%)	(799.5)	1,463.4	(3,116.4)	(12,626.4)	708.9
EBIT Interest Cover (x)	-	-	-	-	-
EBITDA Interest Cover (x)	-	-	-	-	1.5

SUBSTANTIAL HOLDERS	m	%
Salim Group	96.5	24.6%
Dennis Wood	35.6	9.1%
Paradise	29.5	7.5%

VALUATION	
Cost of Equity (%)	8.0
Cost of debt (after tax) (%)	8.0
WACC (%)	8.0

Forecast cash flow (\$m)	318.9
Franking credit value (\$m)	-
Equity NPV (\$m)	318.9
Equity NPV Per Share (\$)	0.81

Target Price Method	DCF
Target Price (\$)	0.80
Valuation disc. / (prem.) to share price (%)	30.1

Appendix 1 – History & Timeline

KGL History

1998 – Incorporated in Brisbane as an exploration company focused on gold and base metals in Kyrgyzstan.

2005 – 'Kentor Gold Limited' IPO. Issued 12m shares at \$0.5/sh (A\$6m) to progress its Kyrgyz gold projects.

2011 – Kentor acquires private exploration company 'Jinka Minerals' \$15m including assuming \$5m debt. The new portfolio contains several tenement packages that include Jervois. The initial focus appeared to be the WA Murchison Gold project, a small \$15m brownfield gold restart targeting 24koz of gold pa.

2013 – Murchison Project was placed into administration after failing to secure a working capital facility.

2015 – Board and Management Overhaul: a period of low commodity prices and weak capital market appetite forced the business to reduce expenditure. The Perth office was closed, several executives and personnel made redundant. The board cut its numbers along with a reduction in fees.

2016 – Strategic Overhaul – Denis Wood becomes Executive Chairman, personally underwriting initial capital raising and overhauls KGL's strategy:

- Name Changed to 'KGL Resources'
- Divests non-core portfolio including Kyrgyzstan gold projects.
- Redirects focus to Jervois: increase mine life to over a decade, copper mineralisation focus, discarded lead/zinc, reducing costs to be in the bottom half of the cost curve, advance permitting.

2017-2020 – Large drilling campaign was undertaken to improve resource confidence and delineate Rockface. All major permits, licenses and approvals completed, including EIS, native title, mining lease.

2021 – Denis Wood retires from the board. Several new board appointments made to fund and build Jervois. CEO Simon Finnis was appointed in July 2021.

Jervois Project History

Mineralisation at Jervois was discovered in 1929 during cattle mustering. Small high-grade open-pit mines exploited, mainly oxide copper and lead-zinc mineralisation at Marshall-Reward, Green Parrot and Bellbird up to the early 1970s.

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

From the 1990s onwards, a renewed focus on exploration has incrementally increased sulphide resources at depth. KGL acquired the Jervois project and Jinka Minerals Ltd, an unlisted exploration company, in 2011.

Timeline:

1950's– Small scale mining construction of processing plant and pits

1960's - Jervois Mining Ltd operating small scale copper mine

1970's - Petrocarb Minerals acquires nearby leases and drills 110 Diamond and RC holes at Reward, Marshall and Green Parrot prospects. Petrocarb and Union Corporation form a JV, and Union takes over exploration.

1980's - Construction and Prompt Closure

- '80 'Plenty River' Mining acquires project for a royalty payment on 1st production.
- '81 construction starts on 'Green Parrot' base metals opencut mine. Mill throughput capacity of 125ktpa to treat oxide lead, zinc, copper and silver ore. Also builds township, services and treatment plant
- April 1982: Construction completed. Place on care and maintenance in June after 500 tonnes of concentrate produced.
- August 1983: mine restarted and processed 25kt of oxidised ore over five months and was placed on care and maintenance in December 1983 due to a sharp decline in metal prices (never restarted).
- Project reverts to exploration: regional geological fieldwork under a JV with 'Anaconda'. Airborne magnetic anomalies at Bellbird and Green Parrot, Van Gils, Killeen and outer J line mineralisation tested with diamond drilling.

1990-2000s – Orphan Period: Plenty River forms a series of exploration joint ventures ('JV') starting with Normandy Poseidon ('91), Tyson Resources ('97), Britannia Gold ('98) and Mount Isa Mines ('MIM.') ('99). 'Reward Minerals' acquires the project ('03) and later sells to 'Jinka Minerals' ('09)

2010's New Life under Kentor Gold/KGL:

- 2011 Kentor Gold acquired private exploration company 'Jinka Minerals' for A\$8m in cash and assumed \$5m of debt. Tenements include Murchison Gold and Jervois. Jervois JORC compliant resource of 8.8mt at 1.3% copper and 27g/t silver.
- Kentor commences scoping study work and drill campaign. Initial metallurgical test work indicates copper recovery of 94% at a coarse grind size of 90micron P80. Produces a 26% grade copper concentrate.

2014 – Maiden PFS – 25mt opencut and underground resource defined at a grade of 1.1% Cu and 22g/t Ag with a cut-off of 0.5% Cu. The study outlines a 2.0mtpa sulphide plant with a seven-year mine life producing ~21ktpa of copper in concentrate and separate lead and zinc concentrates. Initial capex estimate of A\$189m and C1 costs of US\$1.5/lb. Follow up work targeting increased mine life, higher copper throughput.

2015 – PFS Update and Rockface Discovery

- **Updated PFS:** Opencut and underground resource increased to 31mt at a grade of 1.1% Cu, at a lower cut-off of 0.35%. The study outlined an 8.3-year mine life with a 2.3mtpa capacity at a grade of 1.1% copper-producing ~21ktpa of copper in concentrate along with a separate bulk lead/zinc concentrate. C1 unit cost of US\$1.97/lb. Costs of A\$189m with a Pre-tax NPV of A\$248m, IRR of 35%

- **October** – Discovery of Rockface 13m @ 2.14% Cu from 255m

2016 – Project Strategy Changes

- Strategic and management overhaul. New Chairman Denis Wood defines a new project strategy and reduces corporate overhead.
- Re-focused strategy on copper (drops lead/zinc) and back to drilling and defining a mine life to >10 years.

2017 – Grows Project Footprint and Receives Key Permits

- Acquires neighbouring tenements at Unca Creek
- NT government grants a Mining Lease as well as Indigenous Land Use Agreement (ILUA) signed with Central Land Council.

2019 – EIS approval. July 2019 resource update 26mt at 1.5% Cu, 27g/t Ag and 0.17g/t Au applying a higher Cu cut-off of 0.5% for surface and 1% for underground.

2020 – December ('PFS') 2020 updated resource of 21mt at 2.0% Cu, 32g/t Ag and 0.29g/t Au using a cut-off of 0.5% for surface and 1% for underground. Project with 1.6mtpa capacity with a 7.5-year mine life producing ~30ktpa of copper in concentrate. C1 unit cost of C1 US\$1.86/lb, AISC of US\$2.25/lb. A\$200m Capex starting in 4Q 2022. Pre-tax NPV of A\$177m, IRR of 27% and a 3.2-year payback.

2020 – Final permits received including - Mining Management Plan ('MMP') and Water License.

Appendix 2 – Board & Management

Simon Finnis – Managing Director – Since July 2021

Over 30 years of experience developing greenfield and brownfield mining projects through feasibility, construction and commissioning. Most recently, Simon was the CEO of Metro Mining Limited (MMI.ASX) and developed the Bauxite Hills project in North Queensland. He has held several management and operational roles in underground and opencut mines in Australia and internationally, including CEO of Grande Cote during its development and into the operating phase in Senegal; Operations Manager for the Pooncarie Mineral Sands Project; Redevelopment of the Gold Ridge Mine in the Solomon Islands.

Peter Hay – Acting Chair – Since Nov 2017

Mr Hay has Bachelor of Engineering (Mining) and Bachelor of Commerce degrees and is an associate member of the Institute of Chartered Accountants based in Brisbane. With over 30 years of experience in the mining industry, he has held senior positions in some of Queensland's largest resource companies, including General Manager of Pan Australian Mining, Managing Director of Sedgman Limited and Joint Managing Director of Macarthur Coal. Mr Hay has extensive experience as a non-executive director of companies including Sedgman and Aston Resources.

Ferdian Purnamasidi– Non-Executive Director - Since 2016

Ferdian is an Executive at the Salim Group and represents KGL's largest shareholder. Ferdian oversees Salim's Corporate Development and Strategic Acquisitions within the resources sector. The Salim Group is Indonesia's largest conglomerate with interests in mining, agriculture, manufacturing, property and insurance.

Ferdian has spent the past six years facilitating resource development opportunities between Indonesia and Australia. His experiences in Australia include serving as Director at Mach Energy Australia, which owns the Mt Pleasant coal mine in the NSW Hunter Valley. He is also a Director at Robust Resources (ROL.AU), a gold & silver exploration company with projects in Indonesia.

Steve Mallyon – Non-Executive Director – Since July 2021

Steve has over 35 years in the mining and construction materials industry, as well as establishing Royal Bank of Canada's investment banking operation in Sydney. He has extensive operational and corporate finance experience with direct management of mining and development projects in Australia, Africa, South America and Asia. Mr Mallyon has worked for major mining companies in senior roles at MIM. Holdings Limited, RGC. Limited and Billiton. He was previously a Director of N.M Rothschild (Australia), Managing Director of RBC. Capital Markets (Australia) and Managing Director of Riversdale Mining and subsequently Riversdale Resources.

Denis Gately - Non-Executive Director – Since December 2021

Denis spent most of his legal career with Minter Ellison, serving as head of its National Energy and Resources Industry Group, a member of its National Board for nine years and as Brisbane Managing Partner for six years until his retirement in 2010. He has led transactions in mineral and oil and gas operations and development projects, both domestic and international, as well as having extensive experience in associated infrastructure.

Denis has previously served as director of Gloucester Coal Limited, Alligator Energy Limited (chair), Xanadu Mines Limited (chair) and Resource Generation Limited (chair).

Glossary

@	Denotes the metal grade, which accompanies an indication of material size, scale or width. For example, the deposit contained 200 million tonnes @ 2% copper.
AISC	All-in sustaining cost – unit cost metric that estimates all direct and recurring costs required to mine a unit of ore including sustaining capital.
Au	Chemical element abbreviation for gold
BFS	Bankable Feasibility Study - compiles results of other feasibility studies done when planning a mining project and adds information on required permits, environmental impact, negotiated contracts and the costs of closing the mine and reclaiming the ground.
C1 Cost	Reference point to imply the basic cash costs of running a mining operation to allow a comparison across the industry.
Capex	Capital Expenditure
CIF	'Cost Of Insurance and Freight' is a term used to describe which component of the transport cost is paid for by the seller or customer.
CoD	Cost of Debt
CoE	Cost of Equity
Copper Equivalent 'CuEq'	Combined value of all economic metals equated to the value of the primary metal (copper). Applied in polymetallic projects to approximate the value of all metal including byproduct or co product materials. Ords assumes US\$3.0/lb price for copper, US\$1600/oz for gold and \$22/oz for silver. Grade formula: = (copper grade % + (Gold grade g/t x 51.4) + (Silver Grade g/t x 0.77)) ÷ 66.1 Metal Formula: = ((copper metal in tonnes x \$6,610/t) + (Gold in ounces x \$1600/oz) + (Silver in ounces x \$24/oz)) ÷ copper price of \$6,610/t
Cu	Chemical element abbreviation for copper
Cu-Au	Gold and copper
Cut Off	The estimated lowest grade of ore that can be mined and treated profitably.
DCF	Discounted Cash Flows – a financial model of an investment or project, which discounts the net cash flows over the whole life of the investment back to their present value.
DDH	Diamond Drill hole - The hole from a method of obtaining a cylindrical core of rock by drilling with a diamond set or diamond impregnated bit.
DFS	Definitive feasibility study - The most detailed form of feasibility study which determines definitively whether to proceed with a mining project.
District	A section of country usually designated by name, having described, or understood boundaries within which minerals are found and worked.
Deposit	A mineralised ore body which has been physically delineated by sufficient drilling, trenching, and found to contain a sufficient average grade of metal/s to warrant further exploration and/or development expenditures.
EIS	Exploration Incentive Scheme - A State Government initiative that aims to encourage exploration in Western Australia for the long-term sustainability of the State's resources sector.
Epithermal	A process of ore formation in and along openings in rocks at shallow depths from ascending hot solutions.
Epithermal Deposit	A mineral deposit consisting of veins and replacement bodies, usually in volcanic or sedimentary rocks, containing precious metals or, more rarely, base metals.
FEED	Front End Engineering Design – a project delivery method adopted prior to detailed engineering, procurement, and construction and is an important designed used to control project expenses and thoroughly plan a project before bid submission.
FID	Final Investment Decision – taken by company board to proceed to develop a project, typically at the final stage of feasibility study.
g/t	Grams per tonne also known as parts per million
Grade	The amount of valuable mineral in a rock or alluvial sample, usually expressed as a percentage, parts per million (ppm) or in grams per tonne (g/t)
Headgrade	A term referring to the average grade of ore delivered to the processing plant
IP anomaly	Induced Polarisation Anomaly – a significant mineral finds using a geophysical imaging technique in mineral exploration
IRR	Internal Rate of Return – the annual return required to make NPN equal to zero.
JORC	Joint Ore Reserves Committee Code: a professional code of practice that sets minimum standards for public reporting of minerals exploration results, mineral resources, and ore reserves.
Km	Kilometre
Koz	Thousand ounces
kt	Thousands of tonnes

ktpa	Thousands of tonnes per annum
lb	lb is the abbreviation for pounds by weight. One Kilogram equals 2.2 pounds.
LOM	Life of mine - Number of years that an operation is scheduled to mine and treat ore and is based on the current mine plan.
Meta-Sedimentary	Partly metamorphosed sedimentary rocks. These can include elongated belts in the earth's crust within which major deformation, igneous activity and morphism has occurred.
Meta-Volcanic	Partly metamorphosed volcanic rock
Mineralisation	The process by which minerals are introduced to a rock. More generally a term applied to accumulations of economic or related minerals in quantities ranging from anomalous to economically recoverable.
Metallurgy	The science of separating metals from their ores and preparing them for use, as by concentration, smelting and refining
Mo	Molybdenum - A chemical element contained in various minerals.
Moz	Million ounces.
Mt	Million tonnes.
Mtpa	Million tonnes per annum.
NPV	Net Present Value – the sum of the present value of future of all the net cashflows to be received from an investment/project in the future after discounting at an appropriate rate of discount
NSR	Net Smelter Return – the value of concentrate free on board (F.O.B.) mine. It is the share of the net revenues generated from the sale of metals produced by a mine.
OC	Opencut.
Opex	Operational Expenditure
Ounces	or 'Troy ounces' is a unit of measure typically for precious metals. 1 ounce contains 31.103 grams
Oz	Ounces.
Pb-Zn	Lead-Zinc.
PFS	Prefeasibility Study - A comprehensive analysis which is qualified by the availability and accuracy of fundamental criteria and assumptions to the degree that it cannot be the basis for final decisions.
ppm	Parts per million - grade indication, same as grams per tonne.
RC	Reverse Circulation - A percussion drilling technique.
Recovery	The percentage of metal in an ore extracted by the metallurgical process
Reserves	The economically mineable portion of a Measured or Indicated Mineral Resource
ROM	Run-of-mine ore
Skarn	The metamorphic rocks surrounding an igneous intrusive where the latter has encountered limestone or dolomite rocks.
SS	Scoping study - preliminary study to define a possible metallurgical circuit of a project.
Strip ratio	The tonnage of waste rock to be mined, divided by the tonnage of ore to be mined from the pit.
TMM	Total material mined or moved. Represents the all mining volume both waste and ore typically opencut.
UG	Underground.
Vein	A mineralised zone having a regular development in length, width and depth which clearly separates it from neighboring rock.
VHMS	Volcanic-Hosted Massive Sulphide - stratiform accumulations of sulphide minerals that precipitate from hydrothermal fluids on or below the seafloor in a wide range of ancient and modern geological settings.
WACC	Weighted Average Cost of Capital – the average amount a company is expected to pay across all forms of capital to finance its assets

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SPECULATIVE BUY	We expect the stock's total return (nominal yield plus capital appreciation) to exceed 20% over 12 months. The investment may have a strong capital appreciation but also has high degree of risk and there is a significant risk of capital loss.
BUY	The stock's total return (nominal dividend yield plus capital appreciation) is expected to exceed 15% over the next 12 months.
ACCUMULATE	We expect a total return of between 5% and 15%. Investors should consider adding to holdings or taking a position in the stock on share price weakness.
HOLD	We expect the stock to return between 0% and 5%, and believe the stock is fairly priced.
LIGHTEN	We expect the stock's return to be between 0% and negative 15%. Investors should consider decreasing their holdings.
SELL	We expect the total return to lose 15% or more.
RISK ASSESSMENT	Classified as Lower, Medium or Higher, the risk assessment denotes the relative assessment of an individual stock's risk based on an appraisal of its disclosed financial information, historic volatility of its share price, nature of its operations and other relevant quantitative and qualitative criteria. Risk is assessed by comparison with other Australian stocks, not across other asset classes such as Cash or Fixed Interest.

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