

*rimfire*

# HUNTING HIGH-VALUE SCANDIUM

in Australia's Scandium hot spot

INVESTOR PRESENTATION  
OCTOBER 2024



# DISCLAIMER & COMPETENT PERSON STATEMENTS

## COMPETENT PERSONS DECLARATION

The information in the report to which this statement is attached that relates to Exploration and Resource Results is based on information reviewed and/or compiled by David Hutton who is deemed to be a Competent Person and is a Fellow of The Australasian Institute of Mining and Metallurgy.

Mr Hutton has over 30 years' experience in the mineral and mining industry and is an employee of Rimfire Pacific Mining Limited (Rimfire). Mr Hutton has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. David Hutton consents to the inclusion of the matters based on the information in the form and context in which it appears.

The data in this report that relates to Mineral Resource estimates and Exploration Target is based on information evaluated by Mr Simon Tear who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM) and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr Tear is a Director of H&S Consultants Pty Ltd and he consents to the inclusion in the report of the Mineral Resource in the form and context in which they appear.

## FORWARD LOOKING STATEMENTS DISCLAIMER

This document contains "forward looking statements" as defined or implied in common law and within the meaning of the Corporations Law. Such forward looking statements may include, without limitation, (1) estimates of future capital expenditure; (2) estimates of future cash costs; (3) statements regarding future exploration results and goals. Where the Company or any of its officers or Directors or representatives expresses an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and the Company or its officers or Directors or representatives as the case may be, believe to have a reasonable basis for implying such an expectation or belief. However, forward looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward looking statements. Such risks include, but are not limited to, commodity price fluctuation, currency fluctuation, political and operational risks, governmental regulations and judicial outcomes, financial markets and availability of key personnel. The Company does not undertake any obligation to publicly release revisions to any "forward looking statement", or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

# INVESTMENT HIGHLIGHTS



Rimfire commands largest **Scandium prospective** landholding in Australia's Scandium hotspot



**Initial MRE of 5Kt Scandium Oxide + separate Exploration Target of 15 – 46Kt Scandium Oxide\***



Highly experienced team with extensive local operating knowledge



**High impact programs over next 6 months focussed on delivering MRE upgrades**



\* See Cautionary Statements and Notes in Appendix 1

# MAIDEN SCANDIUM RESOURCES ARE JUST THE START



Maiden MREs for Melrose & Murga North (5.1Kt Scandium Oxide) + separate Exploration Target of 100 to 200Mt at 100 to 200ppm Sc (15 – 46Kt Scandium Oxide) *see MRE details, cautionary notes and statements in Appendix 1*



Murga North MRE + Exploration Target + New Prospects **demand further drilling**



High Value - Scandium oxide (**US\$2.1 - 3.9M / tonne**) and Scandium metal (**US134 – 269M / tonne**)<sup>1</sup>



Aim to deliver a globally significant Scandium Resource Inventory by end June 25 Quarter - driven by upgrade of Murga North MRE and conversion of Murga Exploration Target

<sup>1</sup> USGS Scandium Fact Sheet 2024

# CORPORATE OVERVIEW – RIM.ASX

**2.35B**

SHARES ON ISSUE

**194M**

OPTIONS (1.25 – 5C)

**\$0.055**

SHARE PRICE

**~\$130M**

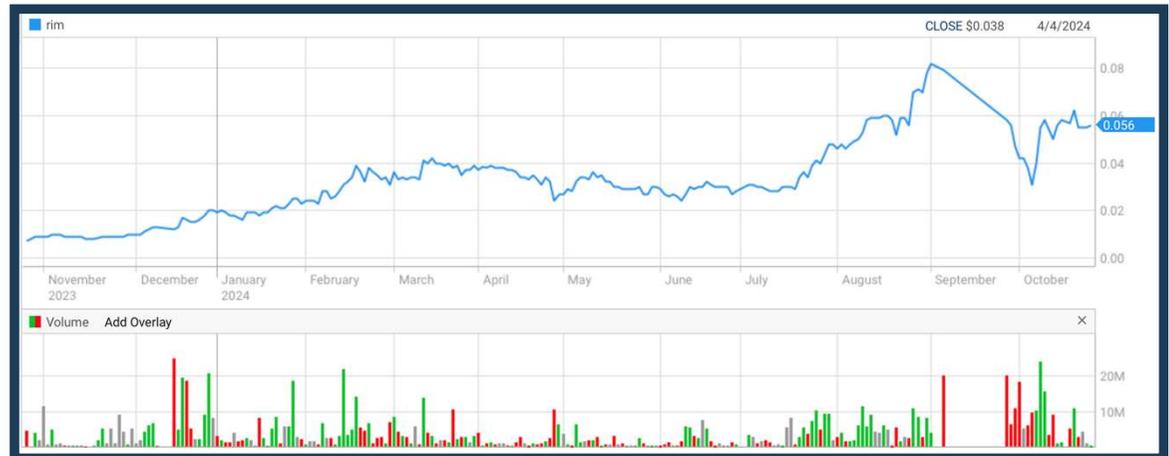
MARKET CAP

**\$1.95M**

CASH

**Top 20  
41%**

12 MONTH SHARE PRICE AND VOLUME



\* Cash at Bank at end September 2024 Qtr. plus proceeds from Sept 2024 Option exercise

# PROVEN TECHNICAL TEAM



## DR PETER CROWHURST

### Geology Manager

Peter has over 25 years of exploration experience principally in the areas of project generation, field evaluation, project execution and structural geology.

Peter's experience extends across Australia, Asia and SW Pacific including research work with CSIRO on industry projects. Peter has strong experience with multiple commodities / geological settings including Cu-Au porphyries, seafloor massive Cu-Zn-Pb-Ag sulphides, mineral sands and lithium



## PAUL WRIGHT

### Technical Consultant

#### *Key role in discovery of Cadia East*

Paul has over 30 years of exploration experience including at Cadia, where he was involved in the early exploration work that took Cadia East from a soil anomaly into a significant resource.

Paul has key expertise in porphyry Cu-Au systems and multitude of Au-only systems.



## MICHAEL LOVE

### Technical Consultant

#### *Key role in discovery of Lake Cowal, Northparkes, Dubbo Project*

Mick has strong experience in the Lachlan Orogen and was heavily involved in the discovery, early exploration and development of Northparkes (Cu / Au porphyry), Lake Cowal (Au), and Dubbo Project (Rare Earths).

Mick has over 30 years of exploration experience with key expertise in greenfields exploration, project discovery, project execution and geology.



## BOYD WILLIS

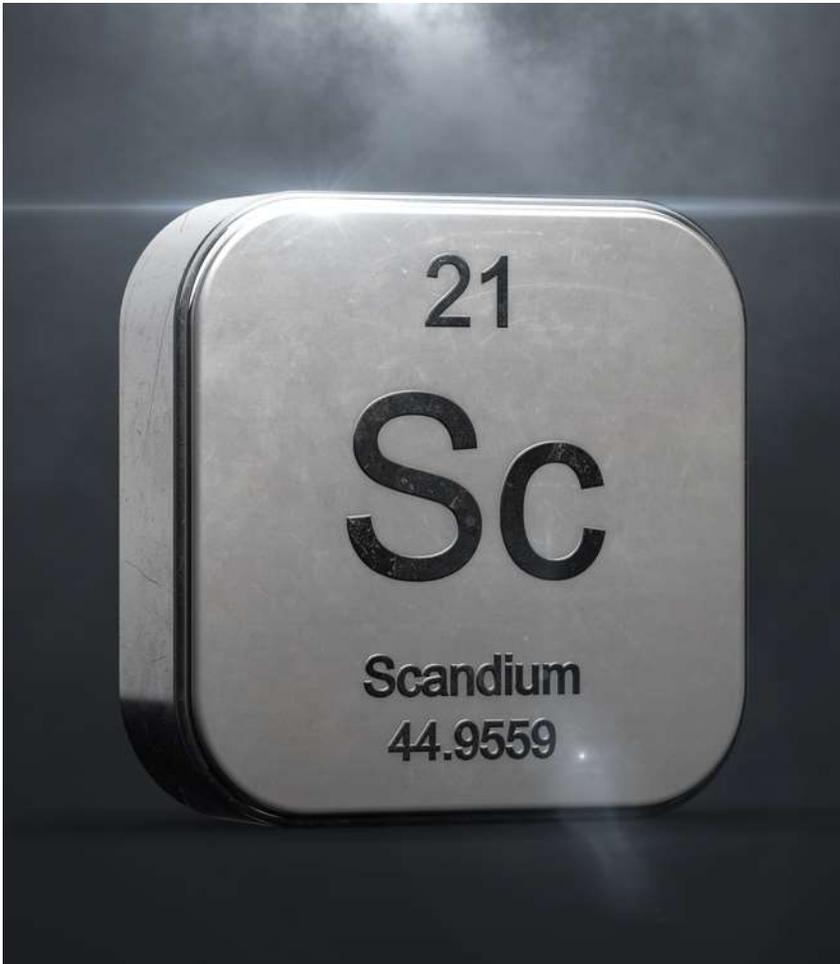
### Process Consultant

#### *Specialist Hydrometallurgist*

40+ years' process engineering experience, including 31 years in complex hydrometallurgical processes for base metal and scandium recovery, including 26 years in nickel laterite ore processing and 10 years in scandium hydrometallurgy.

Boyd has been involved in over 30 laterite nickel projects and his experience spans project definition, process development, design and coordination of detailed testing and pilot programs, process modelling and study management up to PFS and DFS level.

## SCANDIUM and its USES



- Scandium (Sc) is a lightweight, soft metal with a high melting point and good electrical and heat conductivity
- Scandium when used in combination with aluminium can produce stronger, lightweight, more corrosion resistant, heat tolerant, weldable and 3D printable aluminium products
- Scandium's physical properties provides specific benefits in highly specialised industries such as:
  - ✓ **Aerospace and Defence** – Aluminium/Scandium alloys provide strength and weight benefits for aircraft and aeronautical components
  - ✓ **Transportation** – Lightweight alloys suitable for high-performance technologies in automotive, rail and marine applications
  - ✓ **Solid Oxide Fuel Cells (SOFCs)** – Scandium improves efficiency, durability, and operating temperature of SOFCs such as Hydrogen fuel cells

# THE SCANDIUM MARKET

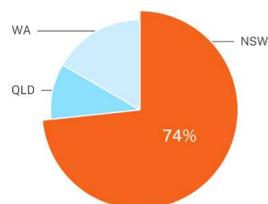
- Average crustal abundance ~16ppm<sup>1</sup> and fresh rock occurrences over 100ppm are considered rare
- All scandium produced as a by-product of mineral refining, i.e. **no single scandium mine source exists anywhere**
- Current annual global consumption estimated to be 30-40 metric tons of scandium<sup>1</sup> – however difficult to accurately estimate due to “secret” military applications
- Prices vary - Scandium Oxide (US\$2.1 - US\$3.9M / tonne<sup>2</sup>) & Scandium Metal (US\$134 – 269M / tonne<sup>2</sup>)
- The US and its western allies are totally dependent on imports from China, Kazakhstan, Philippines, Russia and Ukraine
- Scandium is on the Critical Minerals List for Australia, Canada, the European Union and the United States
- **Future uptake and demand growth is SUPPLY CONSTRAINED due to GEOPOLITICAL RISK**
- Western economies are seeking long term secure & stable supply from allied nations such as Australia
- **Rio has entered the Scandium market** with the acquisition of the Burra Project next door to Rimfire<sup>3</sup>
- **“As the demand for cleaner, lighter, and more durable materials continues to rise, we expect the use of scandium to continue to grow along with this demand”** (Rio Tinto<sup>3</sup>)

<sup>1</sup> Field Geologist Manual 2001 <sup>2</sup> USGS Scandium Fact Sheet 2024 <sup>3</sup> Rio Tinto website

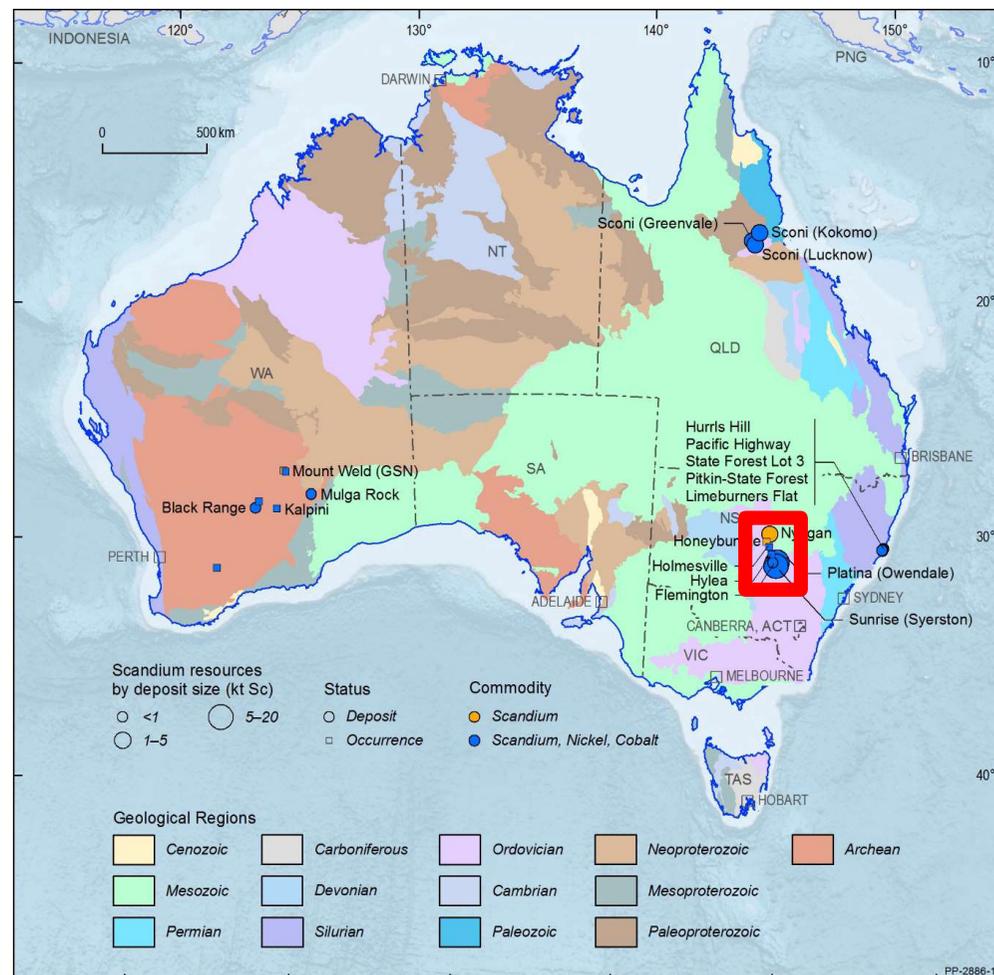
# NSW IS THE FUTURE OF SCANDIUM SUPPLY

- Australia has Economic Demonstrated Resources (EDR) of ~37Kt of scandium, with 74% in NSW\*
- Fifield NSW - Australia's Scandium hotspot
- Fifield's unique geology hosts some of the highest-grade scandium deposits in the world
- Existing Fifield projects dominated by two major companies, i.e., Rio Tinto (RIO.ASX) and Sunrise Energy Metals (SRL.ASX)
- Rimfire has the **largest scandium prospective tenement exposure** (~700km<sup>2</sup>) in the Fifield district

NSW resource



NSW ranked  
**No 1**

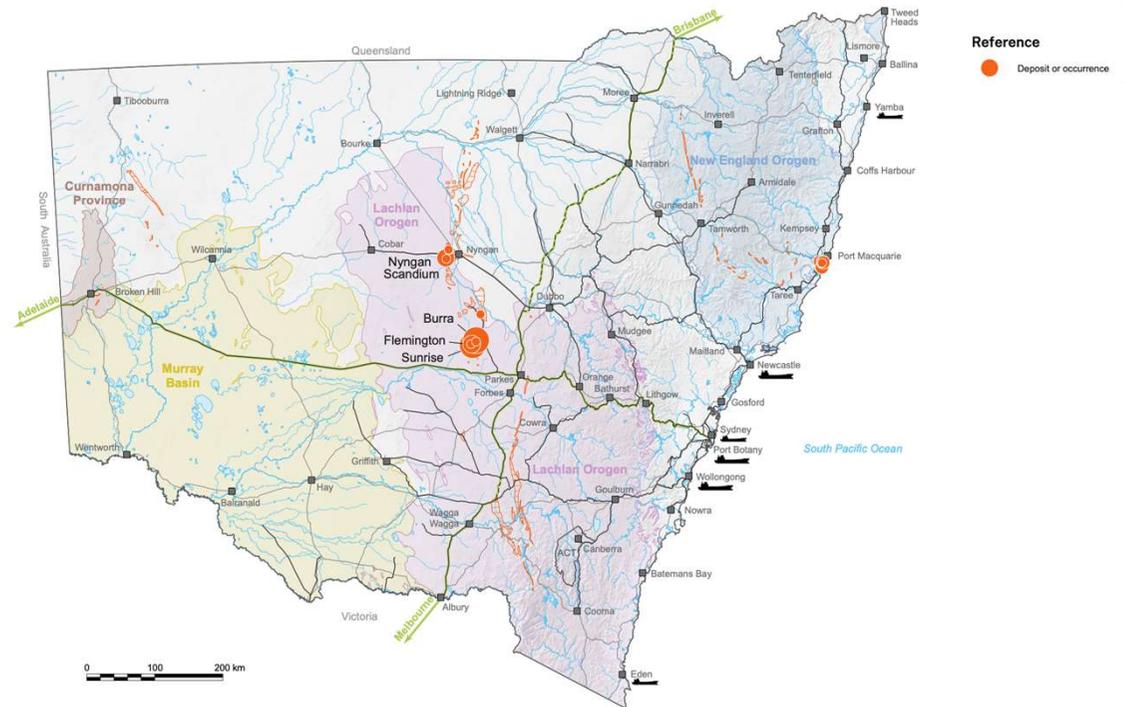


\*Source: [OzMin database](#), Geoscience Australia – EDR is defined by Geoscience Australia as resources for which profitable extraction under defined assumptions is possible

# NSW GOVERNMENT LISTS SCANDIUM AS A PRIORITY METAL

**NSW has the highest concentration of scandium in the world, making it one of the only locations where Scandium can be mined as a primary commodity\***

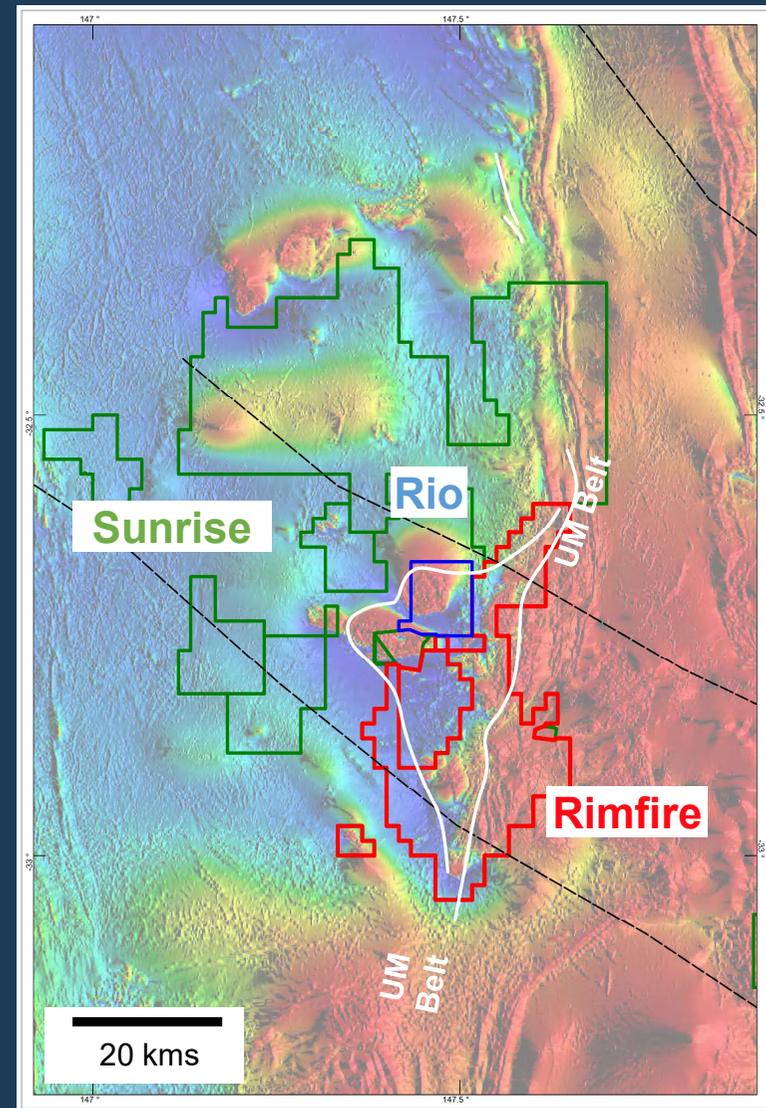
- NSW Government commits to \$250M in royalty deferrals to boost the critical minerals industry in the state
- Scandium specifically named as one of 5 priority minerals/metals by the NSW Government
- The royalty deferrals are designed to boost exploration and development of priority metals projects such as Fifield Scandium



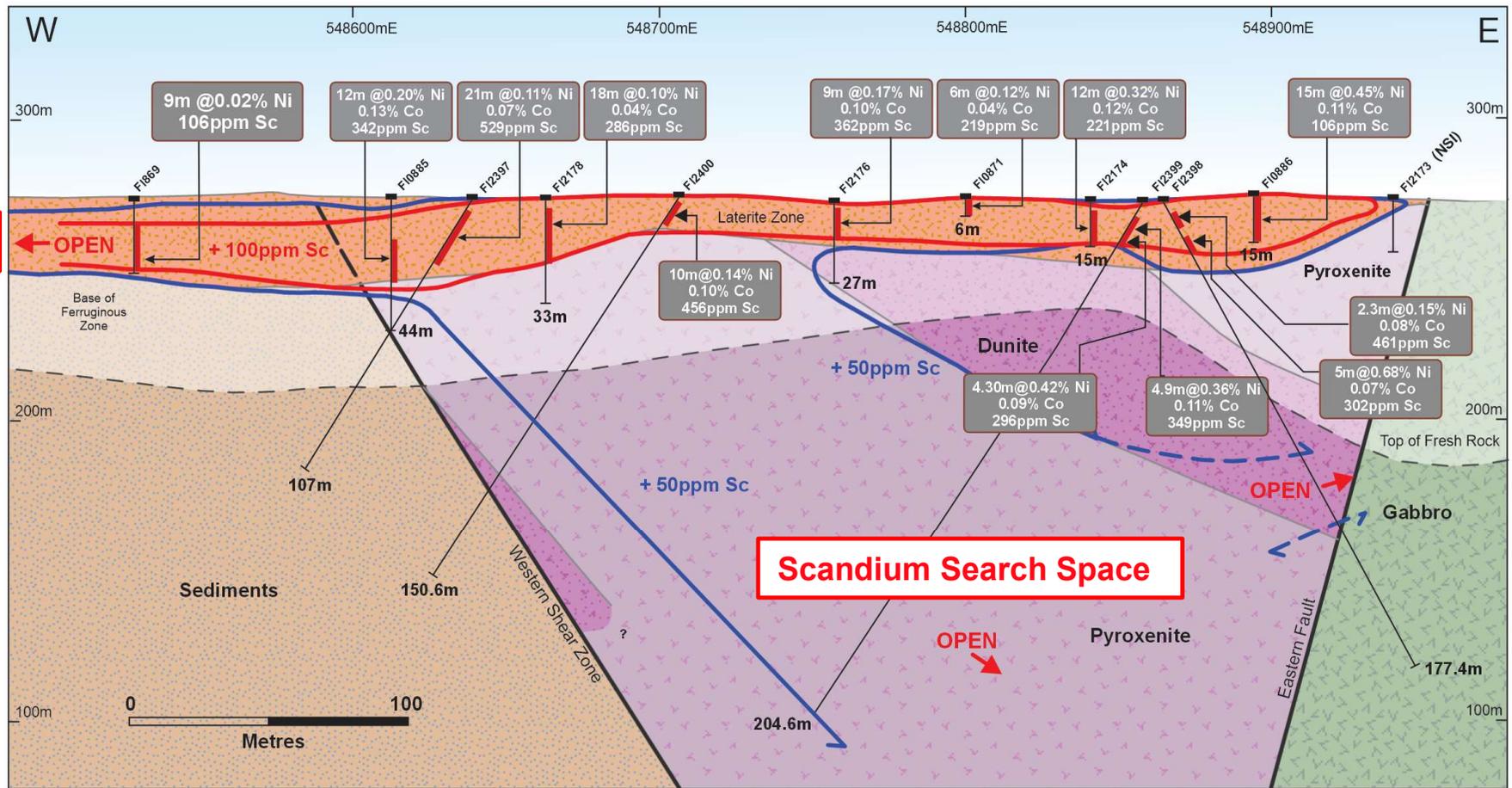
\*<https://www.resourcesregulator.nsw.gov.au/meg.site/invest-nsw/industry-support/nsw-priority-metals/scandium>

## WHAT'S SPECIAL ABOUT FIFIELD?

- 350km long belt of Ordovician (Alaskan – type) mafic - ultramafic (gabbro / pyroxenite / dunite) rocks
- Thickest portion in Fifield area due to cross cutting structures
- Scandium (+/- nickel and cobalt) mineralisation occurs within weathered laterite developed over the pyroxenite units
- **Rio's purchase of Burra endorses Fifield as Australia's Scandium hotspot**



# SCANDIUM IN LATERITE AND BASEMENT



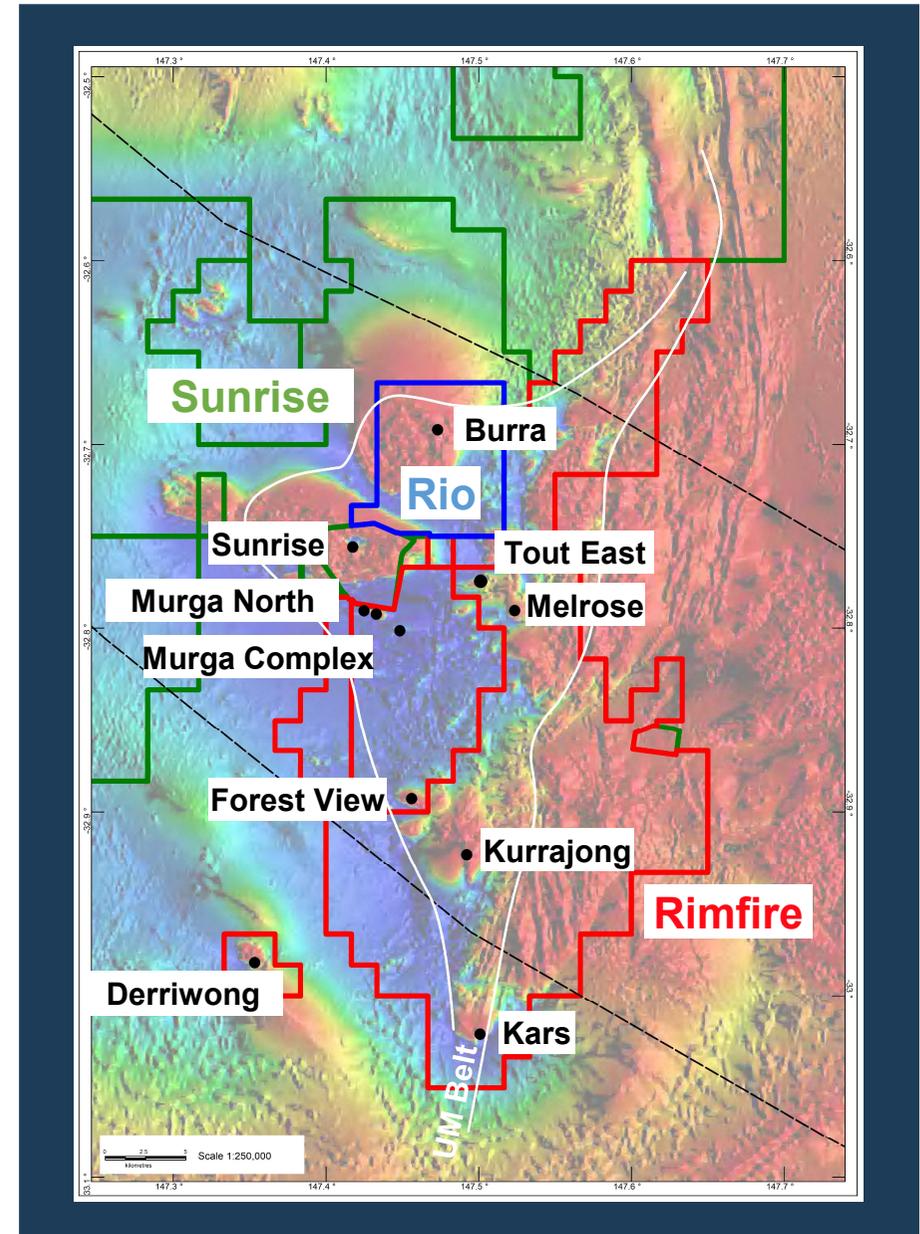
Melrose 6,371,575mN cross section

# RIMFIRE HAS THE UPSIDE

- Existing Third-Party Resources - Burra (15Kt Sc oxide<sup>1</sup>) and Sunrise (19Kt Sc oxide<sup>2</sup>) have minimal upside
- Rimfire has significant upside** and commands largest Scandium prospective landholding in the Fifield area
- Rimfire has a pipeline of shallow Scandium prospects – **Melrose, Murga North, Murga Exploration Target, Forrest View, Currajong, Tout East, Kars, Derriwong**
- Maiden Mineral Resources at Melrose and Murga North are **just the start**
- Investigating new Scandium opportunities in underlying fresh basement rocks

<sup>1</sup> PGM.ASX Announcement dated 12 July 2016

<sup>2</sup> Sunrise Deposit NI 43-101 Technical Report dated 25 June 2018



## NEXT STEPS

To build a globally significant scandium Mineral Resource inventory at Fifield

Upgrade Murga North MRE

- Aircore drilling (50m x 50m) and Diamond drilling
- XRD
- Planned January – March 2025

Convert Murga Exploration Target to MRE

**Aircore drilling (100m x 100m) underway**  
**RESULTS - LATE NOVEMBER**

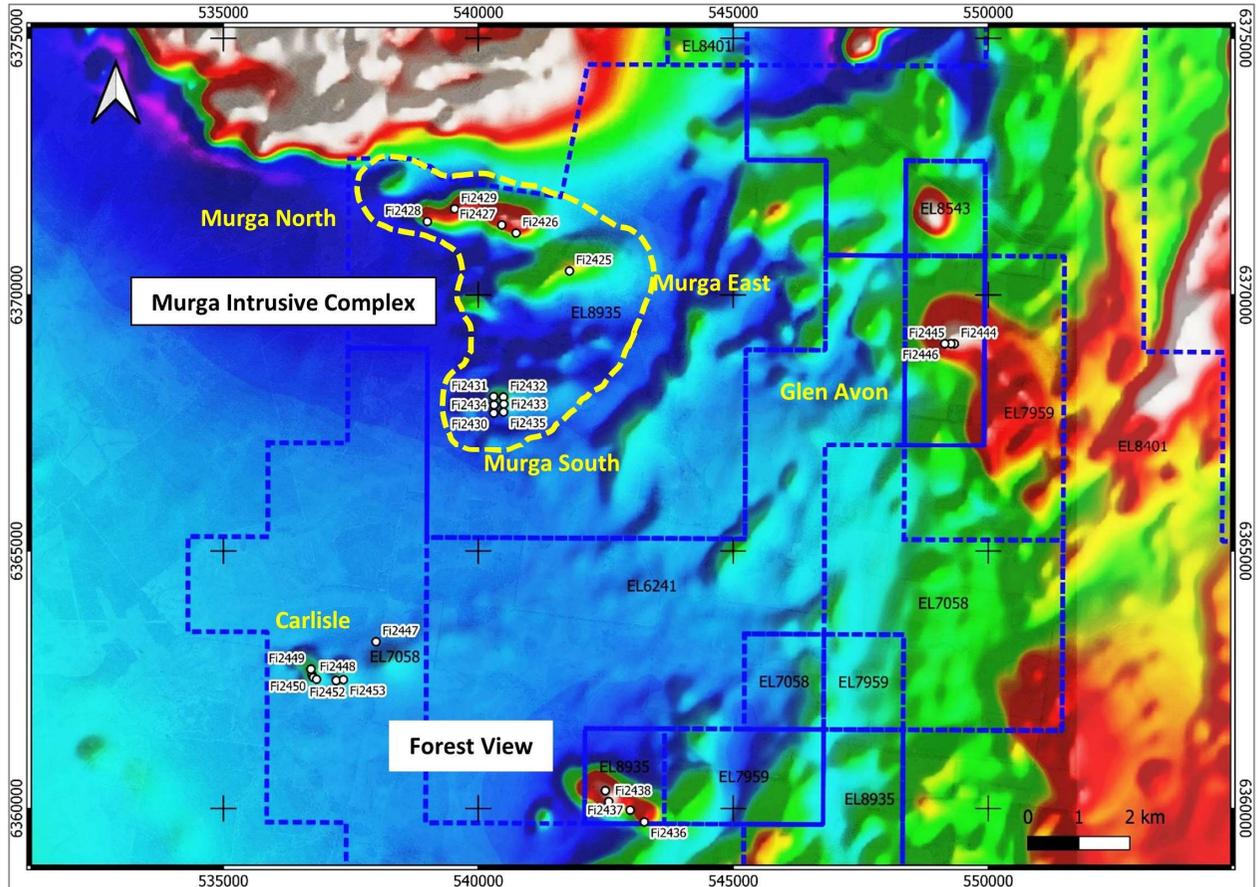
Drill test target pipeline

- Currajong / Forrest View / Tout East / Derriwong / Kars / Murga Basement
- Follow up drilling planned January – March 2025

Concurrent Stage 2 Metallurgical Test work – investigating AL and HPAL

# MURGA SCANDIUM

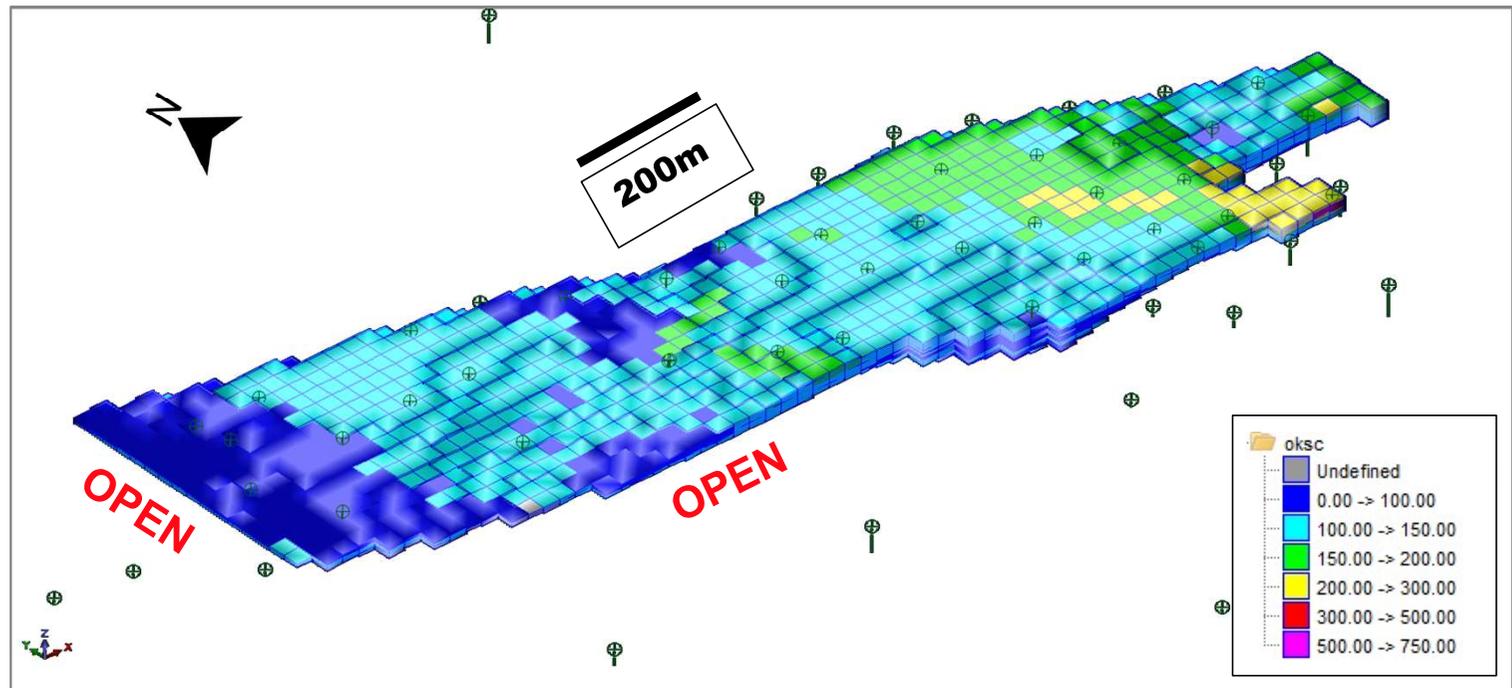
- Rimfire 100% owned\*
- Sc mineralisation at surface within flat-lying laterite zone over pyroxenite host rocks
- Previously explored for gold and PGEs
- Scandium prospectivity highlighted by Rimfire reconnaissance drilling in October 2023
- Murga North MRE and surrounding Exploration Target defined September 2024



\* Subject to Termination Notice – see RIM ASX Announcement dated 26 September and 17 October 2024

# MURGA NORTH MINERAL RESOURCE

- Inferred MRE – 4,050t Sc Oxide\*
- Areal extent 1.6km x 0.4km with a thickness range of 1 to 24.5m and an average thickness of 15m.
- From surface
- Aircore drilling on 100m x 100m centres
- Open to south and west



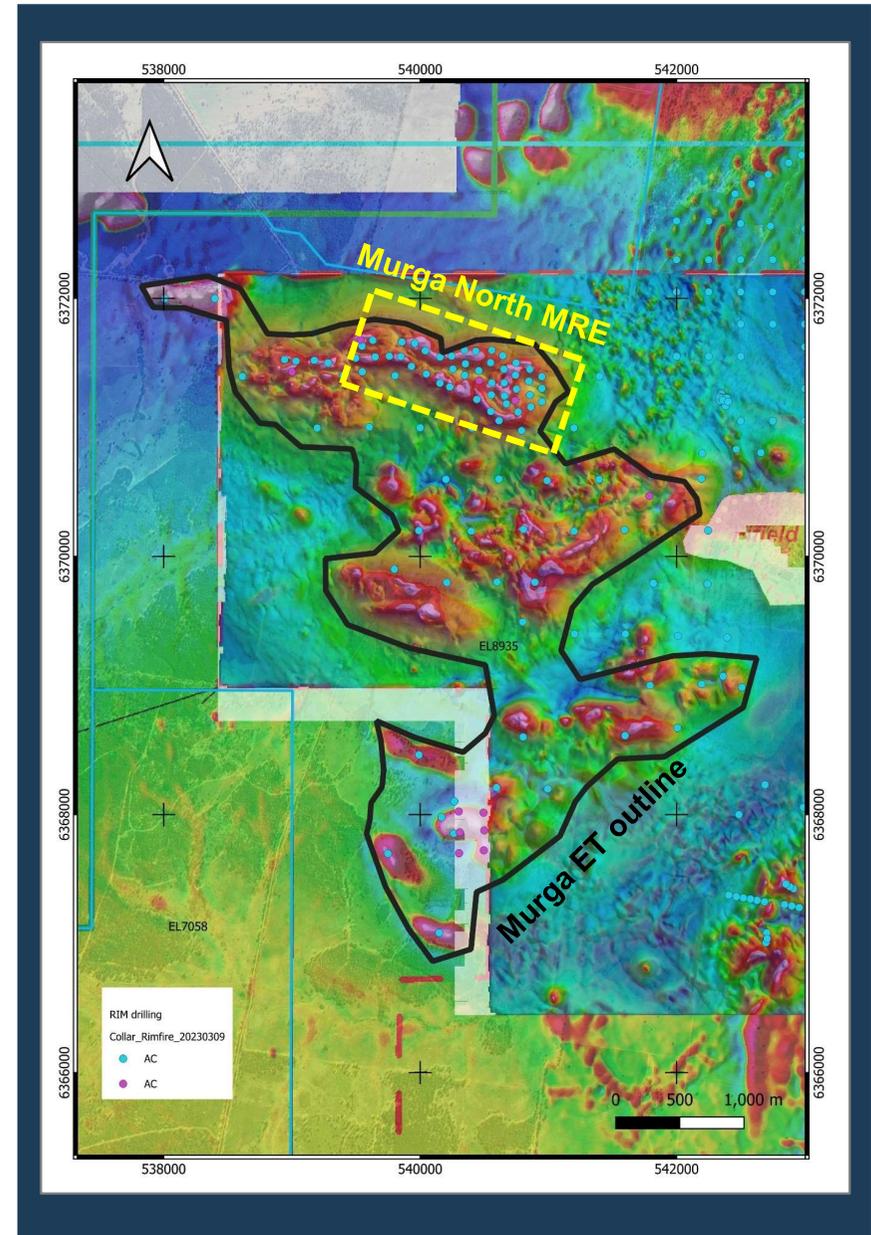
Murga North grade block distribution – plan view

\* See Cautionary Statements and Notes in Appendix 1

# MURGA EXPLORATION TARGET

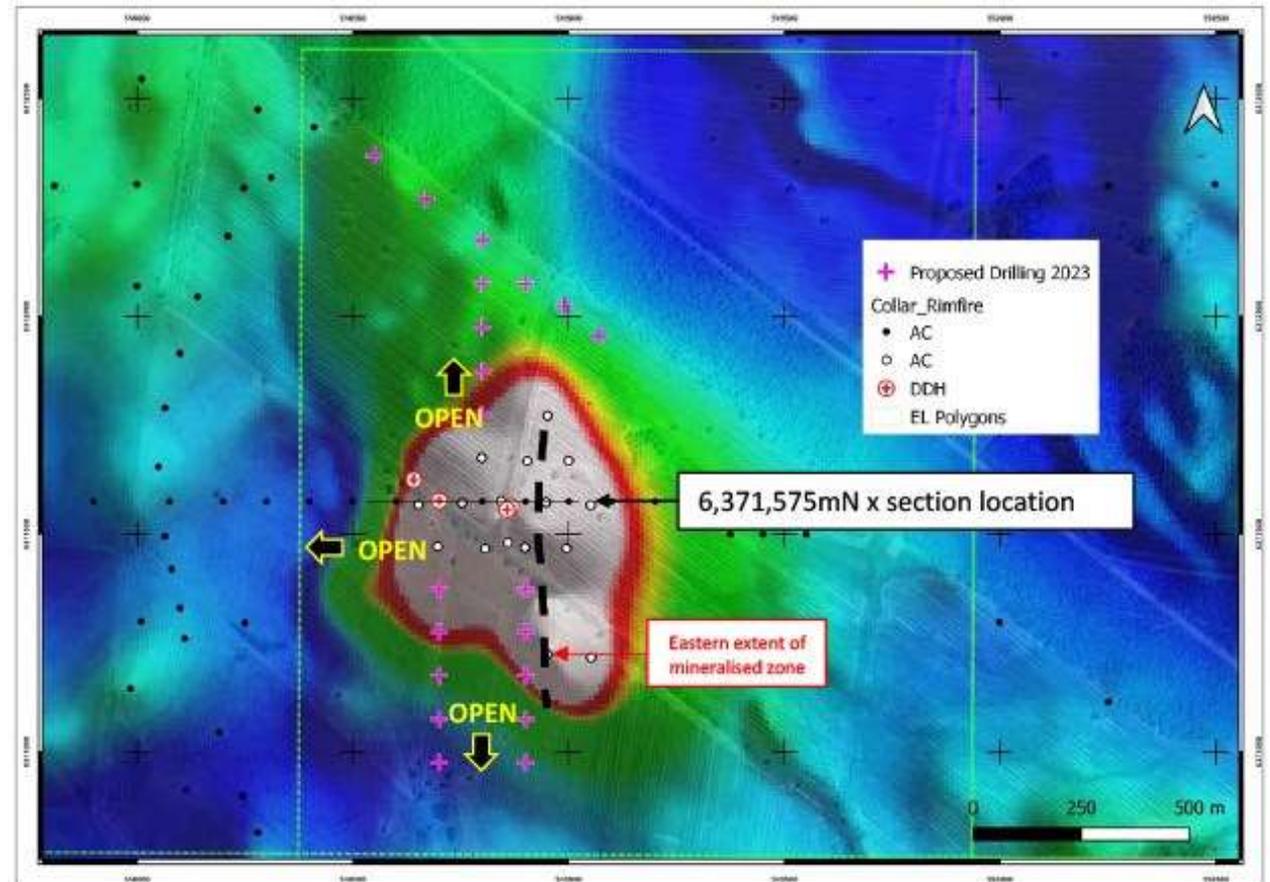
- Excludes Murga North MRE
- Exploration Target outline based on magnetic data (pyroxenite) and wide spaced (400m x 400m) drill results, i.e.;
- 13m @ 188ppm Sc from 3 metres *including 4m @ 248ppm Sc*
- 3m @ 127ppm Sc from 13 metres
- 18m @ 174ppm Sc from 1 metre *including 3m @ 226ppm Sc*
- 27m @ 188ppm Sc from 0 metres *including 12m @ 224ppm Sc*
- **Conservative estimate** with only 50% of the outlined area classified as an Exploration Target
- **Exploration Target of 100 to 200Mt at 100 to 200ppm Sc, i.e.;**  
**(15 – 45Kt Sc Oxide)\***

\* See Cautionary Statements and Notes in Appendix 1



# MELROSE SCANDIUM

- Rimfire 100% owned\*
- High-grade Sc Co Ni (+PGEs) mineralisation from surface within flat-lying laterite zone over pyroxenite host rocks

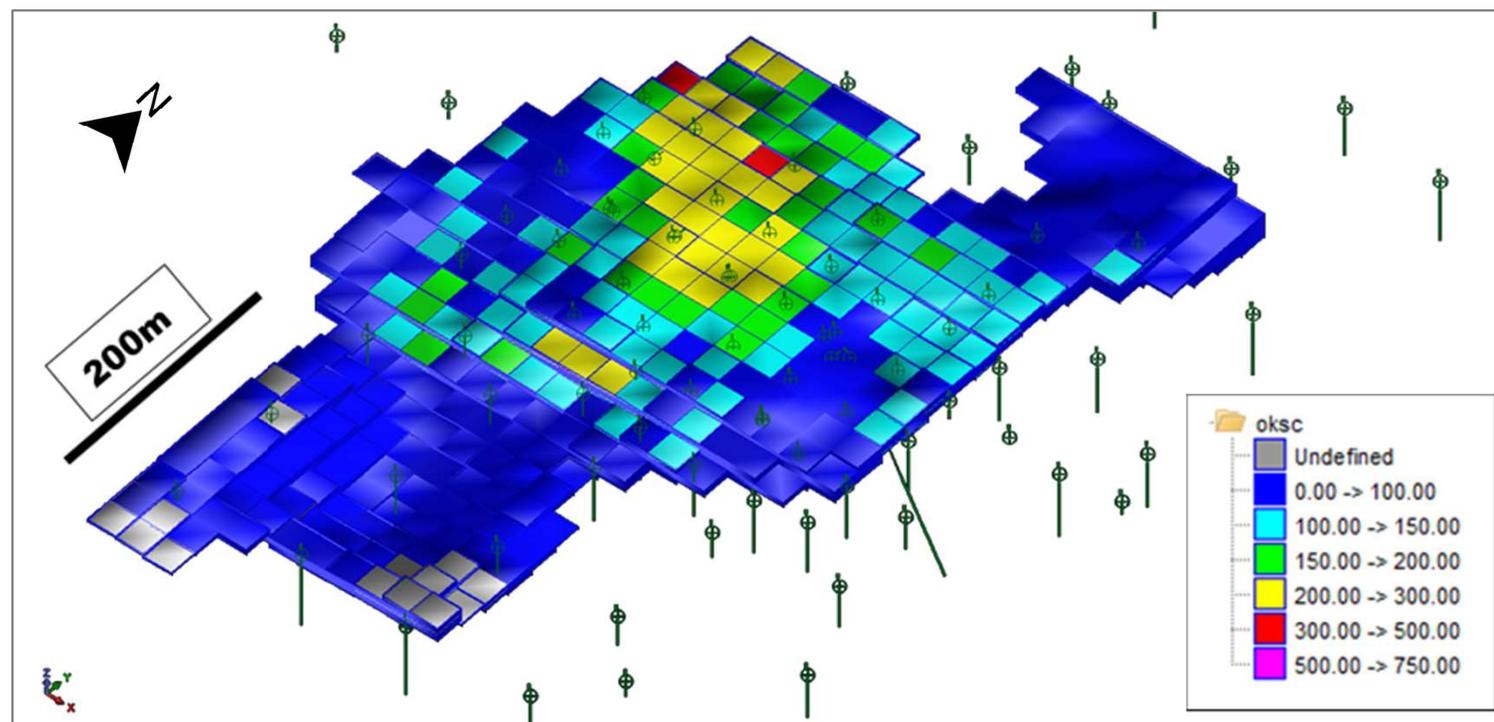


\* Subject to Termination Notice – see RIM ASX Announcement dated 26 September and 17 October 2024

Melrose TMI magnetic image and drillholes

# MELROSE MINERAL RESOURCE

- Indicated and Inferred MRE – 1,120t Sc Oxide\*
- Areal extent of mineralised laterite - 0.75km x 0.4km with a thickness range of 2 to 33m and an average thickness of 16m
- From surface
- Aircore, RC and diamond drilling on 50m x 50m centres
- Largely closed off



Melrose grade block distribution – plan view

\* See Cautionary Statements and Notes in Appendix 1

# CONCURRENT METALLURGY

- Initial sighter leaching test work conducted at Atmospheric Pressures returned scandium recoveries up to 90.1% <sup>1</sup>
- Highly experienced hydrometallurgist Mr Boyd Willis engaged as Process Consultant to guide future metallurgical studies
- Xray Diffraction (XRD) studies recently completed on Melrose drill core to better understand Scandium iron species association – will influence future leaching techniques
- Murga XRD studies planned as next step.
- Rimfire also evaluating High Pressure (HPAL) leaching techniques and down Stream extraction technologies to determine commercial processing route

<sup>1</sup> Rimfire ASX Announcement dated 13 May 2024



# INVESTMENT HIGHLIGHTS



Rimfire commands largest **Scandium prospective** landholding in Australia's Scandium hotspot



**Initial MRE of 5Kt Scandium Oxide + separate Exploration Target of 15 – 46Kt Scandium Oxide\***



Highly experienced team with extensive local operating knowledge



**High impact programs over next 6 months focussed on delivering MRE upgrades**



\* See Cautionary Statements and Notes in Appendix 1

# APPENDIX 1 – CAUTIONARY STATEMENT AND NOTES

## CAUTIONARY STATEMENTS IN RELATION TO MINERAL RESOURCE ESTIMATES AND EXPLORATION TARGETS

Details of the Melrose and Murga North Mineral Resource Estimates were released by Rimfire Pacific Mining in an ASX Announcement entitled “Highly Encouraging Maiden Scandium Mineral Resources for Melrose and Murga North” dated 9 September 2024

With respect to the Melrose and Murga North Mineral Resource Estimates - Rimfire confirms that it is not aware of any new information or data that materially affects the information included in the 9 September 2024 ASX announcement, and that all material assumptions and technical parameters underpinning the estimates in that ASX announcement continue to apply and have not materially changed.

With respect to the Murga Exploration Target - Cautionary Statement: The potential quantity and grade of the Exploration Target is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource, and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

## APPENDIX 2 - MINERAL RESOURCES

### Summary of Mineral Resources – Melrose / Murga Scandium (RIM ASX Release 5/09/2024)

Deposit	Category	Cut off	Mt	Sc_ppm	Co_ppm	Ni_ppm	Contained Sc t	Contained Sc2O3 t	Contained Co t	Contained Ni t
Melrose	Indicated	100ppm Sc	2.9	250	570	2,000	730	1,100	1,700	5.900
	Inferred		0.1	200	430	1,300	16	20	30	100
	<b>Total</b>		<b>3.0</b>	<b>240</b>	<b>570</b>	<b>2,000</b>	<b>740</b>	<b>1,120</b>	<b>1,730</b>	<b>6,100</b>
Murga North	Inferred		21.0	125			2,650	4,050		
<b>Melrose + Murga North</b>	<b>Total</b>						<b>3,390</b>	<b>5,170</b>		
<b>Murga Exploration Target</b>			100 to 200Mt at 100 to 200ppm Sc				<b>~10 – 30Kt</b>	<b>~15 – 46Kt</b>	<b>See Cautionary Note</b>	

**Cautionary Statement:** The potential quantity and grade of the Exploration Target is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource, and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

### Summary of Mineral Resources – Sorpresa Combined Gold Silver (RIM ASX Release 6/11/2019)

Deposit	Category	Cut off	Mt	g/t Au	g/t Ag	Contained Au Koz	Contained Ag Moz
Sorpresa	Measured	1g/t Au & 85g/t Ag	0.189	2.54	70	15.4	0.43
	Indicated		1.041	1.25	78	41.7	2.62
	Inferred		0.289	1.84	42	17.1	0.39
	<b>Total</b>		<b>1.519</b>	<b>1.52</b>	<b>70</b>	<b>74.3</b>	<b>3.44</b>

## APPENDIX 3 – MANAGEMENT TEAM



**IAN McCUBBING**  
Non-Executive Chair

Ian was appointed Non-Executive Director and Chairman of the Board in 2016. He has over 30 year's experience, principally in the areas of corporate finance, M&A and brings a strong commercial background in the resources industry to the Company.

Ian has been a CFO and Non-Executive Director of ASX200 mining companies.



**DAVID HUTTON**  
Managing Director

David has over 30 years of exploration experience, with key expertise in greenfields exploration, project discovery, project execution, geology, corporate management and strategy

David was involved with the discovery and / or delineation of numerous precious and base metal deposits, including Thunderbox gold deposit, Altia Silver Lead Zinc deposit, F8 zinc deposit (Pillara) and Barda Gonzales Copper Deposit (Western Argentina).



**GREG KEANE**  
CFO/Investor Relations

Greg was appointed Rimfire's Chief Financial Officer in May 2017. As an experienced commercial and financial professional in all life cycle stages of an exploration company through to producing operational mining companies, Greg has had significant experience and exposure in defining and implementing operational, commercial and financial strategy.

Greg's experience has been gained in multiple commodities, both locally and internationally.



**ANDREW KNOX**  
Non-Executive Director

Andrew was appointed Non-Executive Director of the Board in March 2020. A qualified accountant he has over 35 years of resources experience principally in acquisitions, mergers and capital raisings for micro and low capital companies in the oil and gas and mining industries.

Andrew was formerly a Non-Executive Director of Rimfire from 2005 to 2011. He is currently CEO and Managing Director of ASX listed Red Sky Energy Ltd.

## APPENDIX 4 – REFERENCES

**Technical information referred to in this presentation has been sourced from the following ASX Announcements:**

- Rimfire Pacific Mining (ASX: RIM) – Critical Minerals Discovery Opportunity at Avondale Project. 28 March 2022
- Rimfire Pacific Mining (ASX: RIM) – Strong nickel, cobalt and scandium drill results. 4 April 2022
- Rimfire Pacific Mining (ASX: RIM) – High-grade scandium at Melrose. 19 September 2022
- Rimfire Pacific Mining (ASX: RIM) – Significant nickel cobalt scandium results at Melrose. 20 October 2022
- Rimfire Pacific Mining (ASX: RIM) – Rimfire investigating Ni – Co – Sc recoveries at Melrose. 9 February 2023
- Rimfire Pacific Mining (ASX: RIM) – Melrose nickel cobalt scandium aircore drilling underway. 8 March 2023
- Rimfire Pacific Mining (ASX: RIM) – Melrose emerging as a significant Ni, Co, Sc opportunity. 26 June 2023.
- Rimfire Pacific Mining (ASX: RIM) – New Murga scandium project identified at Fifield. 28 July 2023
- Rimfire Pacific Mining (ASX: RIM) – Multiple Scandium Intercepts at Fifield. 3 October 2023
- Rimfire Pacific Mining (ASX: RIM) – September 2023 Quarter activities Report. 31 October 2023
- Rimfire Pacific Mining (ASX: RIM) – New Scandium search space at Melrose. 6 December 2023
- Rimfire Pacific Mining (ASX: RIM) – Melrose leaching test work generates up to 90% Sc recoveries 13 May 2024
- Rimfire Pacific Mining (ASX: RIM) – Assays reveal significant increase in Murga Scandium grades 12 June 2024
- Rimfire Pacific Mining (ASX: RIM) – Highly Encouraging Maiden Scandium Mineral Resources for Melrose and Murga North. 5 September 2024
- Rimfire Pacific Mining (ASX: RIM) – Scandium Drilling Underway at Murga Exploration Target



# rimfire

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