



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

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

May 2024



- This presentation contains only an overview of Stavely Minerals Limited (“Stavely” or the “Company”) and its activities and operations. The contents of this presentation, including matters relating to the geology and exploration potential of the Company’s projects, may rely on various assumptions and subjective interpretations which it is not possible to detail in this presentation and which have not been subject to any independent verification.
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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>**
- Junction Lode
  - 35m at 3.44% Cu and 26g/t Ag
  - New structural interpretation provides discovery opportunity

## Stavely Project - S41 Au-Ag Prospect

- ~2km long x 750m wide hydrothermal breccia, only 1 x diamond drill hole to date
- Carbonate – base metal – gold system e.g.:
  - *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
  - *E.g. 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**

MINERALS

ASX Code: SVY

# Stavelly Project

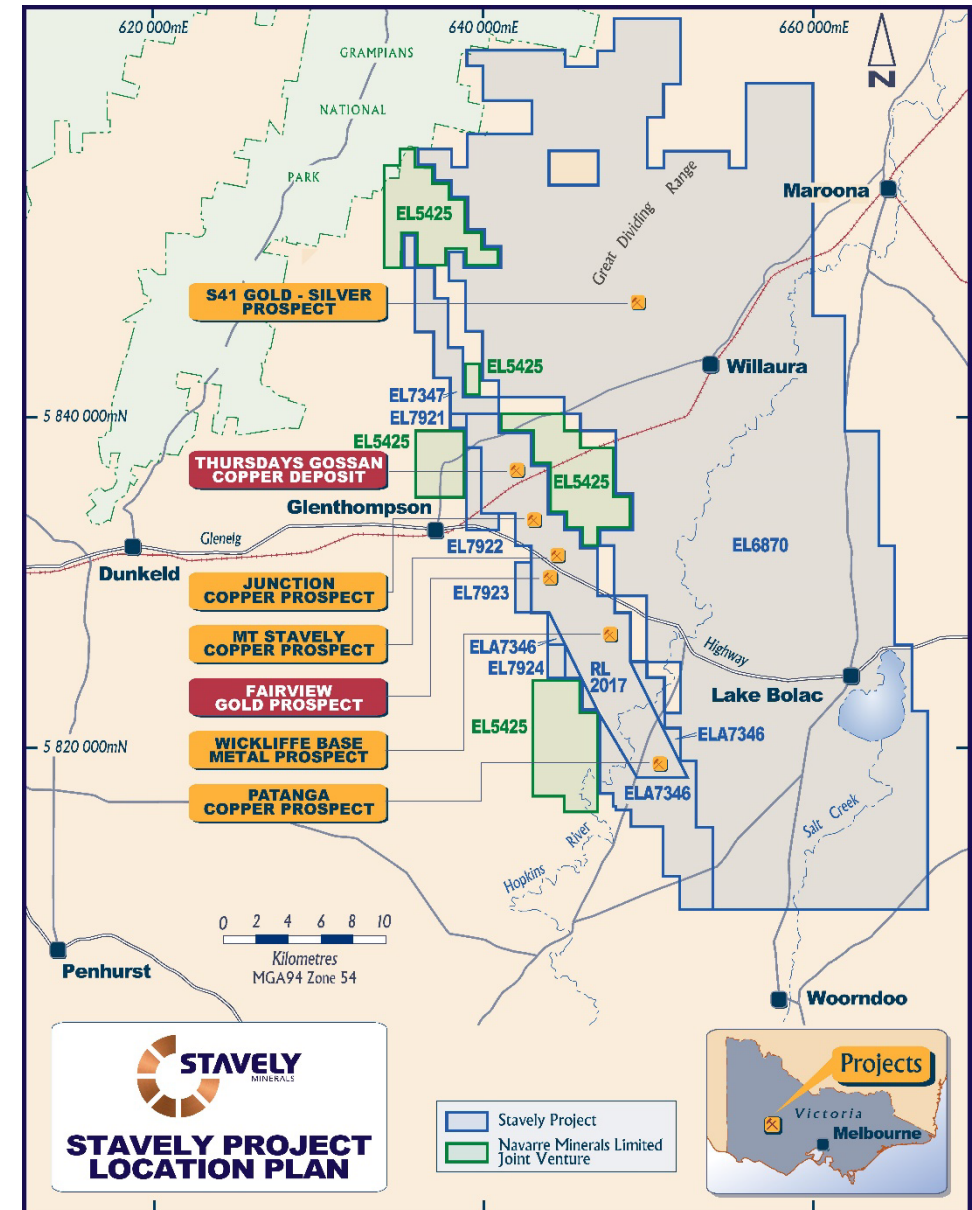
# Stavely Project



- **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





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## Junction Lode Discovery Opportunity



# Junction Lode Discovery Opportunity

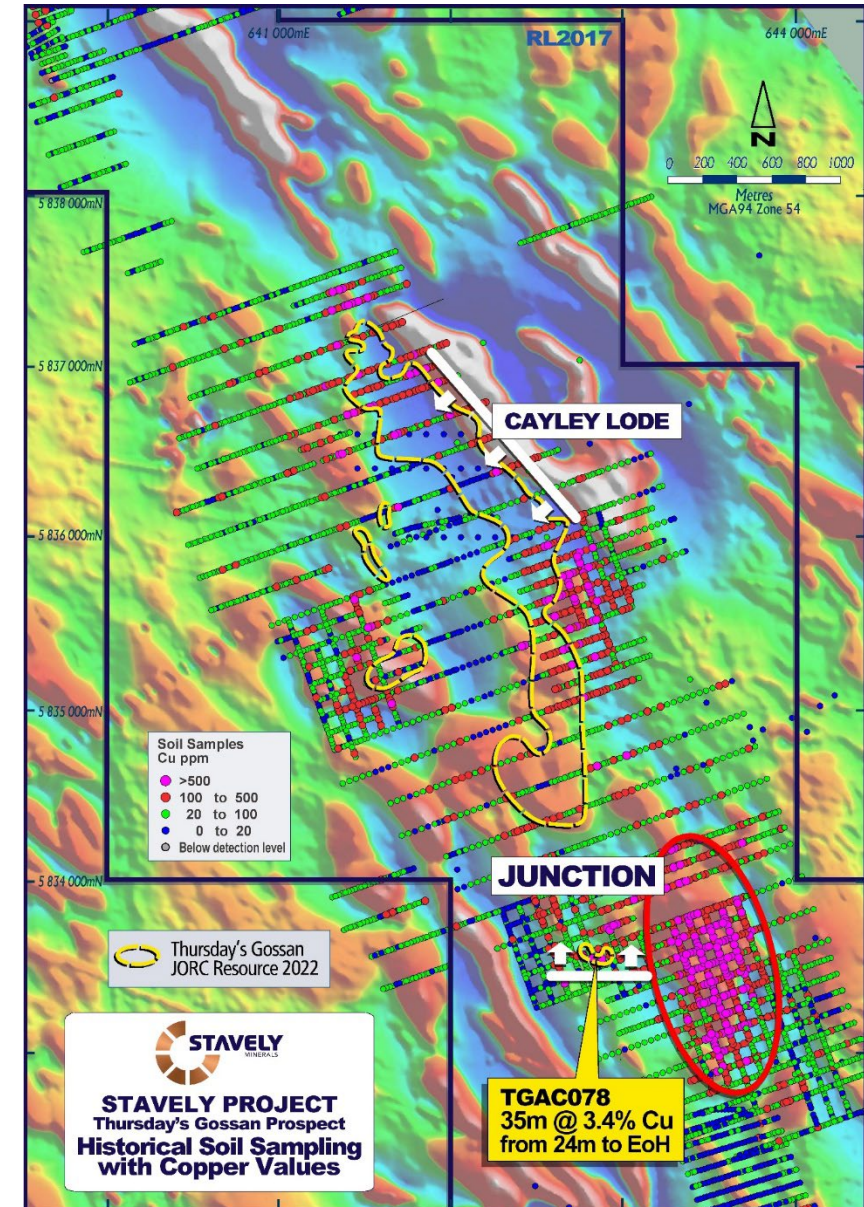


Junction is the largest copper in soil auger anomaly in the entire Stavely Project, located ~2km south of the Cayley Lode.

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

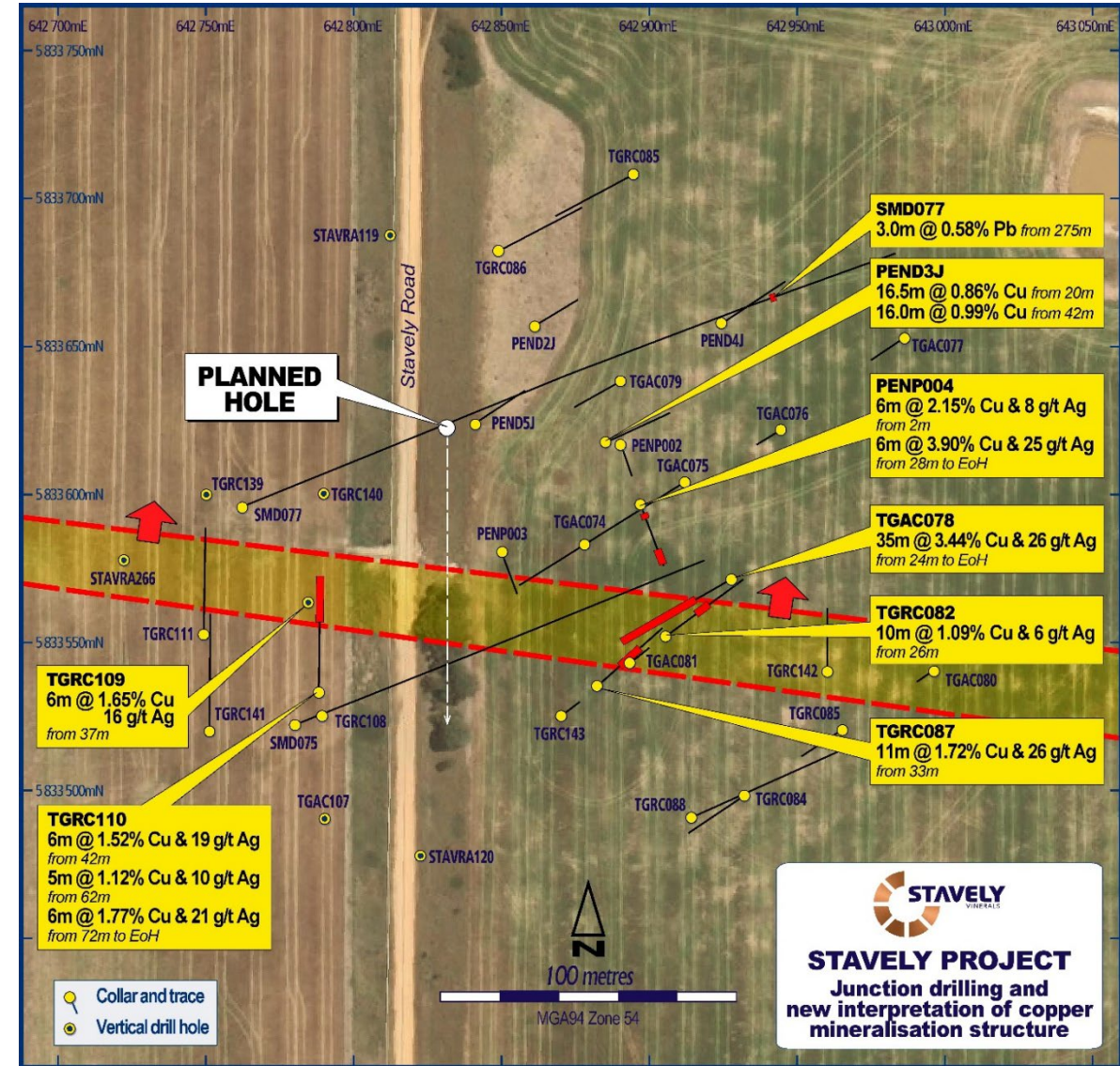


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All previous drilling not well oriented to properly test the Junction Lode. Diamond drill rig mobilising to test the east-west strike and north dip of new structural interpretation.

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





# Junction Lode Discovery Opportunity

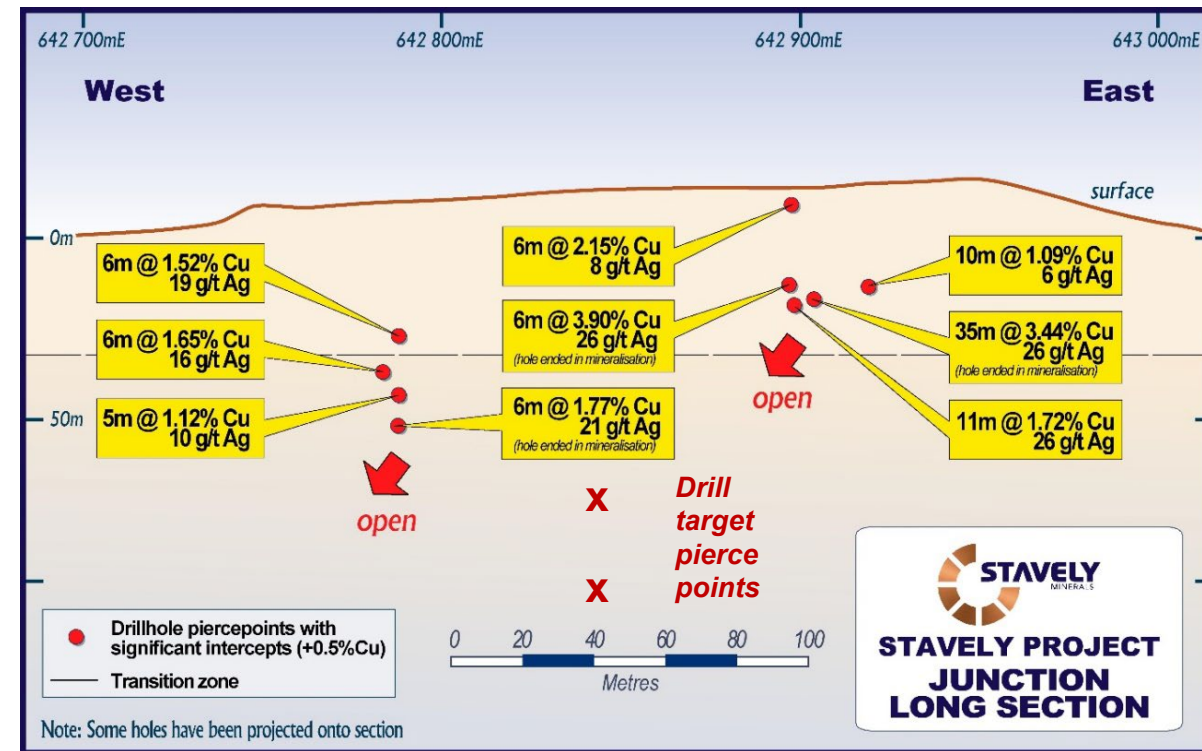


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Diamond drill rig mobilising to test the east-west strike and north dip of new structural interpretation between / below previous intercepts.

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

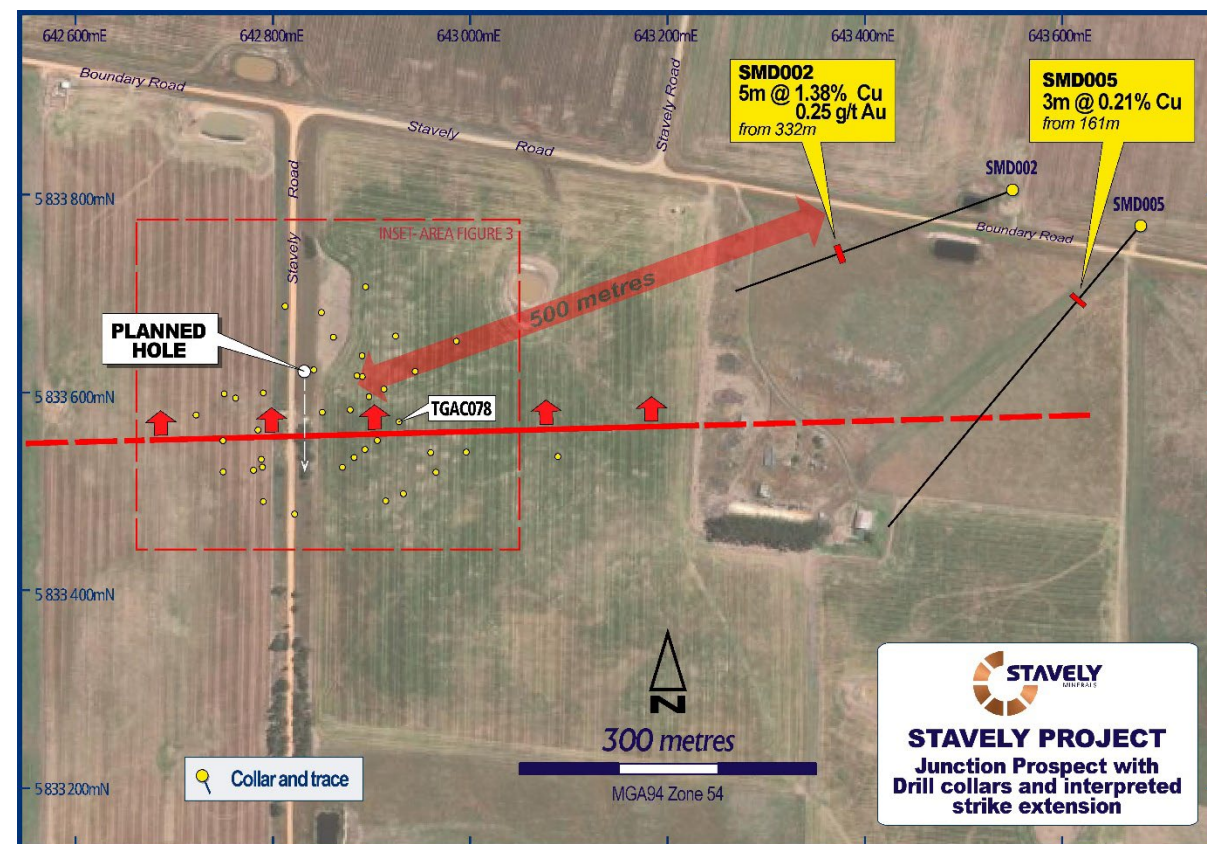


# Junction Lode Discovery Opportunity



Potential for +500m strike extend extending east to Stavely Minerals' diamond drill hole SMD002

- 5m at 1.38% Cu, 0.25g/t Au and 12g/t Ag from 332m



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





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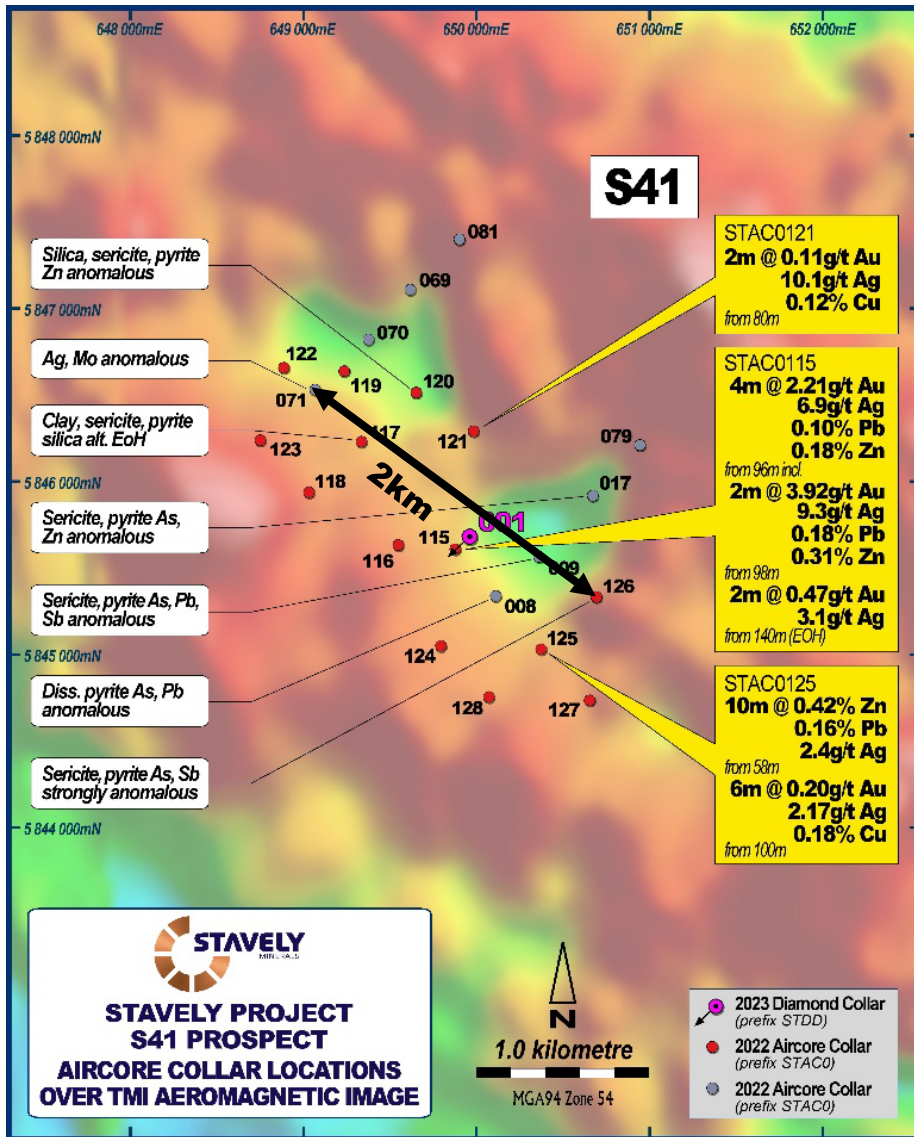
## S41 Breccia-Hosted Gold Target



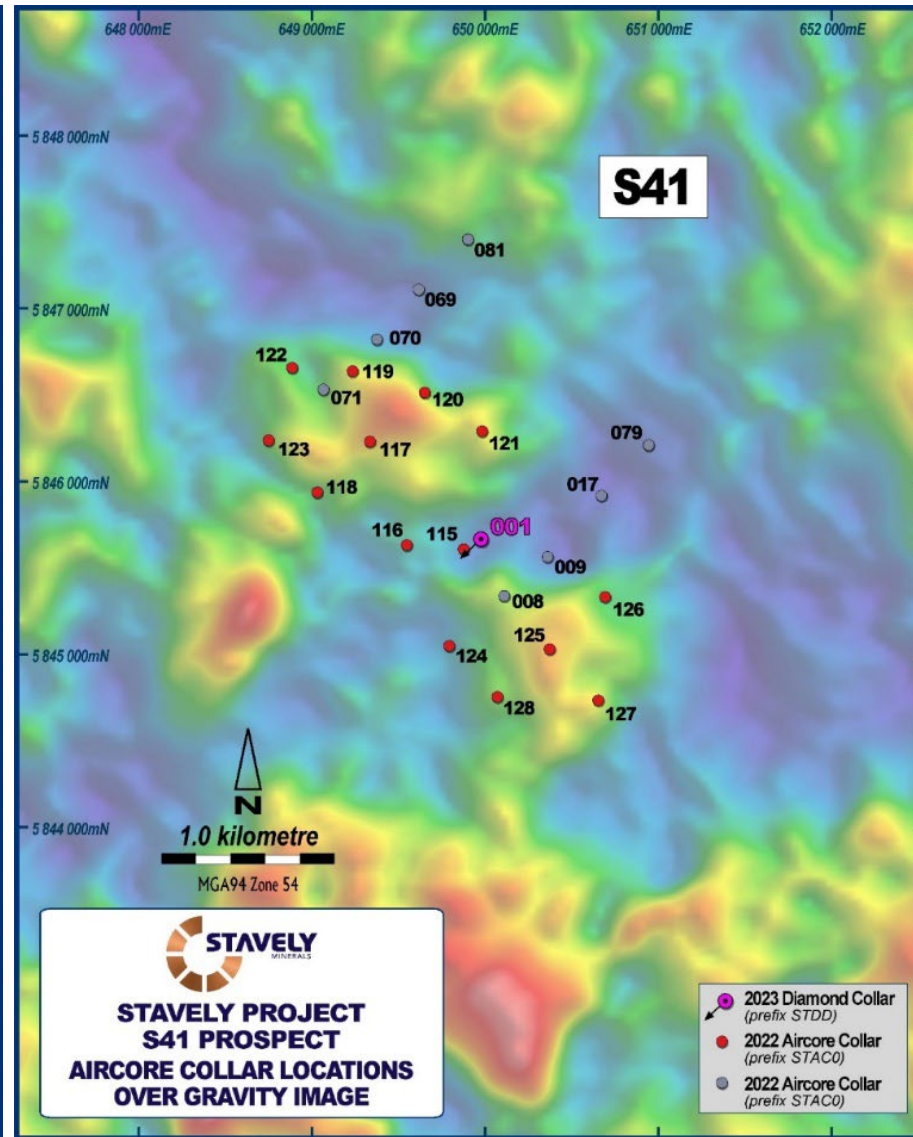
# Emerging Discovery? – The S41 Breccia Prospect



Magnetics



Gravity

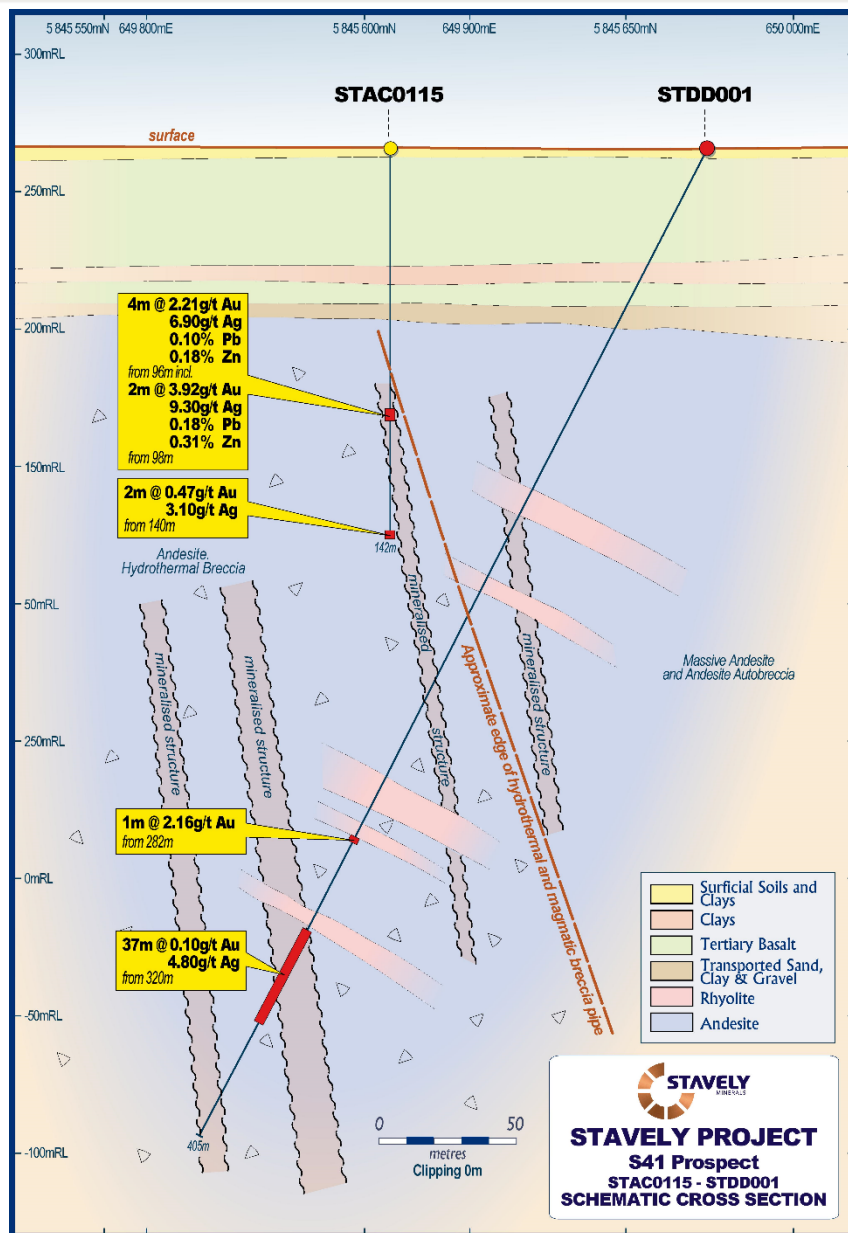


## S41 Prospect Aircore

- 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



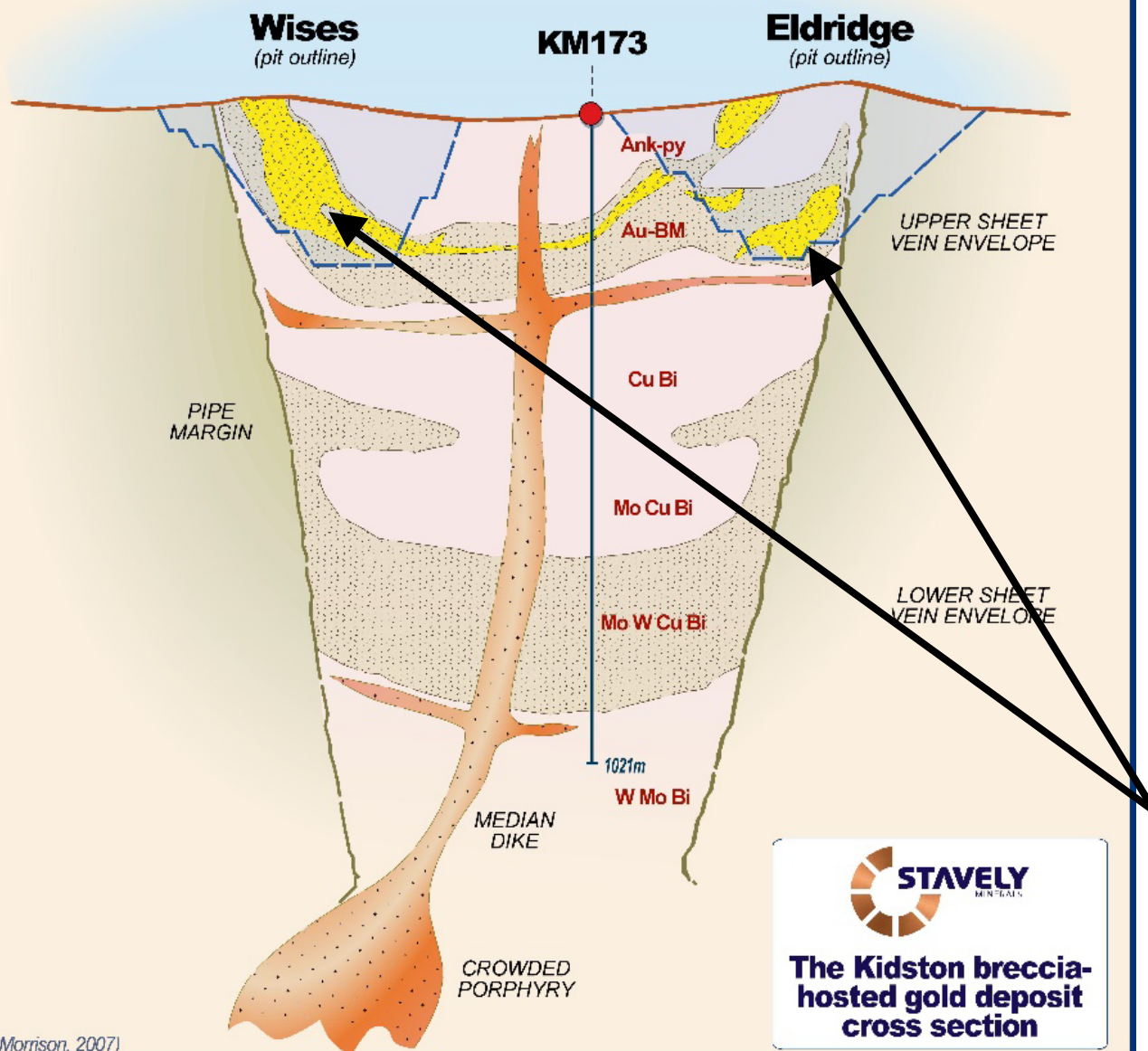
## S41 Diamond Drill Hole

- 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 e.g. Kidston
- Big systems

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



# Emerging Discovery? – The S41 Breccia Prospect



(after G. Morrison, 2007)

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



# The demise of sulphide nickel has been grossly exaggerated

- with apologies to Mark Twain



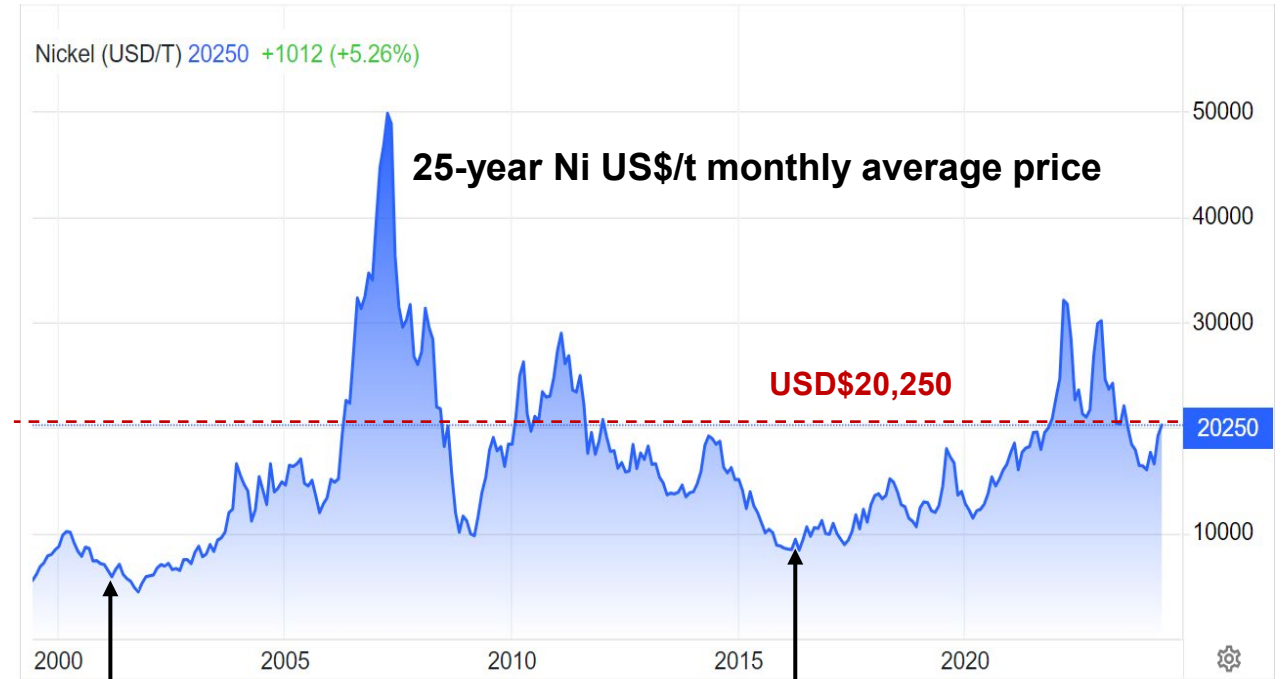
# The demise of sulphide nickel has been grossly exaggerated



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?

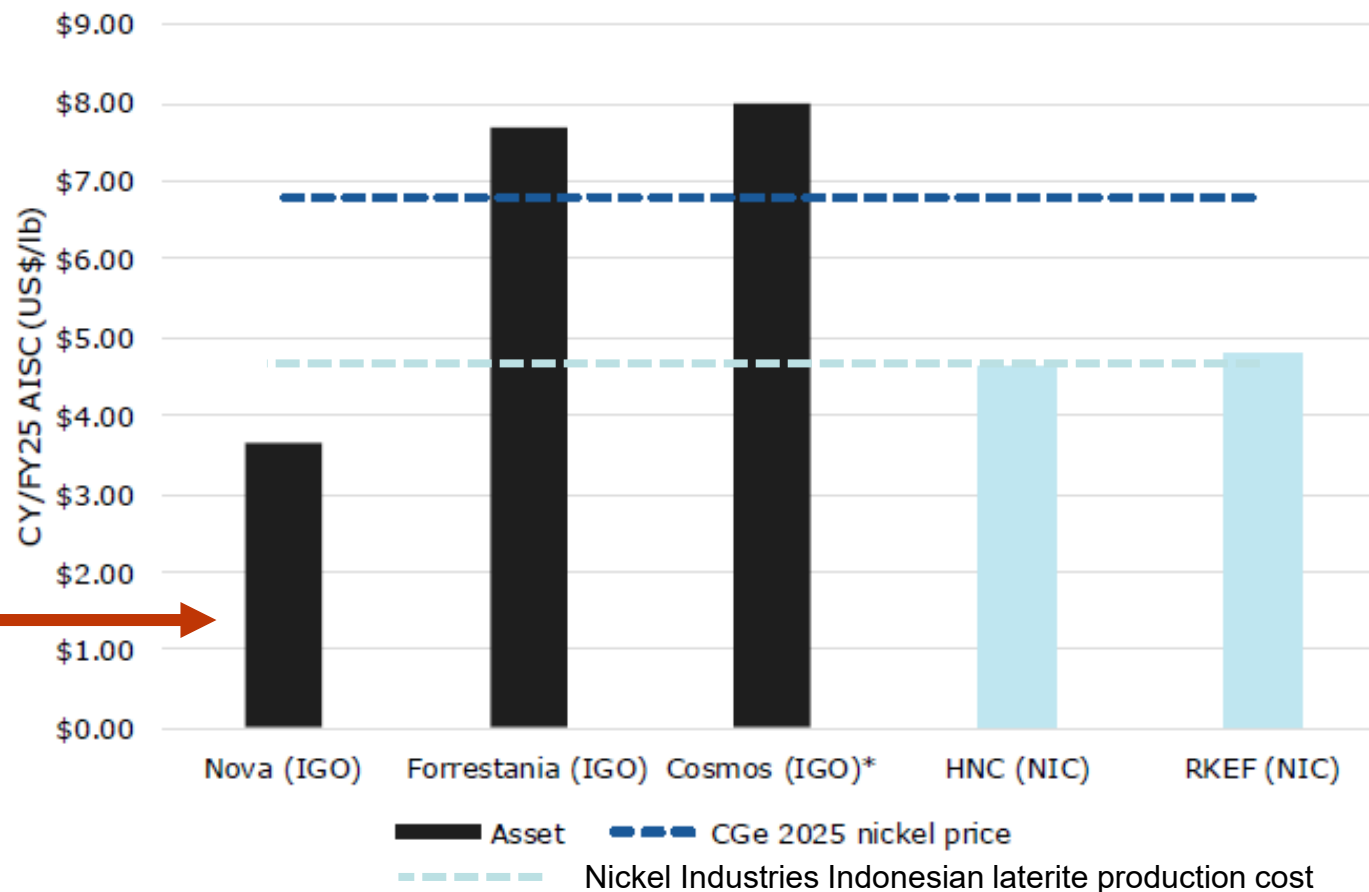


BUT – the key reason sulphide nickel will remain an attractive investment proposition is because a quality sulphide nickel deposit is lower on the cost curve, and more profitable per production unit than laterite nickel.

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?

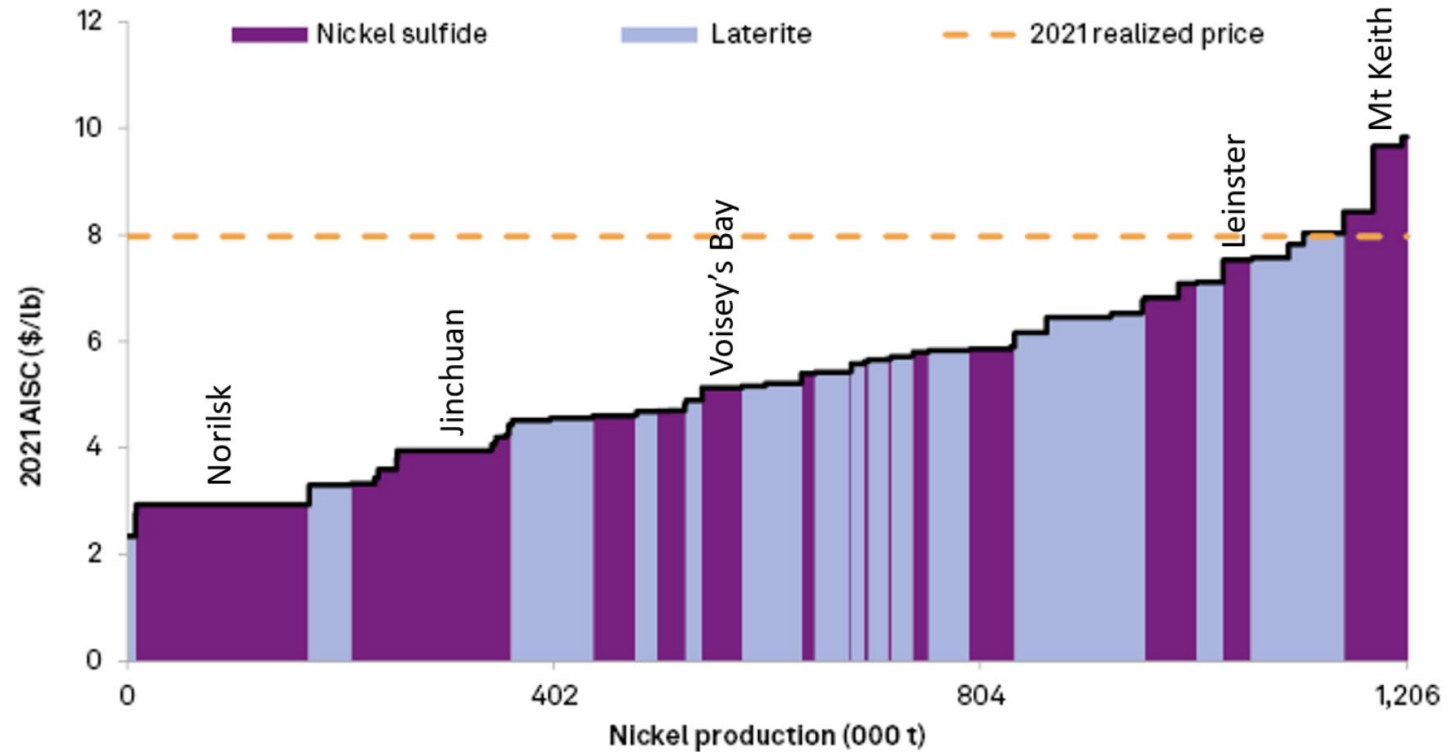


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2021 nickel cost curve by asset type



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

# Magmatic Nickel Sulphide v Kambalda-Style Nickel Sulphide

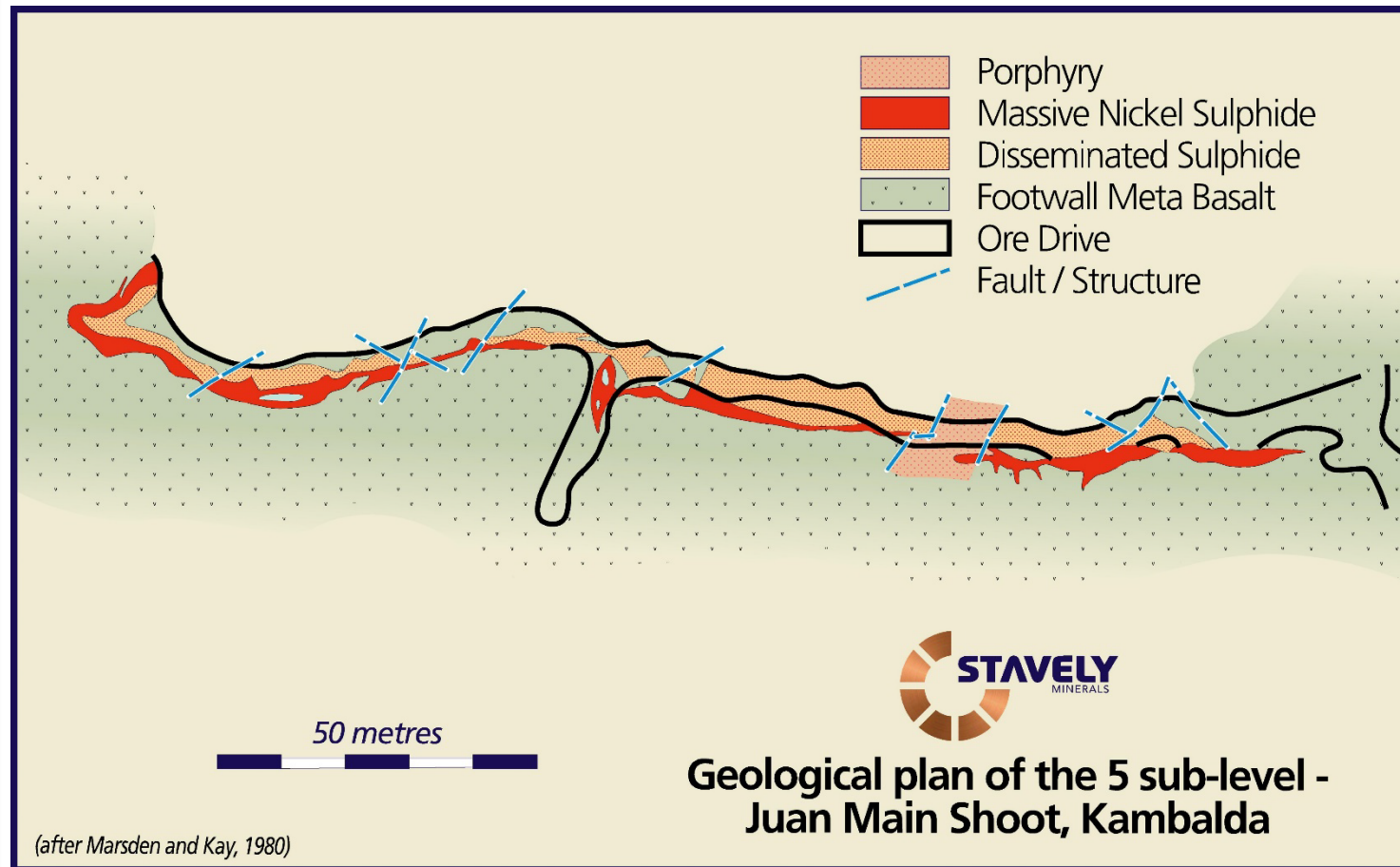


**Komatiite-hosted nickel sulphides are naturally high-cost producers**

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

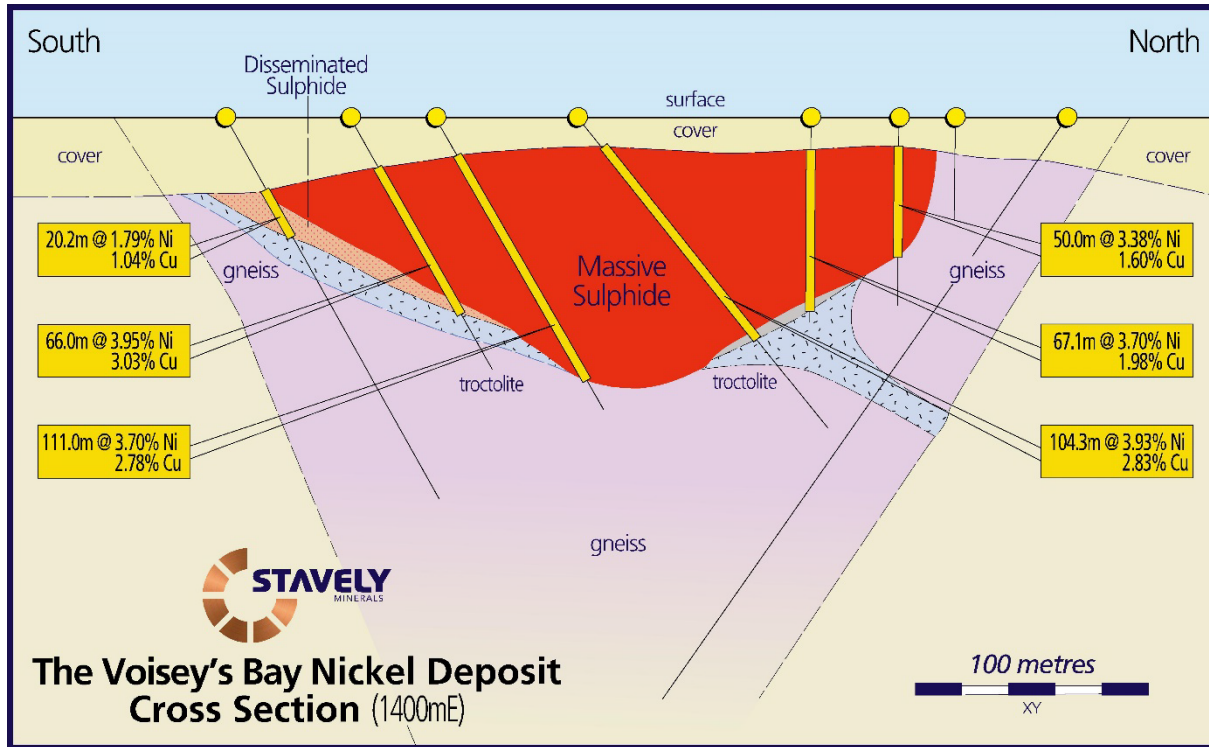
**Magmatic nickel sulphides are amongst the lowest-cost producers**

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.





# The demise of sulphide nickel has been grossly exaggerated



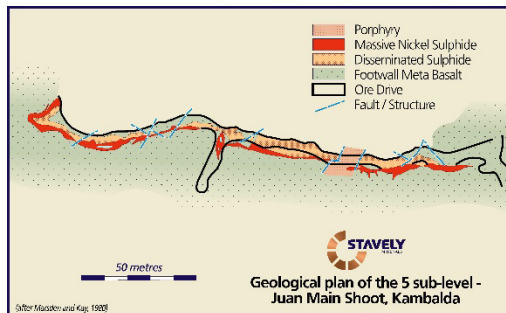
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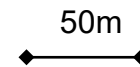
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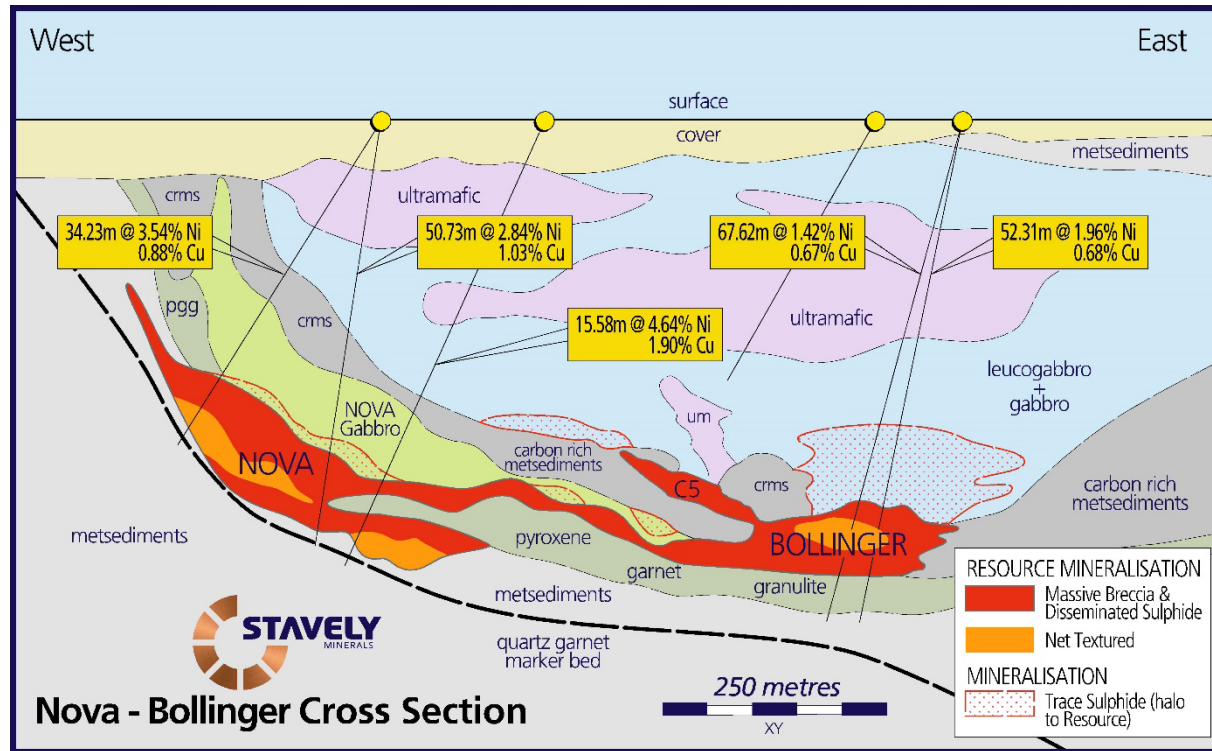
**Mining Economics Rule #1: It's all about payable metal per vertical metre!**



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



# The demise of sulphide nickel has been grossly exaggerated



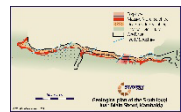
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Nova-Bollinger compared to Level 5, Juan Main Shoot, Kambalda – **to scale**







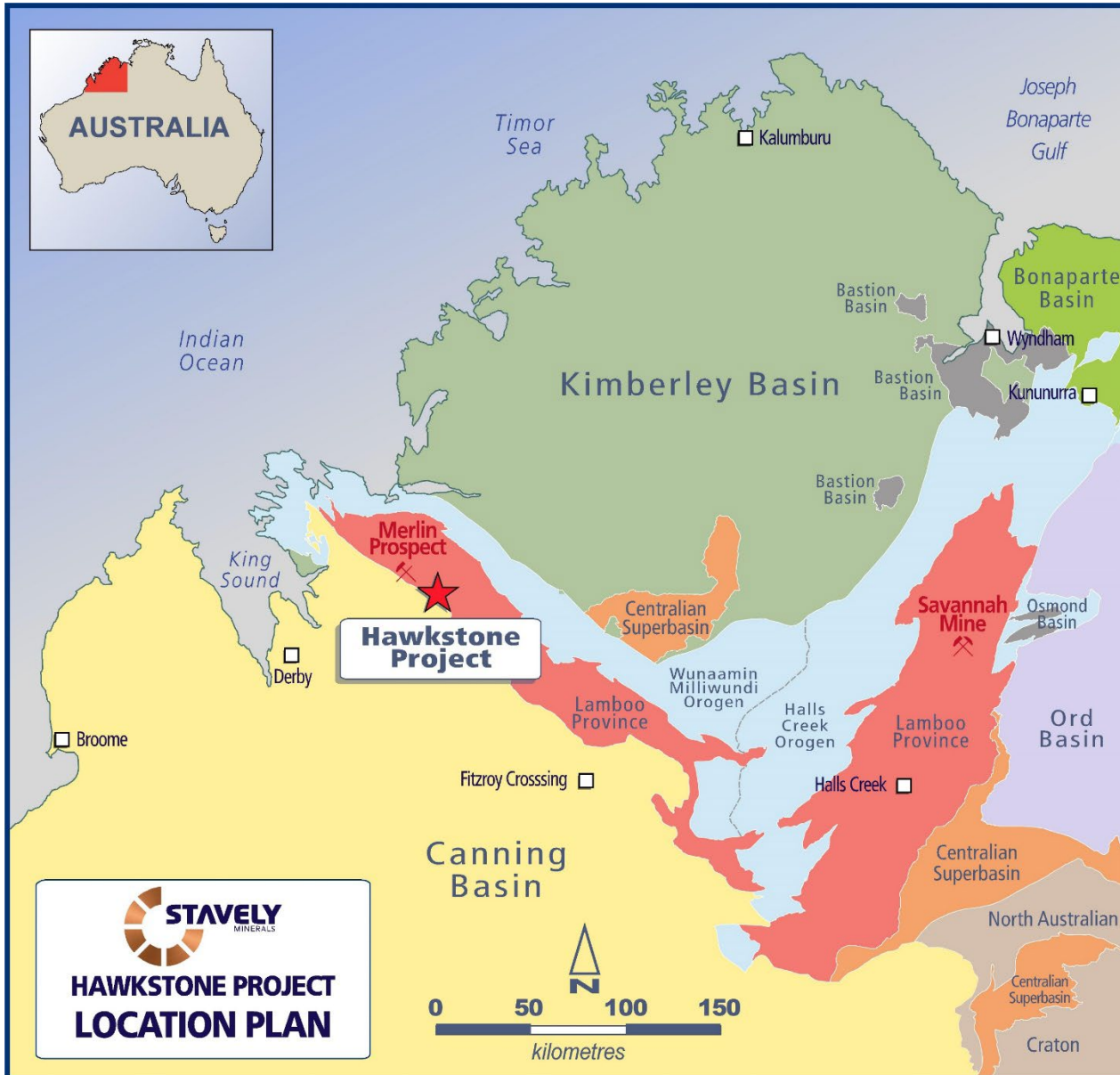
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# The Hawkstone Magmatic Nickel-Copper Project

# Hawkstone Ni-Cu-Co Project



## Hawkstone Ni-Cu-Co Project

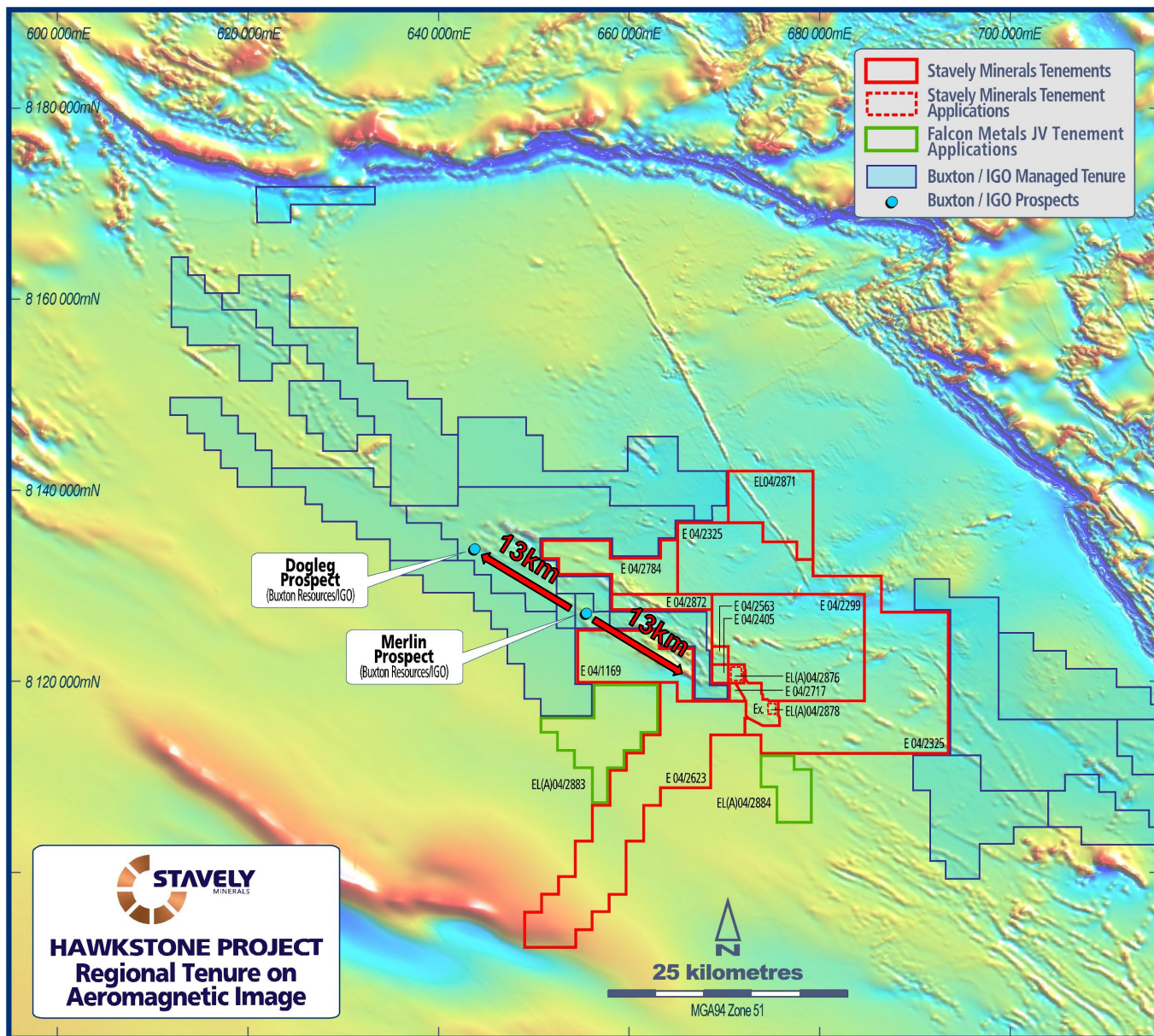
- ~870km<sup>2</sup> 100% tenure
- ~30km of the prospective Ruins Dolerite
- Buxton / IGO JV Merlin discovery 1km from tenement boundary
- Complementary field season (winter) to the Stavely Project (summer)
- Potential for Li pegmatites as there are historic Sn-W-Ta mines in Stavely Minerals' tenure

<sup>1</sup> Buxton Resources website

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

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





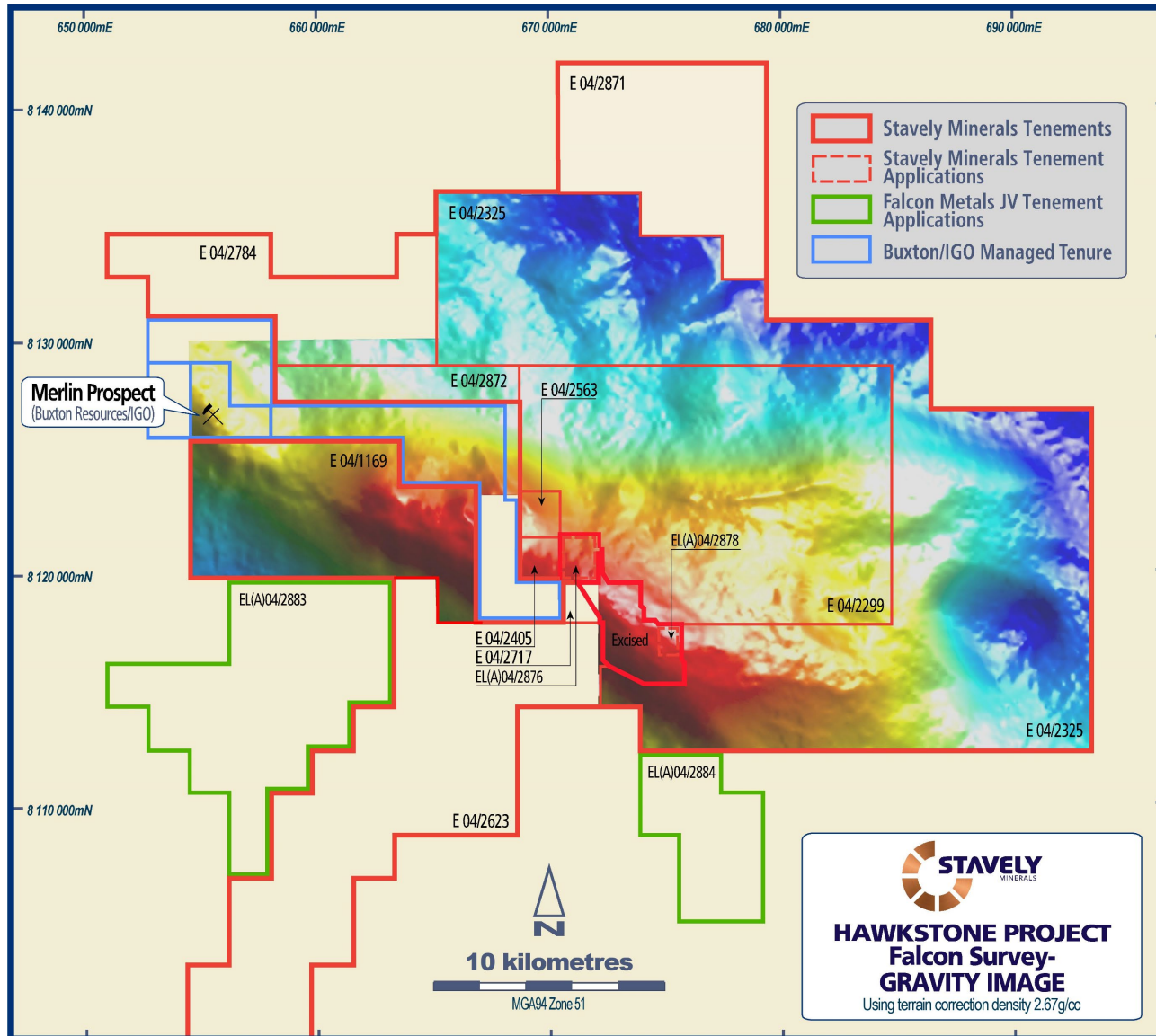
## Hawkstone Ni-Cu-Co Project

**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

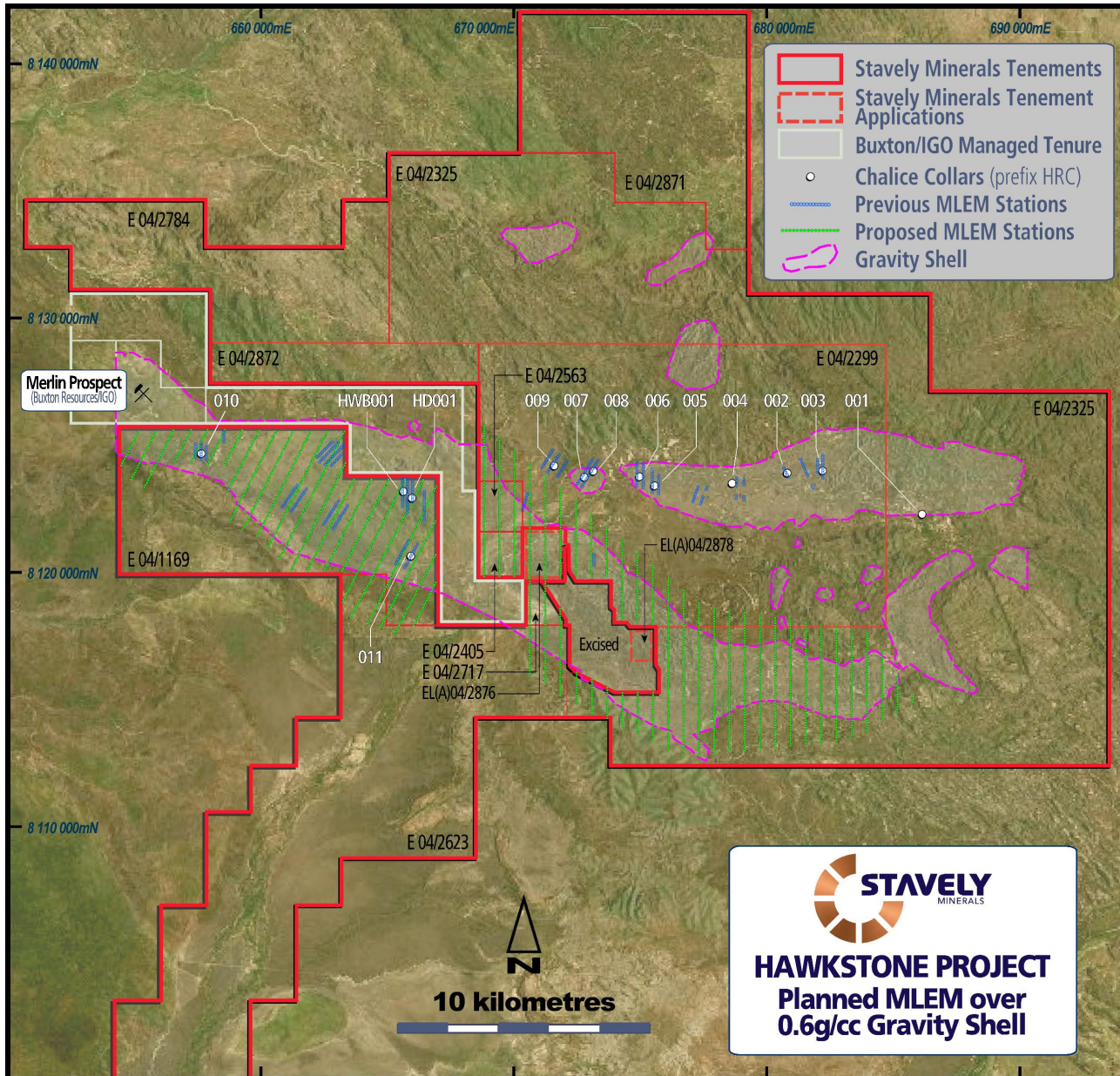


## Hawkstone Ni-Cu-Co Project

- 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 terrane 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

- 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





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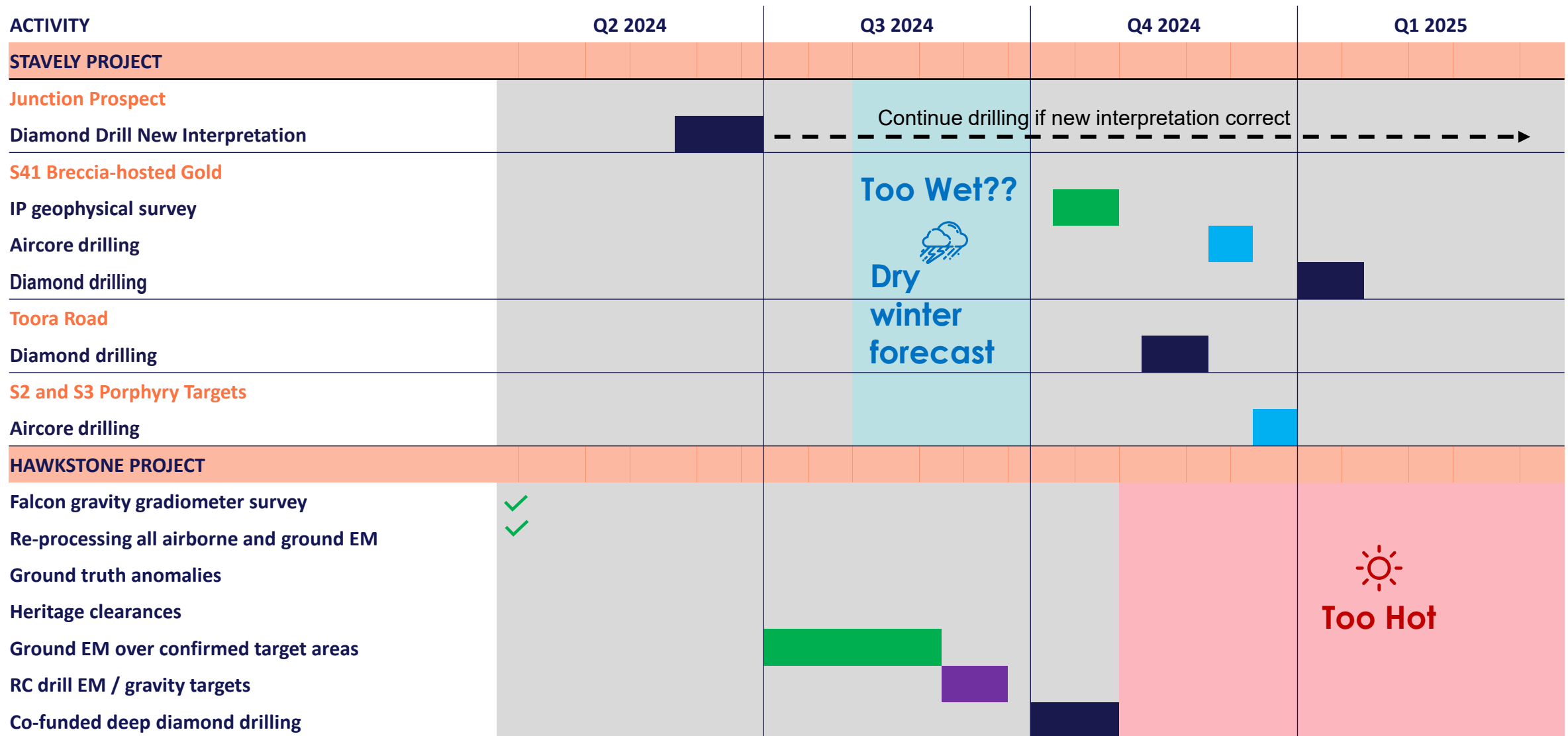
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# Work Programme



# 12-month Work Programme



# Corporate Summary



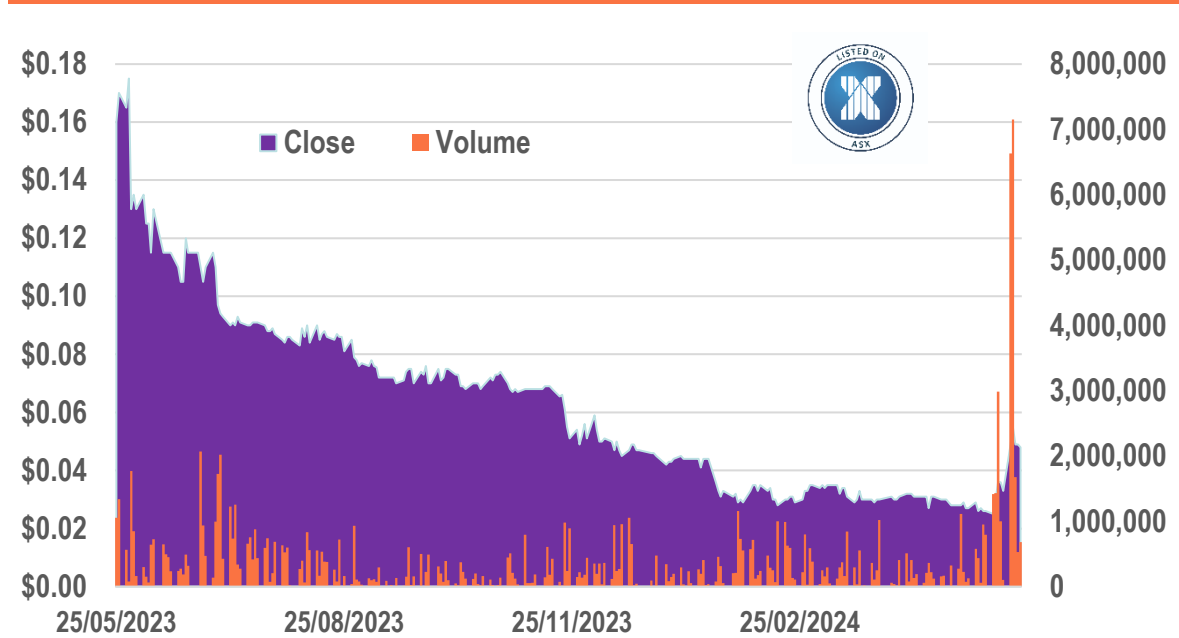
## CAPITAL STRUCTURE

<b>ASX Ticker</b>	<b>SVY</b>
<b>Share Price (24/05/24)</b>	<b>\$0.048</b>
<b>Shares on Issue</b>	<b>382M</b>
<b>Cash (31/03/24)</b>	<b>\$0.96M</b>
<b>Market Capitalisation</b>	<b>\$18.3M</b>
<b>Management and Staff</b>	<b>~10% equity</b>

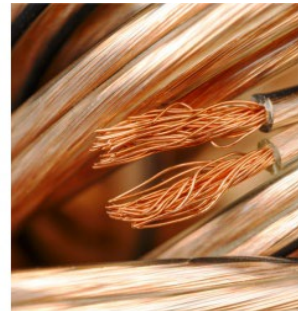
## Directors

<b>Chris Cairns</b>	<b>Executive Chair</b>
<b>Jennifer Murphy</b>	<b>Technical Director</b>
<b>Peter Ironside</b>	<b>Non-Executive Director</b>
<b>Amanda Sparks</b>	<b>Non-Executive Director &amp; Company Secretary</b>
<b>Rob Dennis</b>	<b>Non-Executive Director</b>

## 12-month Share Price to 24 May 2024



STOCK	BID	OFFER	LAST	VOL	
MDLAX	0.006	0.007	0.000	0	META
MDOS FINC	0.002	0.003	0.003	3M	META
MDVAX	0.000	0.000	0.000	0	META
MEC RES	0.022	0.023	0.023	1T	META
MEDIBANK	2.430	2.440	2.440	4M	META
** SEE <MEBDA.A>	0.000	0.000	0.000	0	META
MEDICAL.AUS	0.105	0.120	0.105	10T	META

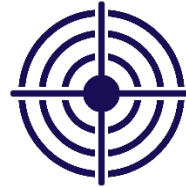




# Summary – Key Investment Takeaways



- ✓ 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 Lode copper-gold-silver (rig mobilizing) 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**

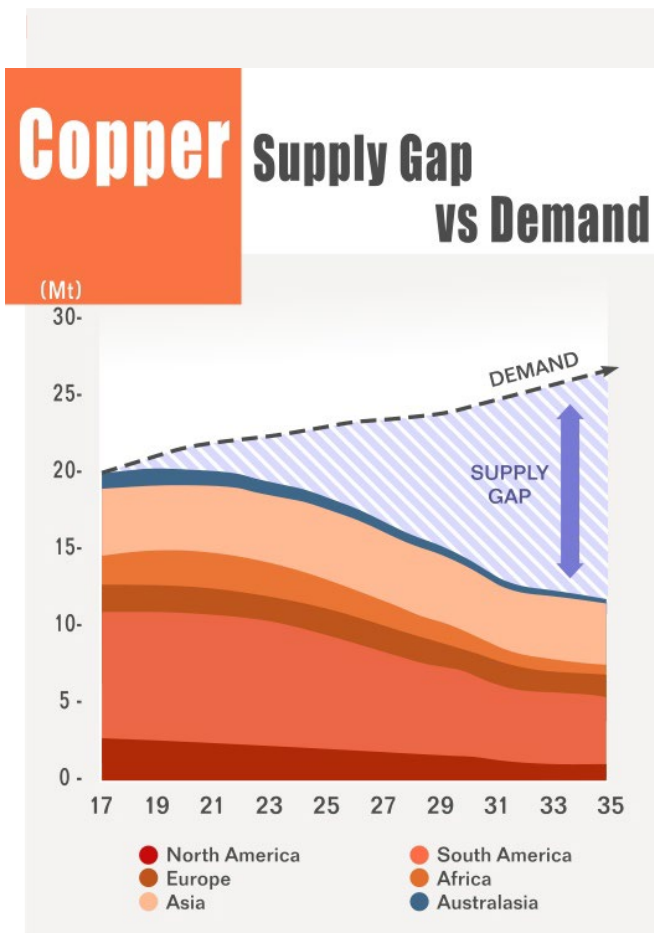


4 x more copper in an electric car than one with an internal combustion engine



6 types of bacteria killed by copper surfaces





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

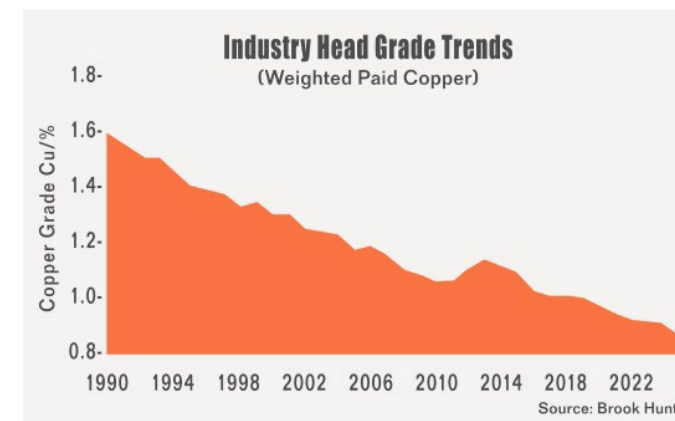
## Copper M&A

### The Cupboard is Nearly Bare



Escondida, the world's largest copper mine:

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





# STAVELY

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[info@stavely.com.au](mailto:info@stavely.com.au)  
Ph: 08 9287 7630

The information in this presentation is extracted from information available to view on [www.stavely.com.au](http://www.stavely.com.au). 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, in the case of estimates of Mineral Resources or Ore Reserves, 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.





# 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