



**Finding the energy metals the world needs for a low-carbon future**

**High-Impact Exploration in Emerging Copper and Nickel Provinces**

Resources Rising Stars Conference

4 September 2024



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What does Stavely Minerals offer that is different?



## BIG targets







## Stavely Project - Thursday's Gossan Prospect

- High-Grade Cayley Lode Cu-Au-Ag discovery
  - **9.3Mt at 1.23% Cu, 0.23g/t Au and 7.1g/t Ag<sup>2</sup>**
  - *Commercial Viability Study in-progress*
- Junction Lode
  - *35m at 3.44% Cu and 26g/t Ag*
  - *New structural interpretation provides discovery opportunity*
- S41 Breccia-Hosted Gold
  - *~2km long x 750m wide hydrothermal breccia, potential for scale*
  - *only 1 x diamond drill hole to date*
  - *Carbonate – base metal – gold system eg.: Kidston, Mt Leyshon, Kelian*



## Hawkstone Magmatic Ni-Cu-Co Project<sup>1</sup>

- Adjacent to IGO / Buxton Merlin / Double Magic discovery – ave. 8% Ni tenor, new Dogleg discovery – emerging magmatic nickel province
  - *Eg. Nova & Bollinger, Jinchuan, Voisey's Bay*

<sup>1</sup>see ASX announcement 23 May 2023

<sup>2</sup>See ASX announcement 14 June 2022, Appendix 1



# Stavely Project



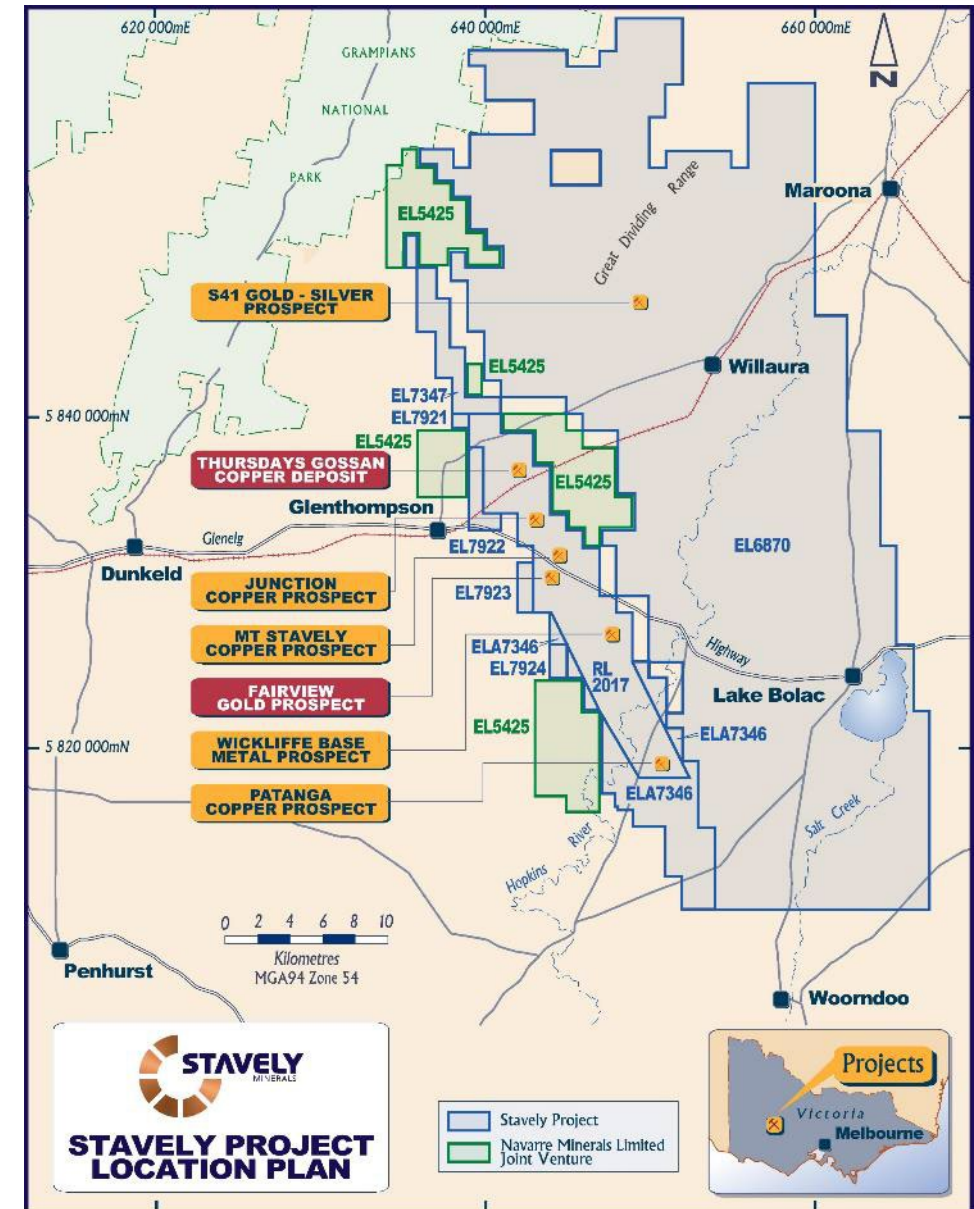
# Stavely Project



- **Discovery** – outstanding shallow high-grade copper-gold-silver discovery (September 2019), the **Cayley Lode**
- **New style of mineralisation** – Magma/Butte copper lode-style system, never before seen in Australia
- **Multiple regional discovery opportunities:**
  - *Junction Lode – 35m at 3.44% Cu and 26g/t Ag from 24m to end of hole*
    - *New structural interpretation opens immediate discovery opportunity*
  - *S41 breccia-hosted gold – 2km x 750m breccia pipe*
    - *Only 1 x diamond drill hole in large system, scale potential*
  - *Other regional targets include S2 and S3 porphyry targets, Toora Road gold target*

<sup>1</sup> reported in compliance with the JORC Code 2012, see ASX announcement 14 June 2022, see Appendix 1 for classifications

<sup>2</sup> see ASX announcement 3 October 2023



# The Cayley Lode Mineral Resources Estimate



- **Discovery** – outstanding shallow high-grade copper-gold-silver discovery (September 2019), the Cayley Lode
- **Cayley Lode MRE<sup>1</sup>** – 9.3Mt at 1.23% Cu, 0.23g/t Au and 7.1g/t Ag
- **Total Resources** – 28.3Mt at 0.75% Cu, 0.11g/t Au and 3.5g/t Ag
- **Containing** – 210,000t Cu, 100,000oz Au, 3.2Moz Ag and 2.4kt Zn
- **New Style of Mineralisation** – Magma/Butte copper lode-style system, never before seen in Australia
- **Potential Pathway to Production<sup>2</sup>** - Assessing potential processing options with a Commercial Viability Study



<sup>1</sup> reported in compliance with the JORC Code 2012, see ASX announcement 14 June 2022, see Appendix 1 for classifications

<sup>2</sup> see ASX announcement 9 May 2024





# Junction Lode Discovery Opportunity



# Junction Lode Discovery Opportunity

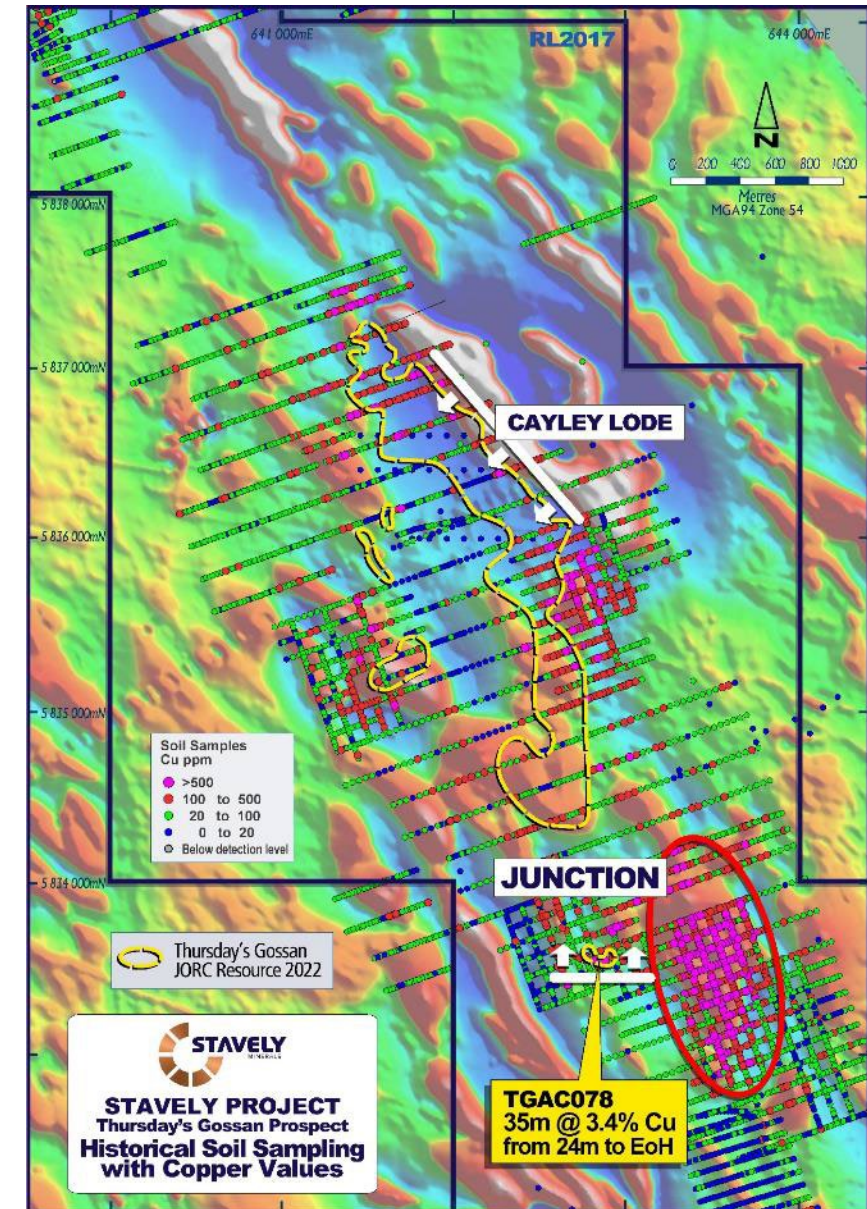


**Junction is the largest copper in soil auger anomaly in the entire Stavely Project, located ~2km south of the Cayley Lode.**

**Historic intercepts at the Junction Prospect include<sup>1</sup>:**

- 35m at 3.44% Cu and 26g/t Ag from 24m drill depth to end-of-hole (EoH) in TGAC078
- 11m at 1.72% Cu and 26g/t Ag from 33m in TGRC087
- 6m at 2.15% Cu and 8g/t Ag from 2m and 6m at 3.90% Cu and 25g/t Ag from 28m to EoH in PENP004
- 6m at 1.52% Cu and 19g/t Ag from 42m, 5m at 1.12% Cu and 10g/t Ag from 62m; and 6m at 1.77% Cu and 21g/t Ag from 72m to EoH in TGRC110
- 6m at 1.65% Cu and 16g/t Ag from 37m in TGRC109

<sup>1</sup> see ASX announcement 14 May 2024





# Junction Lode Discovery Opportunity

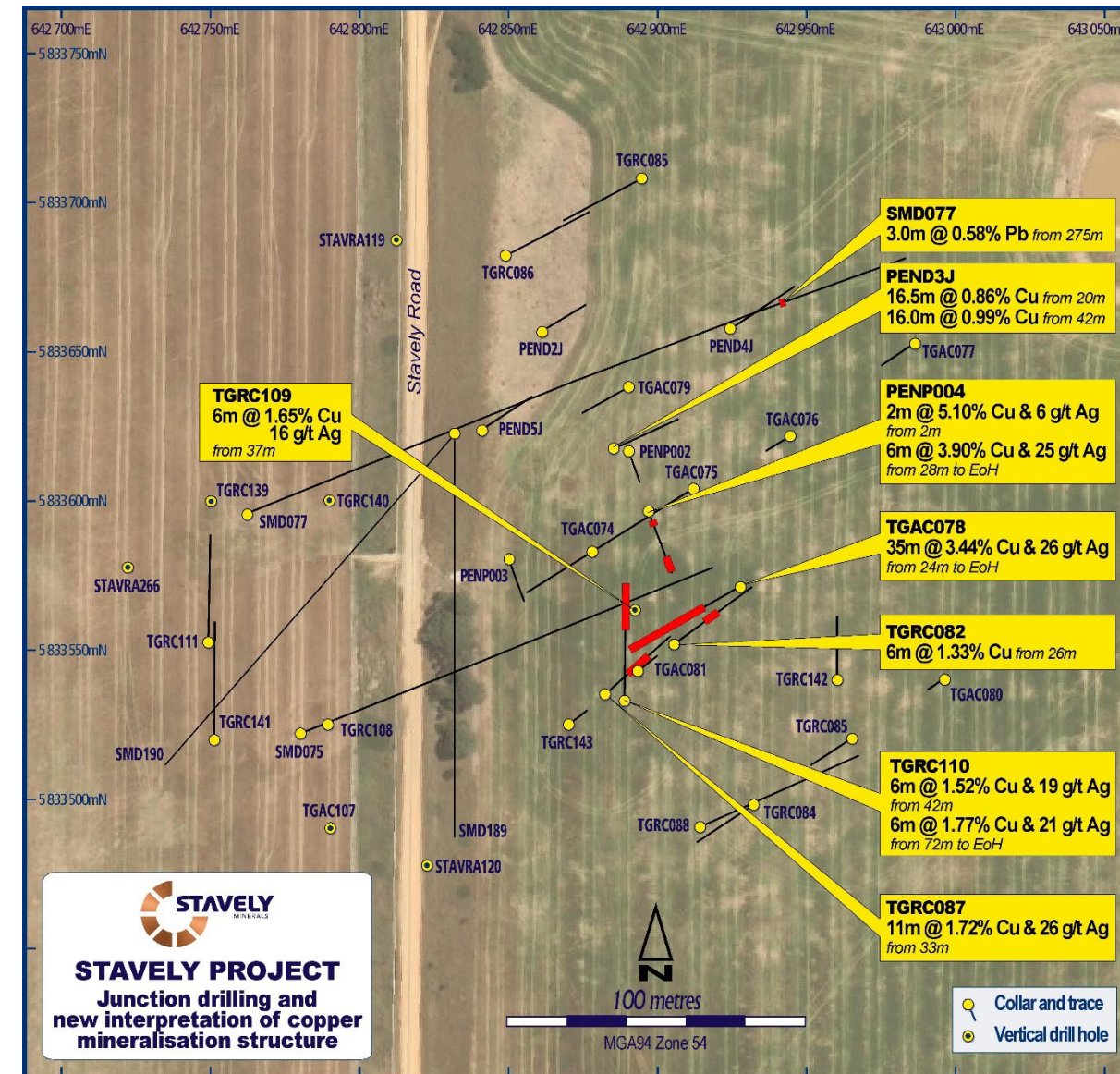


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All previous drilling not well oriented to properly test the Junction Lode.

<sup>1</sup> see ASX announcement 14 May 2024



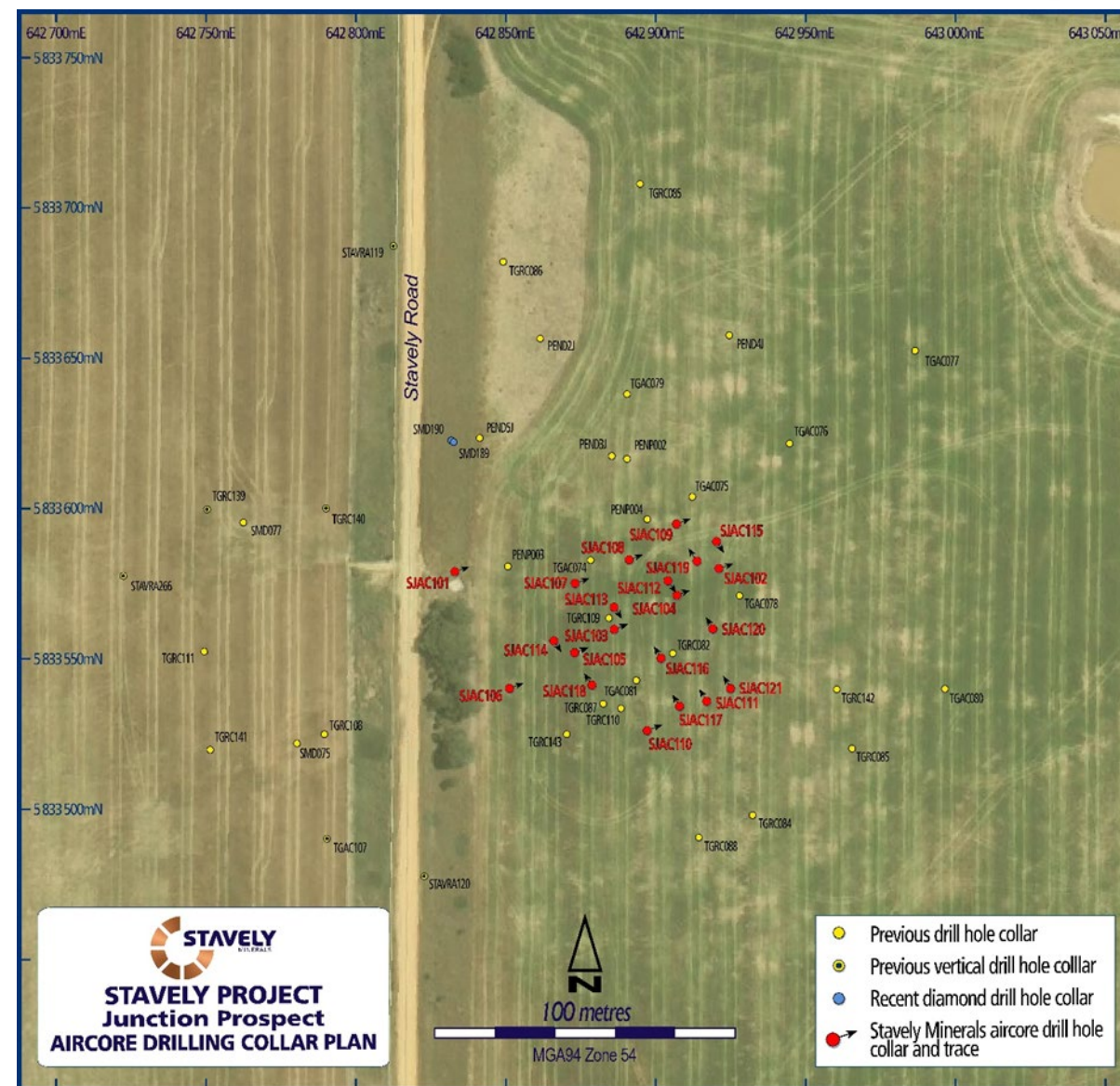


# Junction Lode Discovery Opportunity



Recent aircore drilling has solved the structural controls on high-grade copper mineralisation at the Junction prospect.

- 21 aircore drill holes successfully completed
- Structural controls resolved
- Assays pending



<sup>1</sup> see ASX announcement 3 September 2024





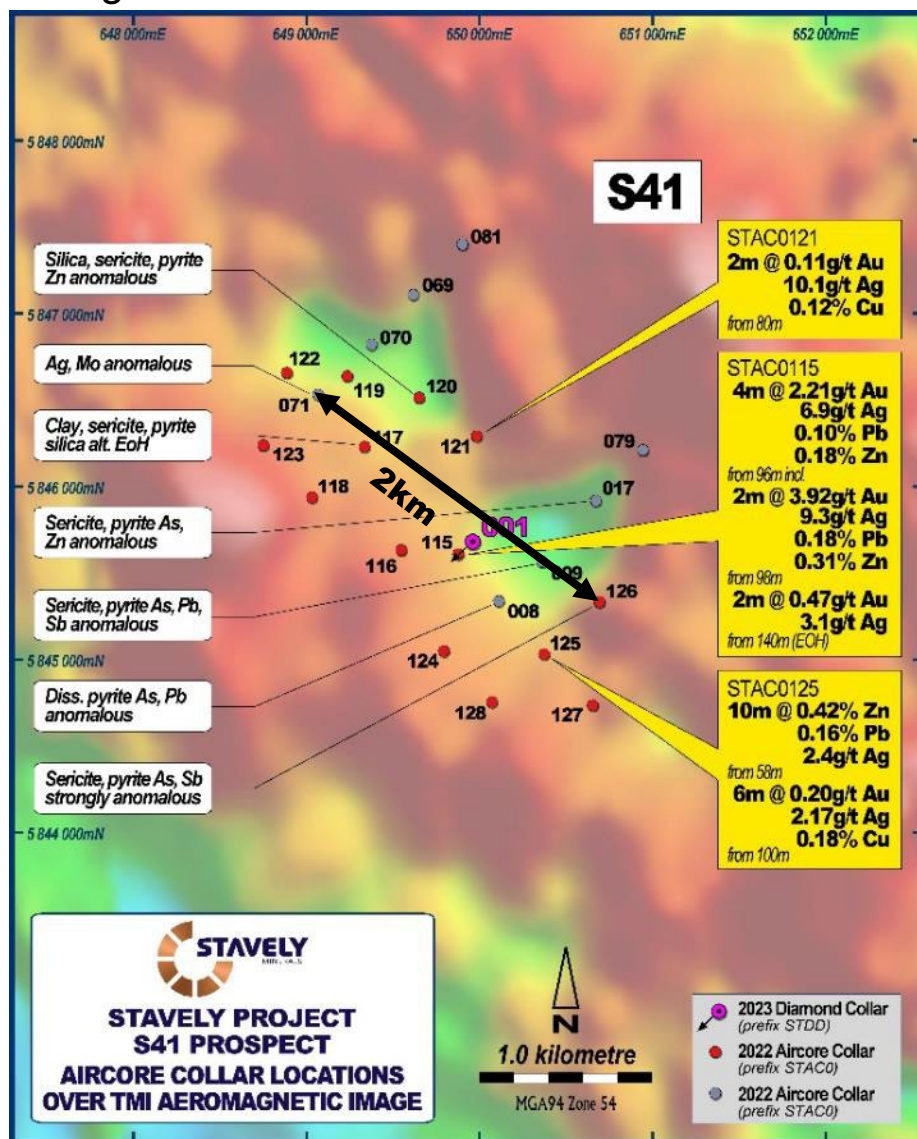
# S41 Breccia-Hosted Gold Target



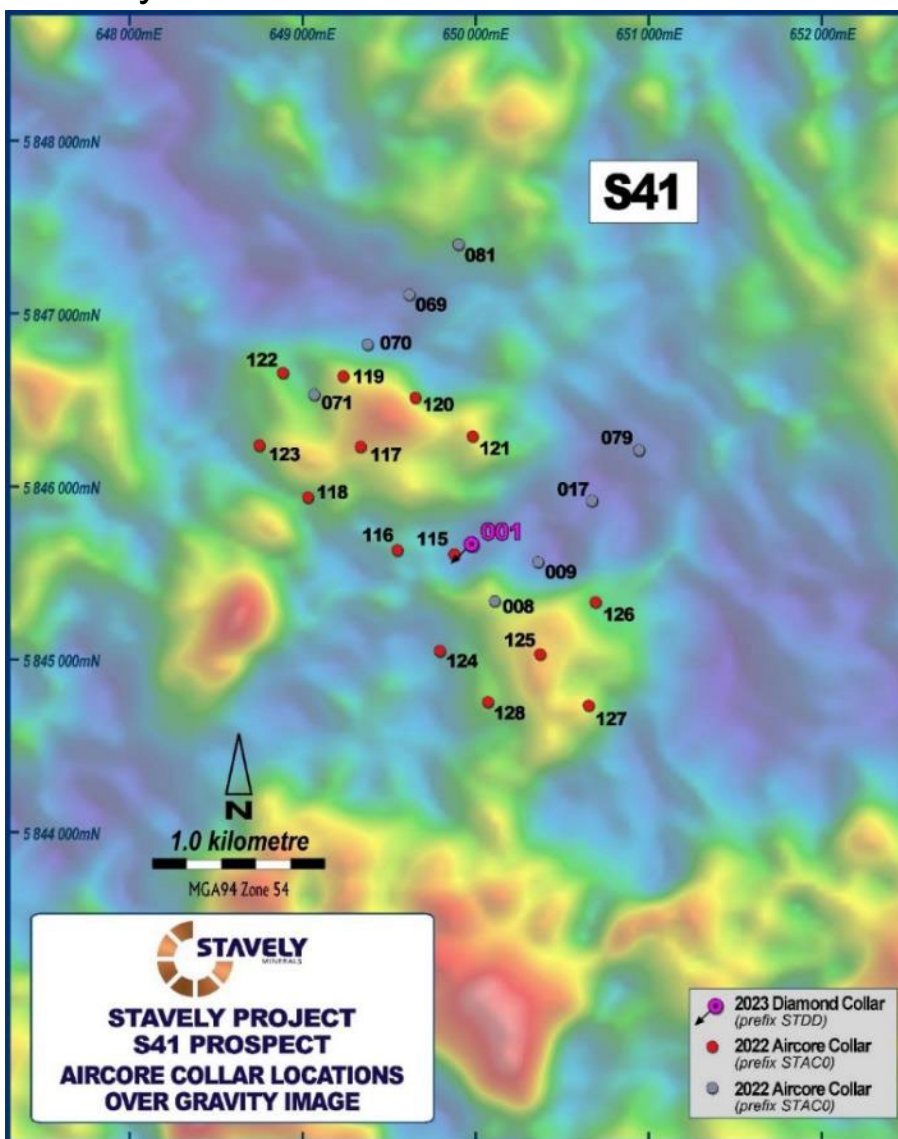
# Emerging Discovery? – The S41 Breccia Prospect



## Magnetics



## Gravity

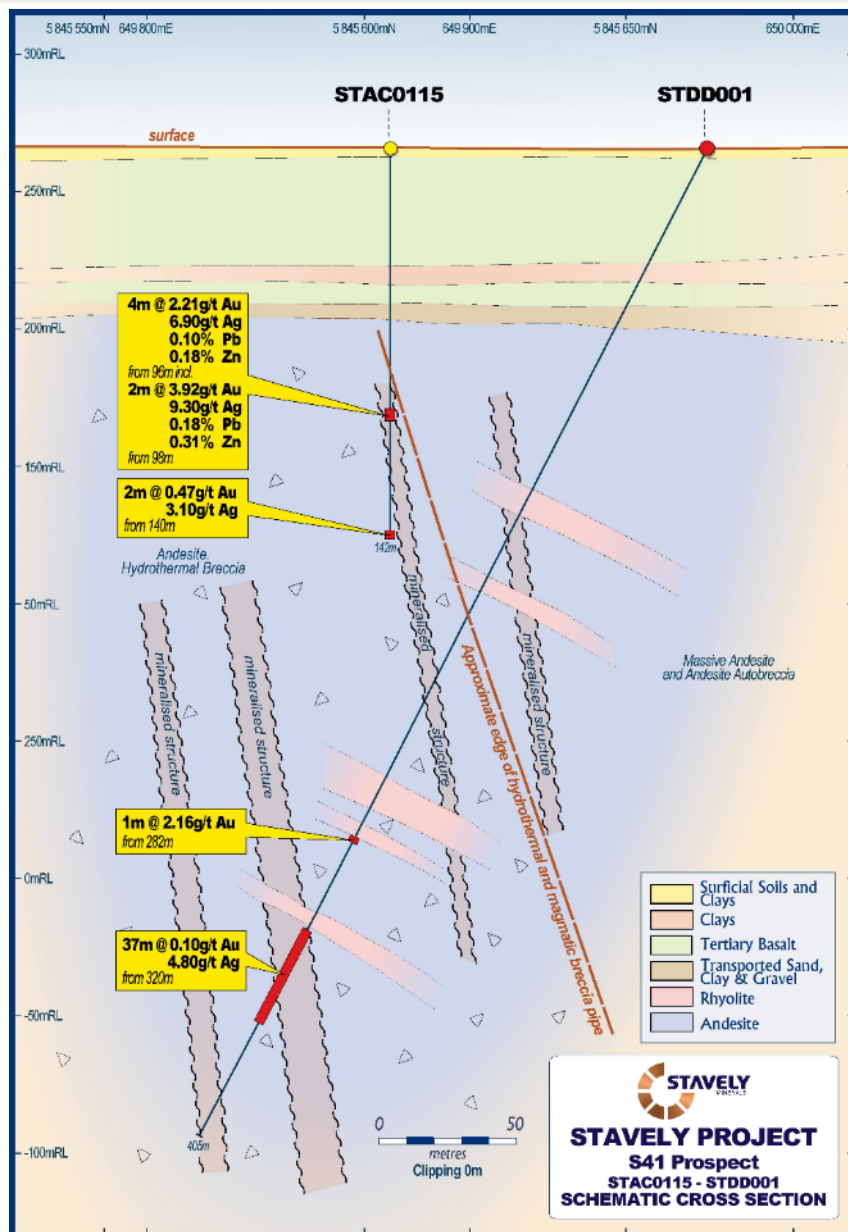


## S41 Prospect Aircore

- **4m at 2.21g/t Au** from 96m drill depth, including:
- **2m at 3.92g/t Au** from 98m in aircore drilling
- Large 2km alteration zone
- Strongly anomalous base metals and pathfinder geochemistry

See ASX announcement 19/04/2023 and available from [www.stavely.com.au](http://www.stavely.com.au)

# Emerging Discovery? – The S41 Breccia Prospect



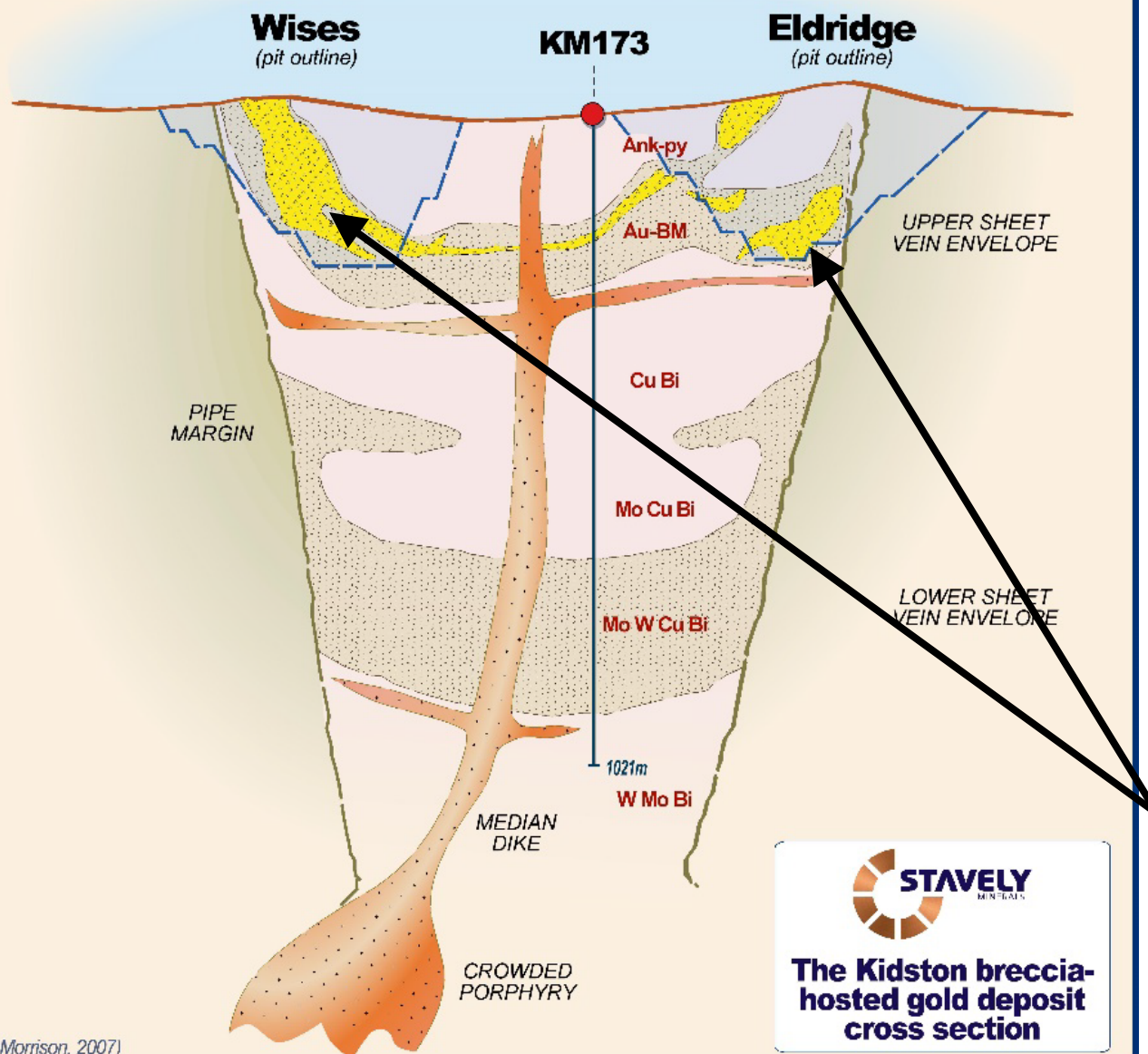
## S41 Diamond Drill Hole

- Only one diamond drill hole in the 2,000m x 750m interpreted breccia system
- **1m at 2.16g/t Au** from 282m drill depth
- **37m at 0.10g/t Au**, including:
  - **2m at 0.56g/t Au** from 320m, and
  - **5m at 24.3g/t Ag** from 353m
- Importantly demonstrated that there is gold and silver in the system associated with Mn-carbonate and Zn & Pb base metals
- Breccia-hosted systems host notoriously inconsistent gold mineralization eg. Kidston
- Potential for scale

See ASX announcement 26/04/2023 and available from [www.stavelly.com.au](http://www.stavelly.com.au)



# Emerging Discovery? – The S41 Breccia Prospect



(after G. Morrison, 2007)

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# The demise of sulphide nickel has been grossly exaggerated

- with apologies to Mark Twain



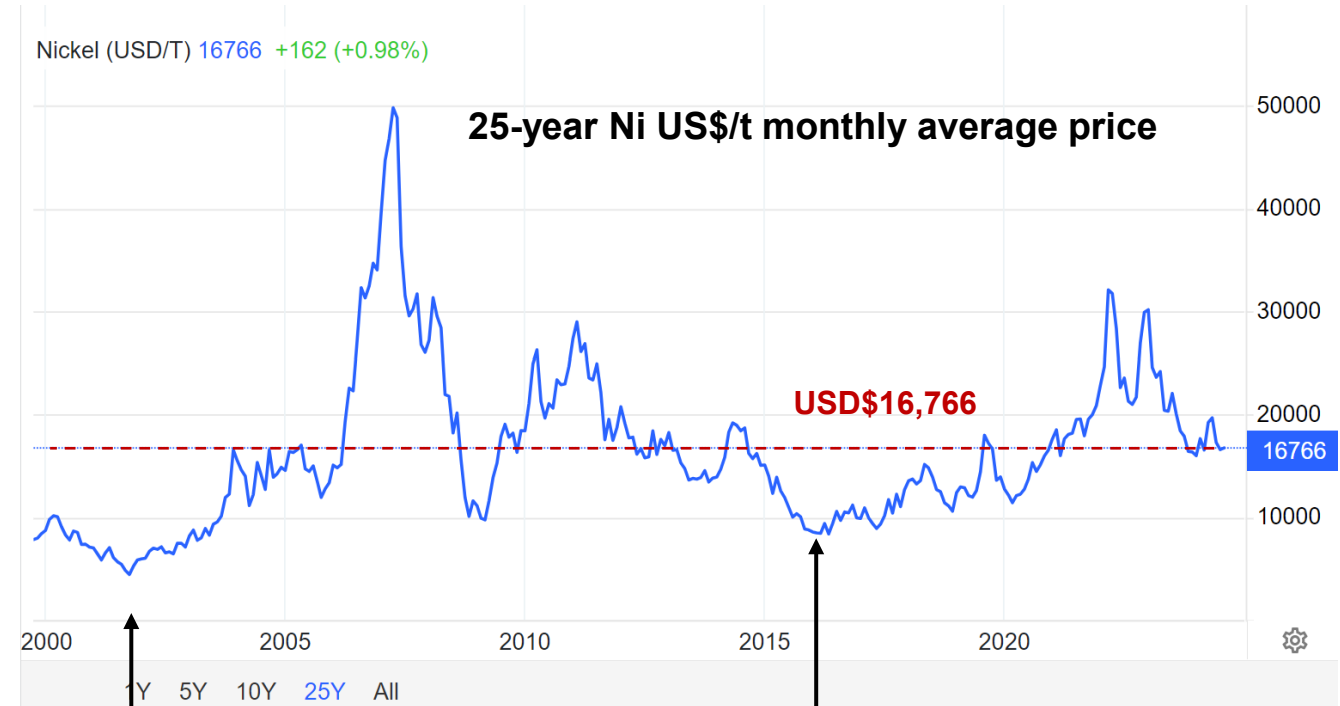
# The demise of sulphide nickel has been grossly exaggerated



The current nickel price is **not** at historic lows

- Emily Ann commences Ni production with ~US\$6,000/t nickel price
- Nova-Bollinger commences production into a falling nickel price

Both were highly profitable.



Emily Ann Nickel Mine  
commences production

Nova-Bollinger Nickel Mine  
commences production

# Why Magmatic Nickel Sulphide?

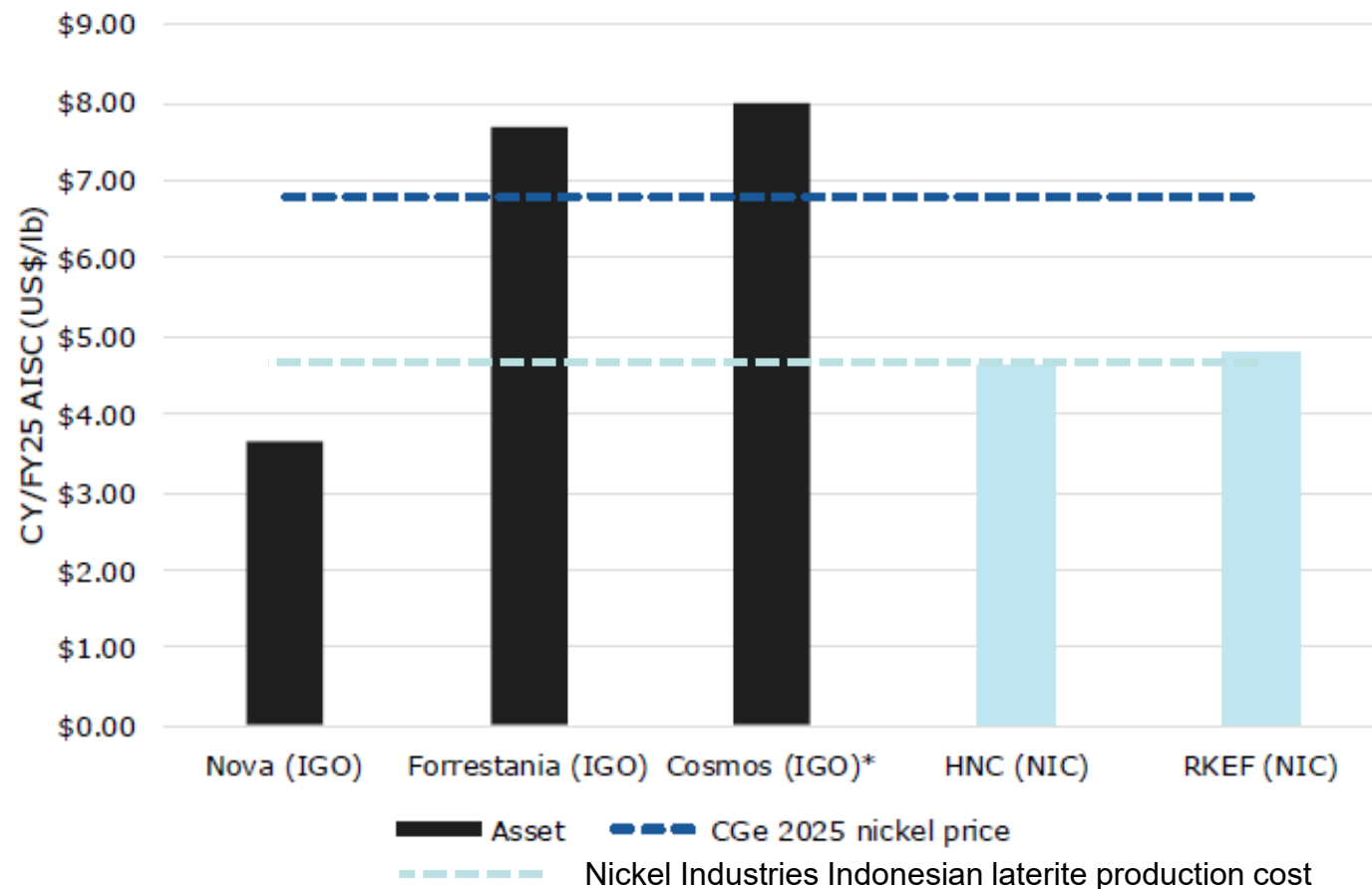


BUT – the key reason sulphide nickel will remain an attractive investment proposition is because a quality sulphide nickel deposit is lower on the cost curve, and more profitable per production unit than laterite nickel.

AND, despite approaching end-of-mine-life, the Nova-Bollinger cost base remains below the NIC Indonesian laterite nickel cost base.

Nova-Bollinger is a magmatic Nickel sulphide style of deposit, along with Norilsk, Voisey's Bay and Jinchuan – the lowest-cost nickel producers globally.

Figure 15: FY25E AISC comparison shows the challenge IGO is facing with two of its key nickel assets



Source: Canaccord Genuity estimates (modified)

Note: Forrestania operations are delivering into US\$32,000/t hedges



# Why Magmatic Nickel Sulphide?

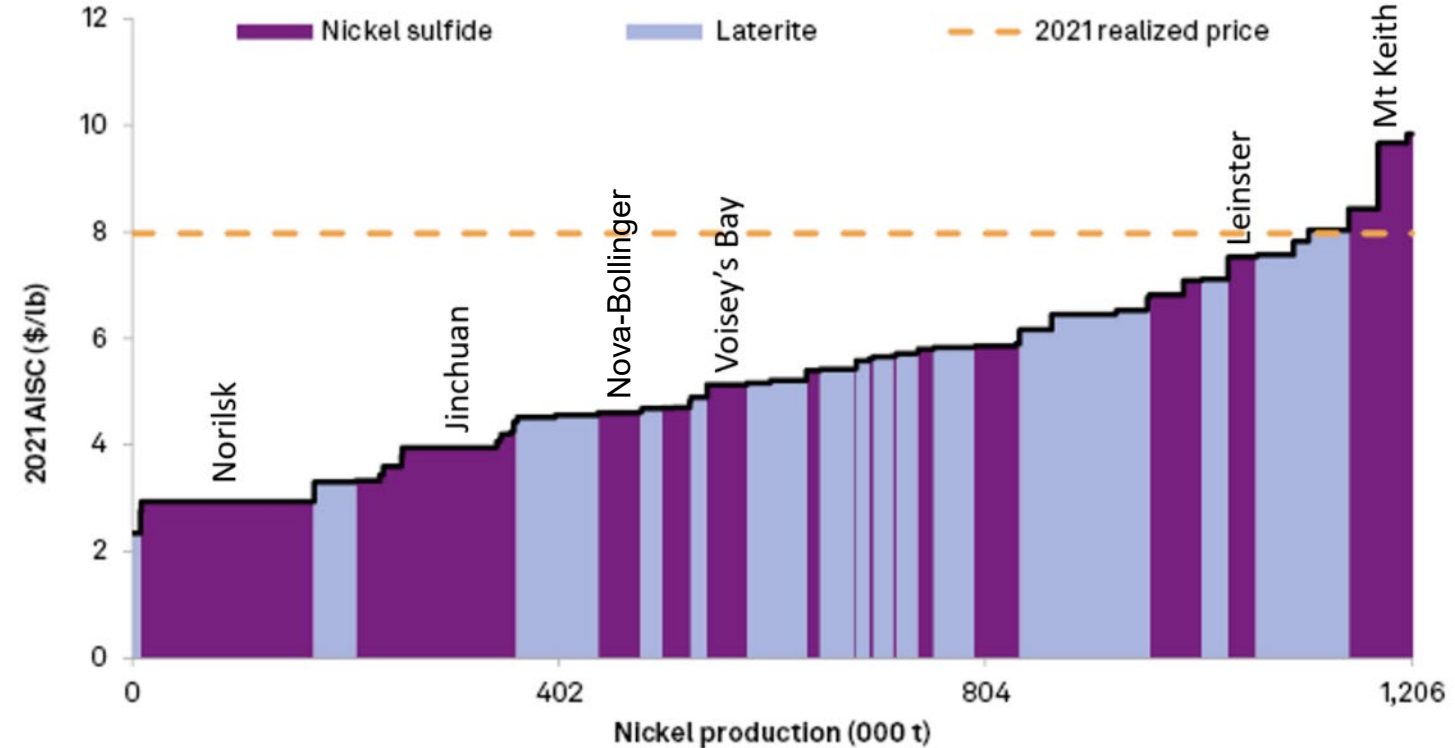


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2021 nickel cost curve by asset type



Data as of June 22, 2022.  
AISC = all-in sustaining cost  
Consensus price forecast scenario, coproduct costs.  
Source: S&P Global Market Intelligence

Indonesian laterite nickel production dominates the third quartile of global production cost

Note: Forrestania operations are delivering into US\$32,000/t hedges



**If you follow the crowd and don't like nickel, close your eyes and stick your fingers in your ears...**

**A\$83.5m**

– Nova-Bollinger EBITDA Q4 2024 **+95%** of Q4 IGO earnings

**A\$294m**

– Nova-Bollinger EBITDA FY2024 **+50%** of FY24 IGO earnings

IGO is a A\$4.1B company

*"The stock market is filled with individuals who know the price of everything, but the value of nothing."*  
— Phillip Fisher

**Don't be a sheep, do your own research.**

Source: IGO June 2024 Quarterly Report and Presentation



# Magmatic Nickel Sulphide v Kambalda-Style Nickel Sulphide

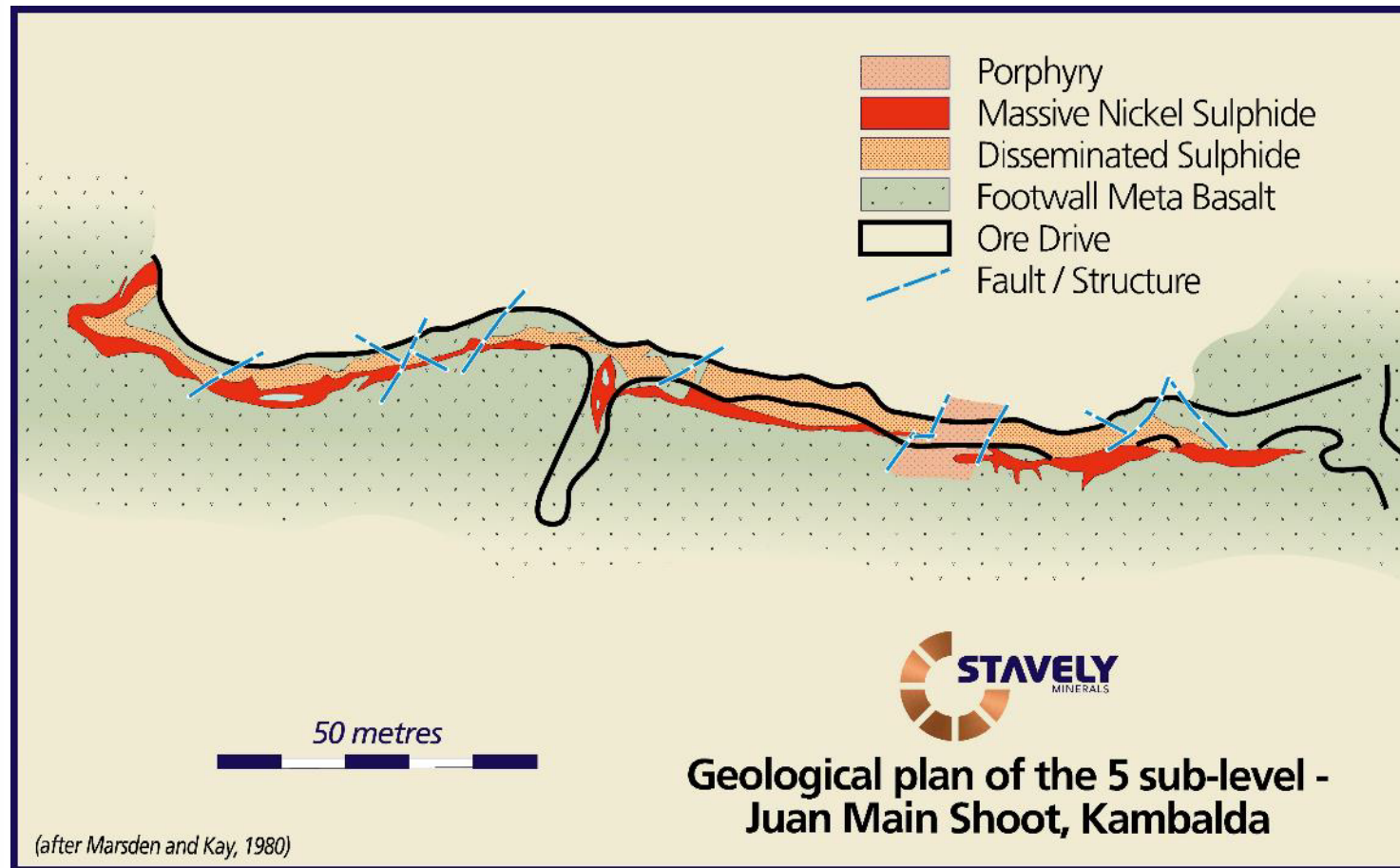


**Komatiite-hosted nickel sulphides are naturally high-cost producers**

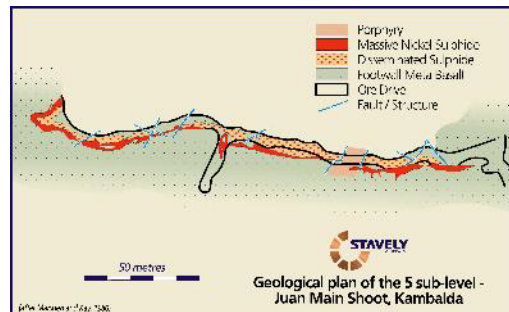
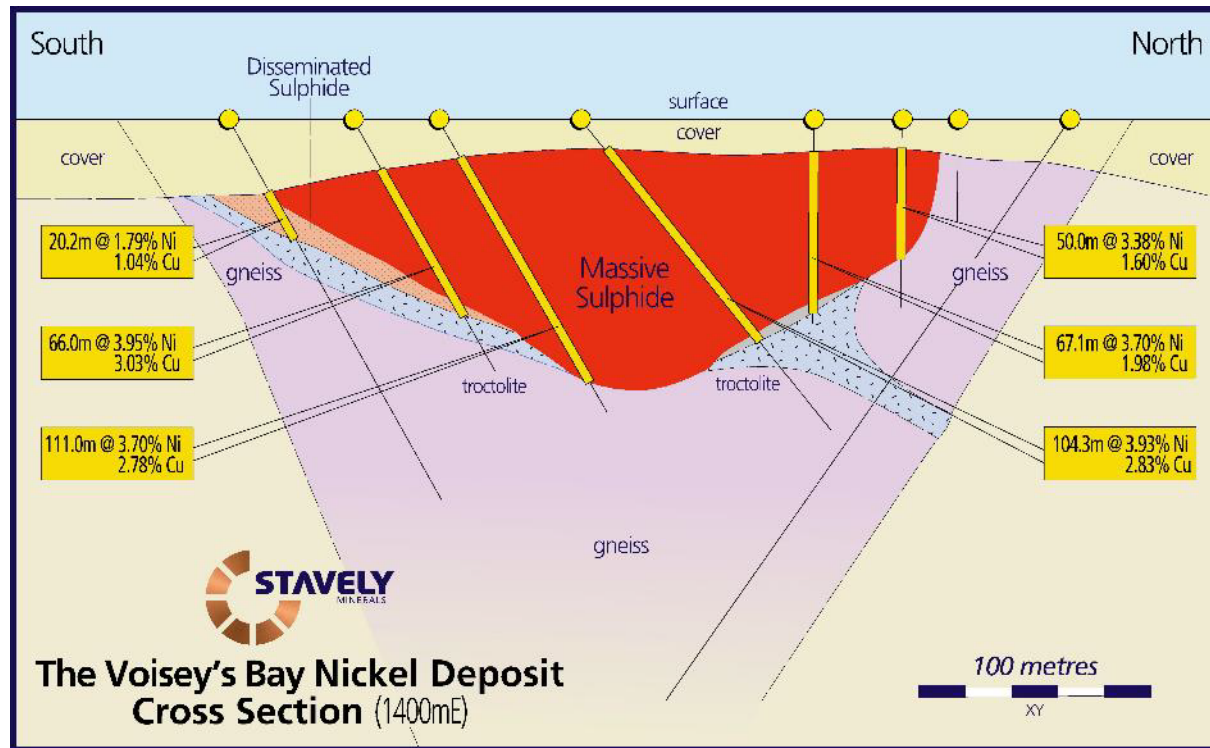
Comparatively low-tonnage per vertical metre Komatiite sulphide operations (eg. Mincor, Leinster) are higher cost than magmatic nickel deposits.

**Magmatic nickel sulphides are amongst the lowest-cost producers**

The lower half of the global nickel production cost curve is dominated by magmatic nickel deposits with high tenor and high tonnage per vertical metre.



# Magmatic Nickel Sulphide v Kambalda-Style Nickel Sulphide



Voisey's Bay Ovoid Zone  
compared to Level 5,  
Juan Main Shoot,  
Kambalda – **to scale**

50m

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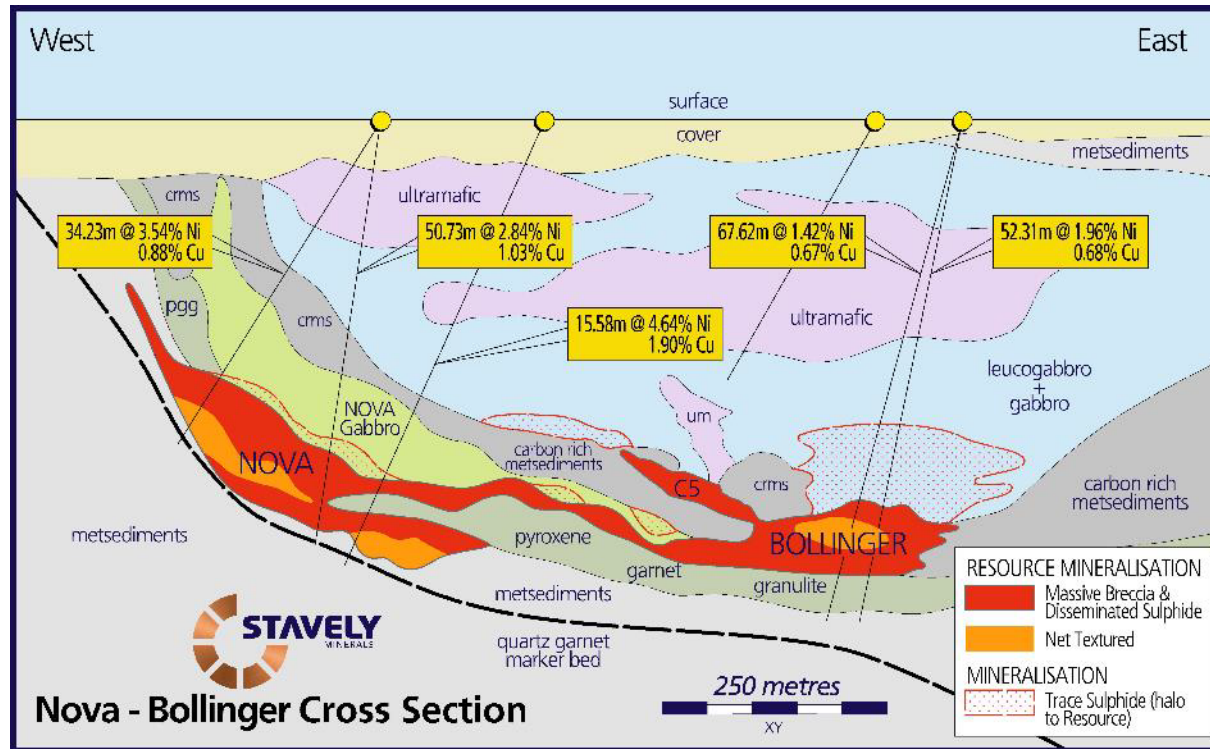
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**Mining Economics Rule 1: It's all about payable metal per vertical metre!**



# Magmatic Nickel Sulphide v Kambalda-Style Nickel Sulphide



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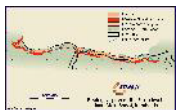
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Nova-Bollinger compared to Level 5, Juan Main Shoot, Kambalda – to scale

50m

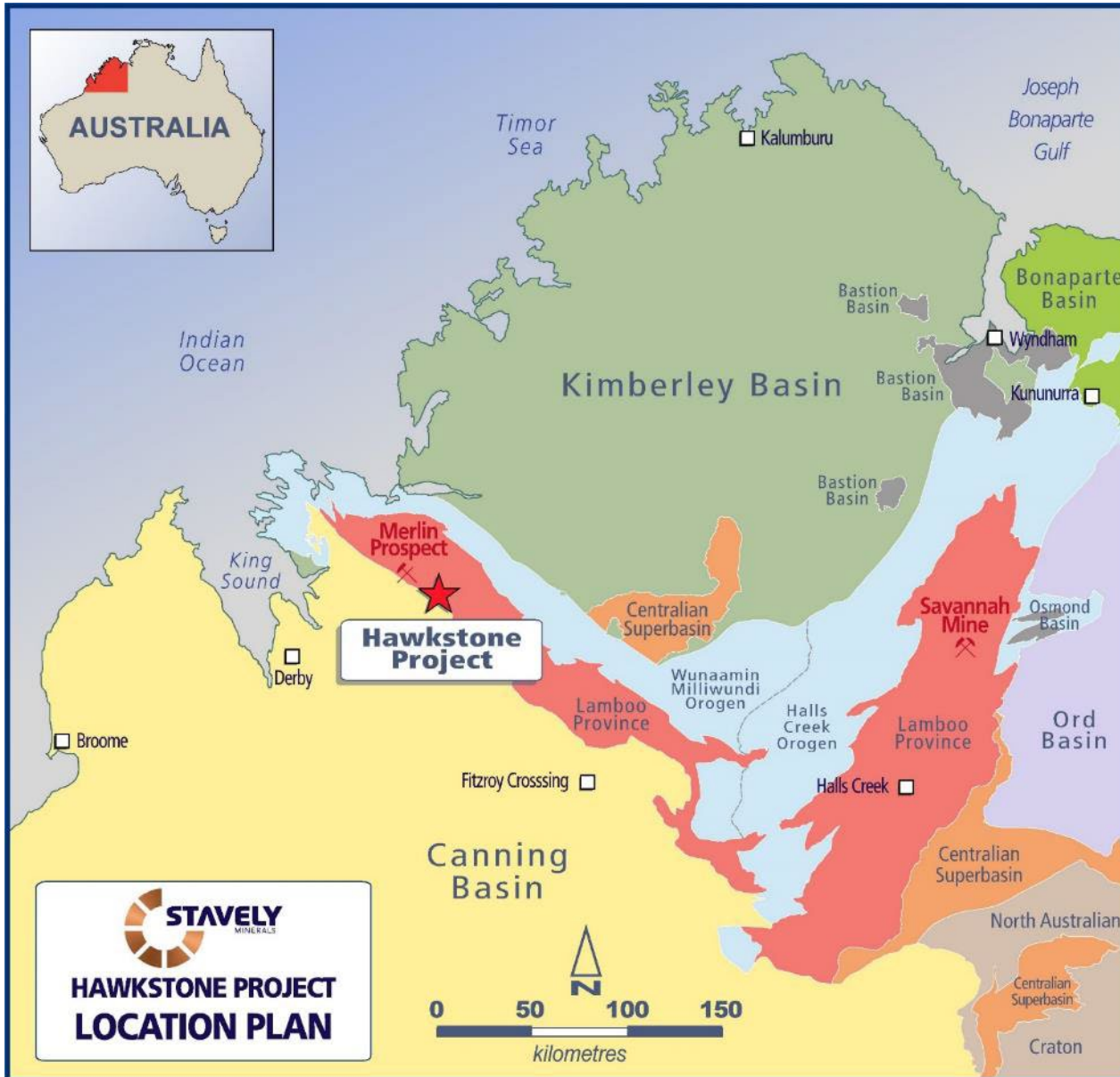




# The Hawkstone Magmatic Nickel-Copper Project



# Hawkstone Ni-Cu-Co Project



## Hawkstone Ni-Cu-Co Project

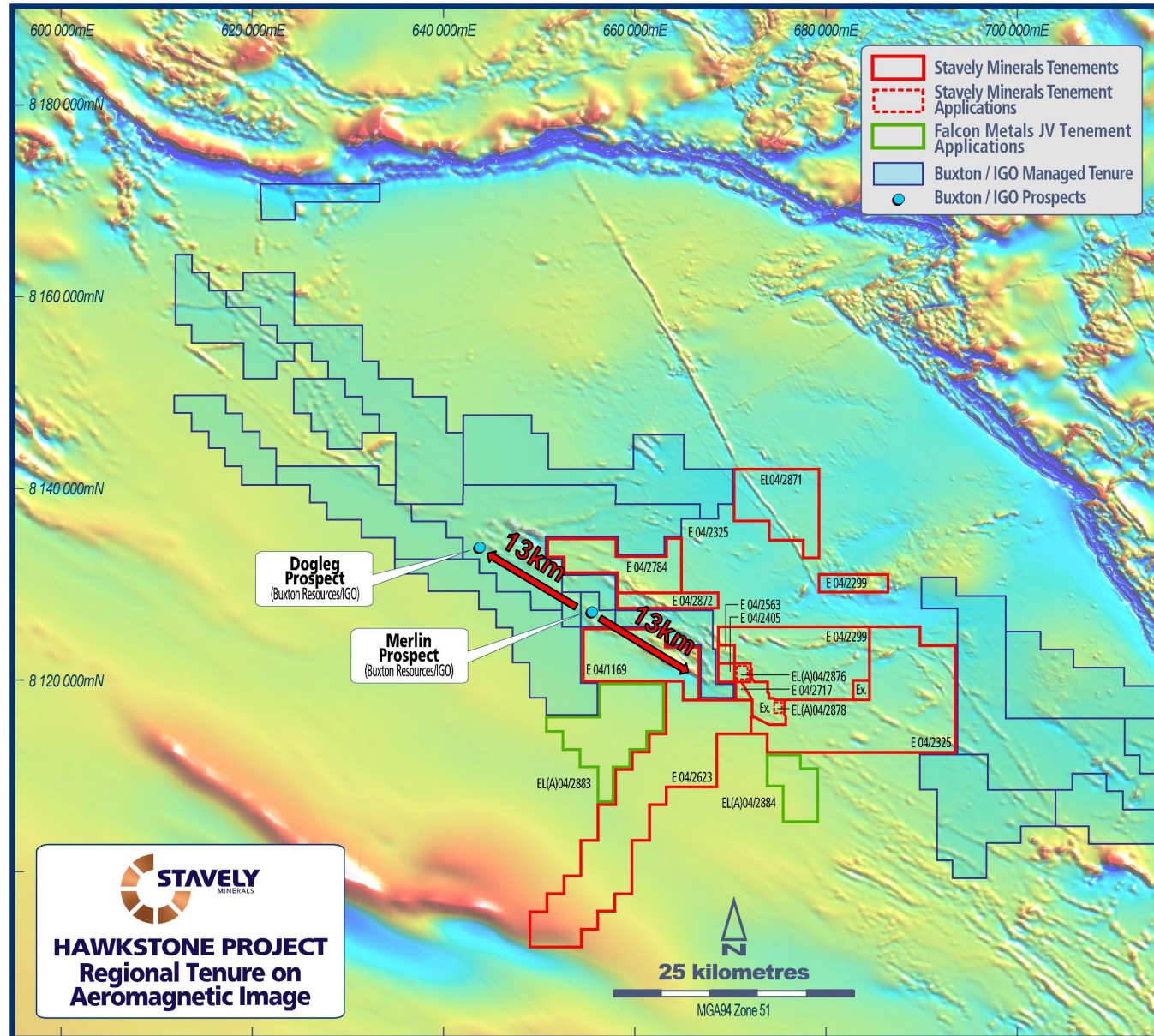
- ~870km<sup>2</sup> 100% tenure
- ~30km of the prospective Ruins Dolerite
- Buxton / IGO JV Merlin discovery 1km from tenement boundary
- Complementary field season (winter) to the Stavelly Project (summer)
- Potential for Li pegmatites as there are historic Sn-W-Ta mines in Stavelly Minerals' tenure

<sup>1</sup> Buxton Resources website

<sup>2</sup>  $AuEq = \text{nickel grade (\%)} \times ((\text{AUD nickel price} / 0.000453592) / 100) / (\text{AUD gold price} / 31.10347)$

See ASX announcement 23/05/2023 and available from [www.stavely.com.au](http://www.stavely.com.au)

# Hawkstone Ni-Cu-Co Project



## Hawkstone Ni-Cu-Co Project

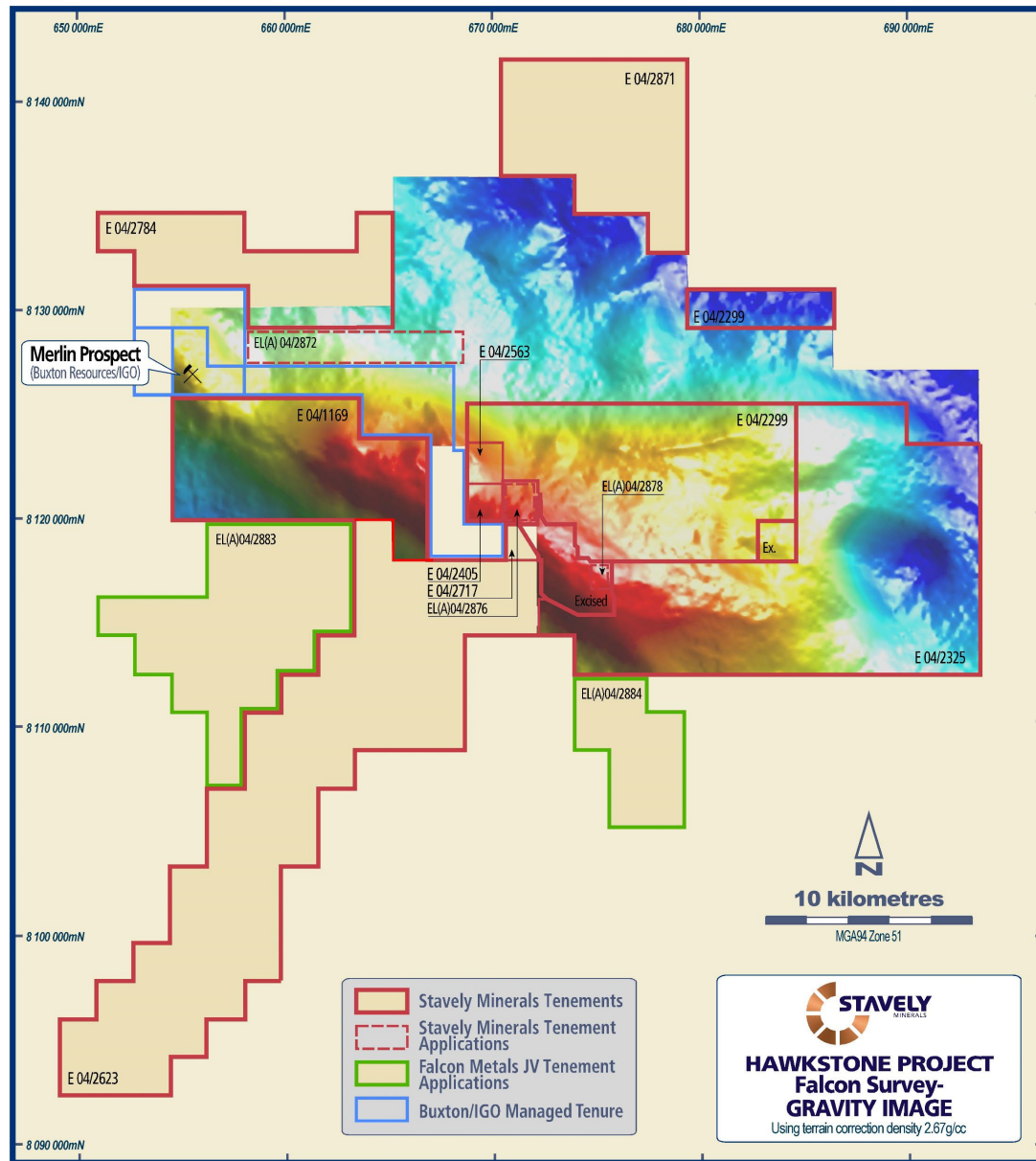
**NEW** IGO / BUX Dogleg nickel discovery (Quick Shears) 13km NW of Merlin / Double Magic<sup>1</sup>:

- 23WKDD003 – 13.85m @ 4.35% Ni, 0.34% Cu and 0.15% Co from 177.34m, incl.
- 5.86m @ 7.47% Ni, 0.31% Cu and 0.25% Co
- 23WKDD004 – 2.89m at 4.17% Ni, 0.83% Cu and 0.14% Co from 233.63m

*“The Dogleg Prospect recently discovered by IGO/BUX JV is considered...to be the most significant greenfields Ni discovery in Australia this decade.”*

<sup>1</sup>See ASX:BUX announcement 03/10/2023, 19/10/2023 and 6/11/2023



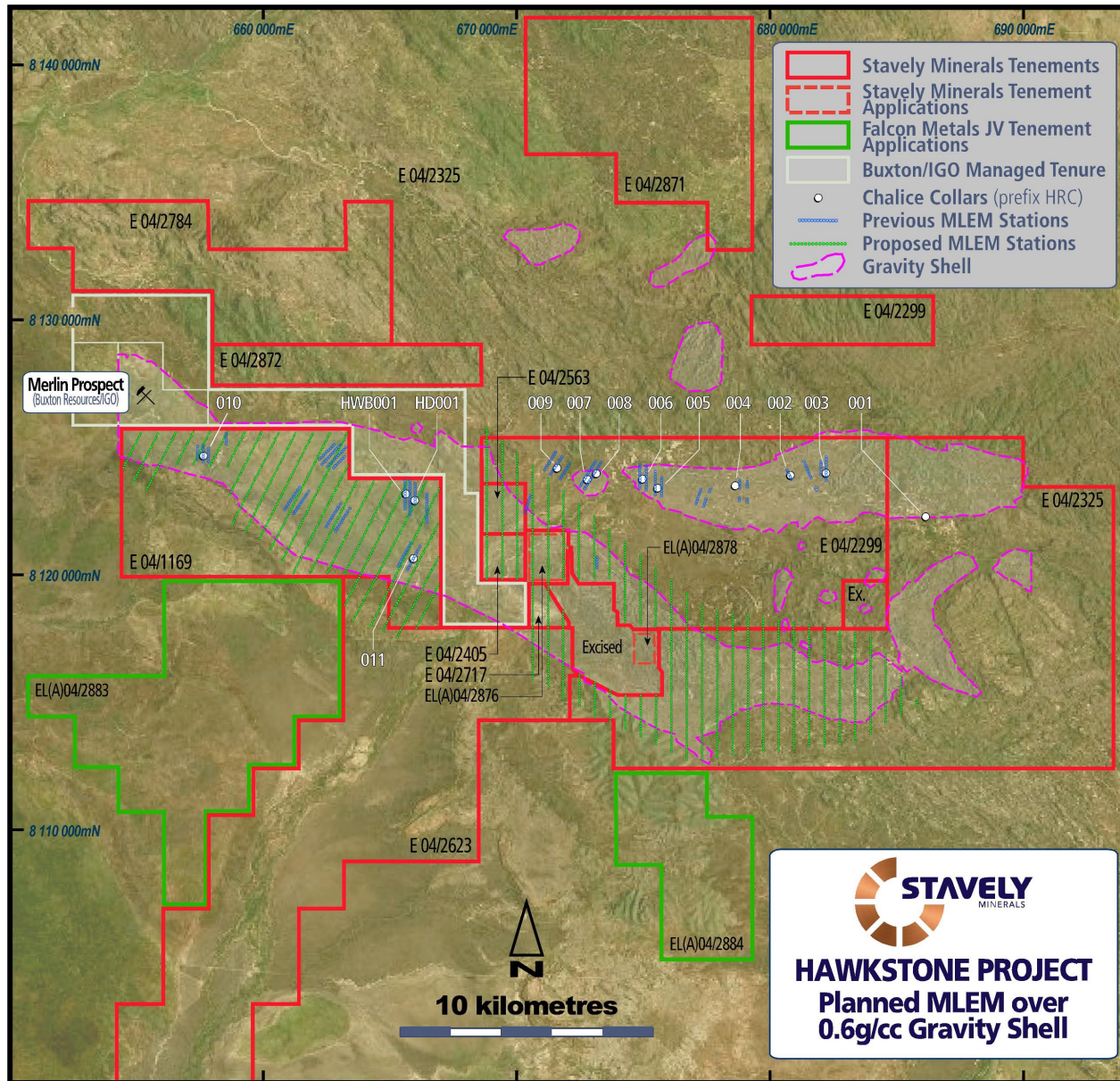


## Hawkstone Ni-Cu-Co Project

- Stavely Minerals has flown the Falcon Gravity gradiometer and magnetic survey over the Hawkstone Project
- Gravity data shows an interpreted ~20km mafic / ultramafic magma chamber at depth
- Perfect host environment for a magmatic nickel sulphide deposit in a terrain with demonstrated high-tenor magmatic nickel sulphide endowment

<sup>1</sup>See ASX:BUX announcement 03/10/2023, 19/10/2023 and 6/11/2023

# Hawkstone Ni-Cu-Co Project



## Hawkstone Ni-Cu-Co Project

- First-stage of on-ground exploration to commence with a large moving-loop EM (MLEM) survey
  - WA EIS co-funding grant of up to **\$230,000**
- Next stage RC drilling of shallow conductors to 200m
  - WA EIS co-funding grant of up to **\$170,000**
- Deeper MLEM conductor to be tested with a deep diamond drill hole to 800m
  - WA EIS co-funding grant of up to **\$220,000**

**Hawkstone can be progressed to a decision to drill, and be drill tested with modest well-leveraged expenditure.**

<sup>1</sup>See ASX:BUX announcement 03/10/2023, 19/10/2023 and 6/11/2023





# Work Programme

# 12-month Work Programme



ACTIVITY	Q3 2024						Q4 2024						Q1 2025						Q2 2025					
STAVELY PROJECT																								
Junction Prospect																								
Aircore drilling New Interpretation																								
Aircore results	✓																							
S41 Breccia-hosted Gold																								
IP geophysical survey																								
Aircore drilling																								
Aircore results																								
Toora Road																								
Diamond drilling																								
S2 and S3 Porphyry Targets																								
Aircore drilling																								
HAWKSTONE PROJECT	✓																							
Falcon gravity gradiometer survey	✓																							
Re-processing all airborne and ground EM																								
Heritage clearances	✓																							
Ground EM over confirmed target areas																								
RC drill EM / gravity targets																								
RC drill results																								
Co-funded deep diamond drilling																								





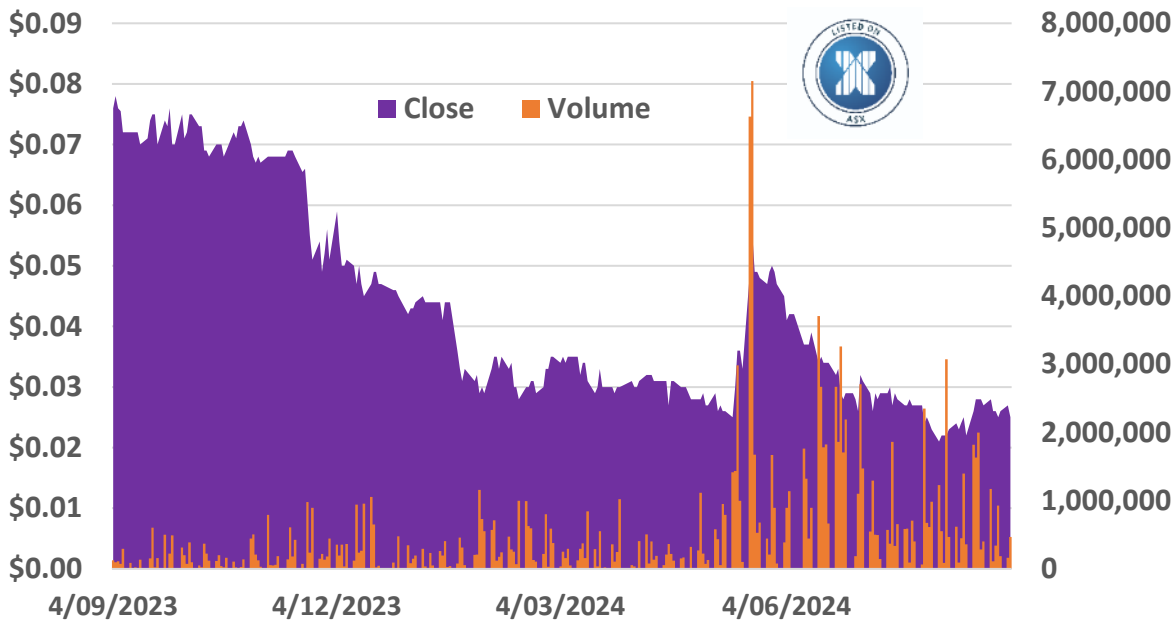
## CAPITAL STRUCTURE

ASX Ticker	SVY
Share Price (02/09/24)	\$0.027
Shares on Issue	482M
Cash (30/06/24)	\$3.7M
Market Capitalisation	\$13.M
Management and Staff	~10% equity

## Directors

Chris Cairns	Executive Chair
Jennifer Murphy	Technical Director
Peter Ironside	Non-Executive Director
Amanda Sparks	Non-Executive Director & Company Secretary
Rob Dennis	Non-Executive Director

## 12-month Share Price to 2 September 2024



# Summary – Key Investment Takeaways



- ✓ The Cayley Lode is a quality high-grade copper-gold-silver Mineral Resource from surface
- ✓ We believe there is potential for local processing of high-grade, small-footprint underground production – Commercial Viability Study has commenced
- ✓ Junction copper (aircore drilling complete, assays pending) and S41 gold discovery opportunities
- ✓ Markets have got it wrong on magmatic nickel sulphide
- ✓ Magmatic nickel sulphide deposits will always dominate the lowest-quartile of the cost curve
- ✓ Hawkstone Ni-Cu-Co Project provides an outstanding opportunity for discovery in an emerging high-tenor magmatic nickel sulphide province with demonstrated fertility
- ✓ BIG targets





# Copper and Nickel ...the Ultimate “Future-Facing” Commodities



3.6 tonnes of copper for every MW of wind power



4-5 tonnes of copper for every MW of photo-voltaic solar power

In order to migrate to a **low-carbon economy** and provide **alternative energy solutions**, certain strategic minerals are required to build the wind farms, solar farms, electric vehicles and high-technology needed to facilitate this transition.

**Copper and Nickel are some of the key metals required**

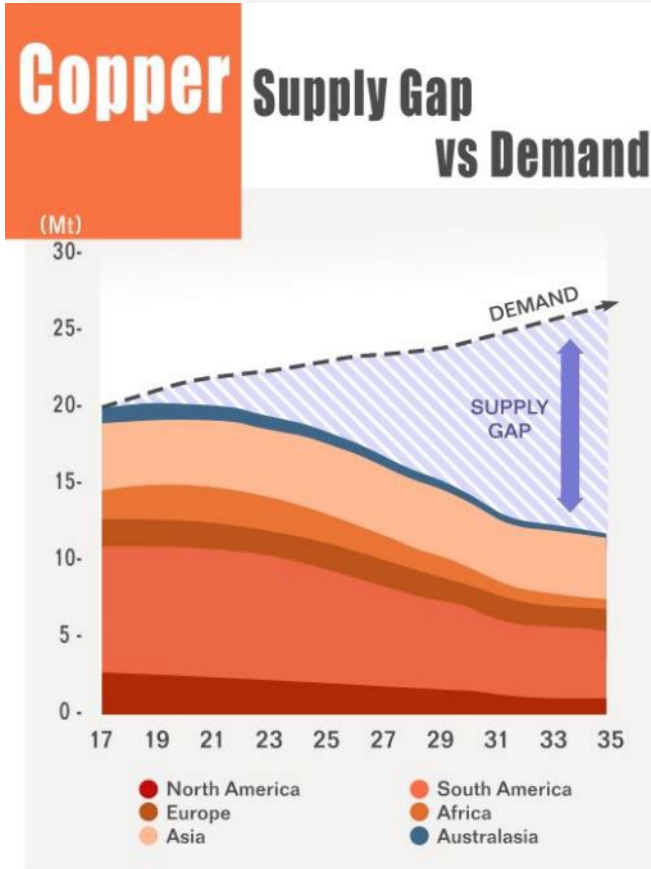


4 x more copper in an electric car than one with an internal combustion engine



6 types of bacteria killed by copper surfaces

# Copper and Nickel...Compelling Market Fundamentals



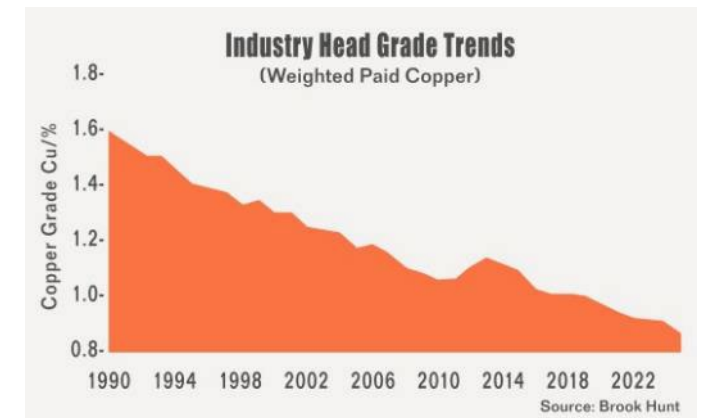
CRU estimates a 15 million tonne copper supply deficit by 2035

There are very few high-quality projects coming on stream in first world jurisdictions



Escondida, the world's largest copper mine:

- 1.72% Cu average head grade in 2007
- 0.52% Ore Reserve grade in 2019







MINERALS

ASX Code: SVY

**Contact Us:**  
**Stavely Minerals Limited**  
Level 1, 168 Stirling Highway  
Nedlands WA 6009  
[www.stavely.com.au](http://www.stavely.com.au)  
[info@stavely.com.au](mailto:info@stavely.com.au)  
Ph: 08 9287 7630

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# Appendix 1: Mineral Resources



# Appendix 1: Mineral Resources Classifications



Table 1. Cayley Lode Initial Mineral Resource estimate

Resource Material	Resource Category	Cut-off	Tonnes (Mt)	Grade	Cont.	Grade	Cont.	Grade	Cont.
		(Cu %)		(Cu %)	Cu (Mlbs)	(Au g/t)	Au (oz)	(Ag g/t)	Ag (oz)
Primary Mineralisation (OP)	Indicated	0.2	5.87	1.04	134.4	0.23	43,407	7	1,321,074
	Inferred	0.2	1.7	1.3	49	0.2	10,931	9	491,907
Sub-Total Primary OP			7.6	1.1	183	0.2	54,338	7.4	1,808,158
Primary Mineralisation (UG)	Indicated	1.0	-	-	-	-	-	-	-
	Inferred	1.0	1.7	1.8	69	0.2	10,931	6	327,938
Sub-Total Primary UG			1.7	1.8	69	0.2	10,931	6	327,938
Total Cayley Lode			9.3	1.23	252	0.23	65,000	7.1	2,100,000



Table 4. Stavely Minerals Total Mineral Resources estimates

Resource Material	Resource Category	Cut-off	Tonnes (Mt)	Grade	Cont.	Grade	Cont.	Grade	Contained Metal	Grade	Cont.
		(Cu %)		(Cu %)	(Mlbs Cu)	(Au g/t)	(oz Au)	(Ag g/t)	(oz Ag)	(Zn %)	(kt Zn)
Total Resources	Indicated	1	21.5	0.61	288	0.1	67,301	3.1	2,153,972	0.3	8
	Inferred	1	6.8	1.2	175	0.1	32,797	4.7	1,043,839	0.2	16
Total Stavely Minerals			28.3	0.75*	463	0.11*	100,000	3.5	3,200,000	0.2	24



<sup>1</sup> reported in compliance with the JORC Code 2012, see ASX announcement 14 June 2022