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*rimfire*

SCANDIUM | COBALT | COPPER | PGE's

# JUST THE START!

INVESTOR PRESENTATION  
SEPTEMBER 2024



rimfire

# 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.

## 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



Enviably land holding in world renowned Lachlan Orogen and Broken Hill Districts NSW



**Initial MRE of 5Kt Scandium Oxide and Exploration Target of 15 – 46Kt Scandium Oxide**



Highly experienced team with successful track record & local operating knowledge



**High impact programs over next 6 months fully funded by GPR - focussed on delivering Scandium Resource upgrades**



# MAIDEN SCANDIUM RESOURCE – JUST THE BEGINNING



Initial MRE for Melrose & Murga North is 5.1Kt Scandium Oxide with separate Exploration Target of 100 to 200Mt at 100 to 200ppm Sc (15 – 46Kt Scandium Oxide) *See Exploration Target Cautionary Note on page 5*



Murga North Resource Open & Exploration Target + New Prospects Demand Testing



Scandium oxide prices recently quoted as **US\$2.1 - 3.9 million / tonne<sup>1</sup>**



Rimfire anticipates upgraded MRE by end June 25 Qtr. - driven by upgrade of Murga North MRE and conversion of Murga Exploration Target

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



# MINERAL RESOURCE INVENTORY

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## 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>

# CORPORATE OVERVIEW – RIM.ASX

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**2.29B**

SHARES ON ISSUE

**254M**

OPTIONS (1.25 – 2C)

**\$0.08**

SHARE PRICE

**~\$183M**

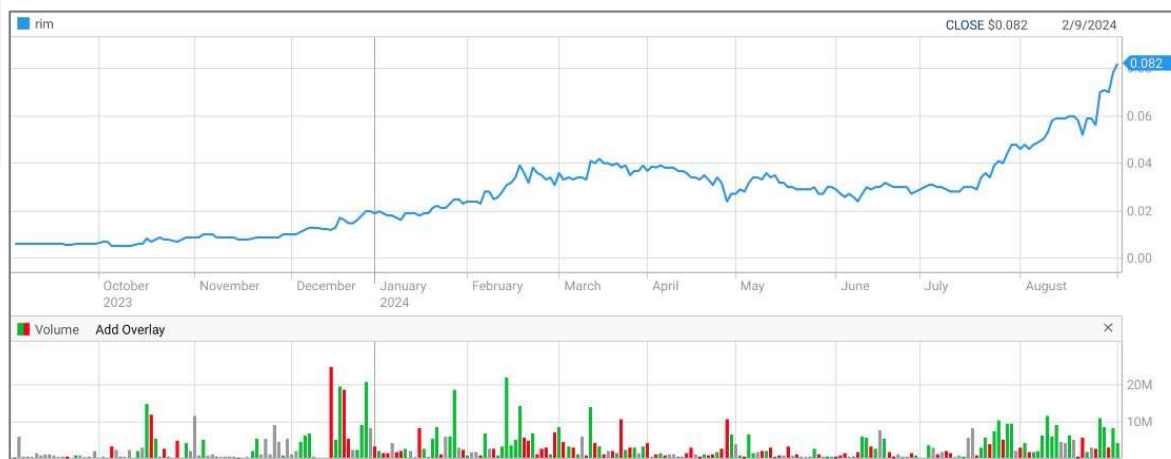
MARKET CAP

**\$1.45M**

CASH

**Top 20**  
**41.3%**

## 12 MONTH SHARE PRICE AND VOLUME



\* Cash at Bank and Earn In Accounts at end June 2024 Qtr. plus proceeds from July 2024 Placement

## FUNDING SOURCES

Cash at Bank*	\$1.45 million	Cash at Bank and Earn In Accounts at end June 2024 Qtr. plus proceeds from July 2024 Placement
Exploration Partner contributions	Up to \$4.45 million	Assuming all moneys paid by GPR to achieve full earn in under both Fifield and Avondale Earn In and JV Agreements
Exploration Partner payment to RIM	Up to \$1 million	
February 2025 2c Options (142.5M options)	\$2.85 million	If all exercised

# 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



## 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.



## 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.



## 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



- 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, 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 allows provide strength and weight benefits for aircraft and aeronautical components
  - ✓ **Transportation** – Lightweight allows 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
- Primary occurrences over 100ppm are considered rare with average crustal abundance ~16ppm<sup>1</sup>

<sup>1</sup> Field Geologist Manual 1995



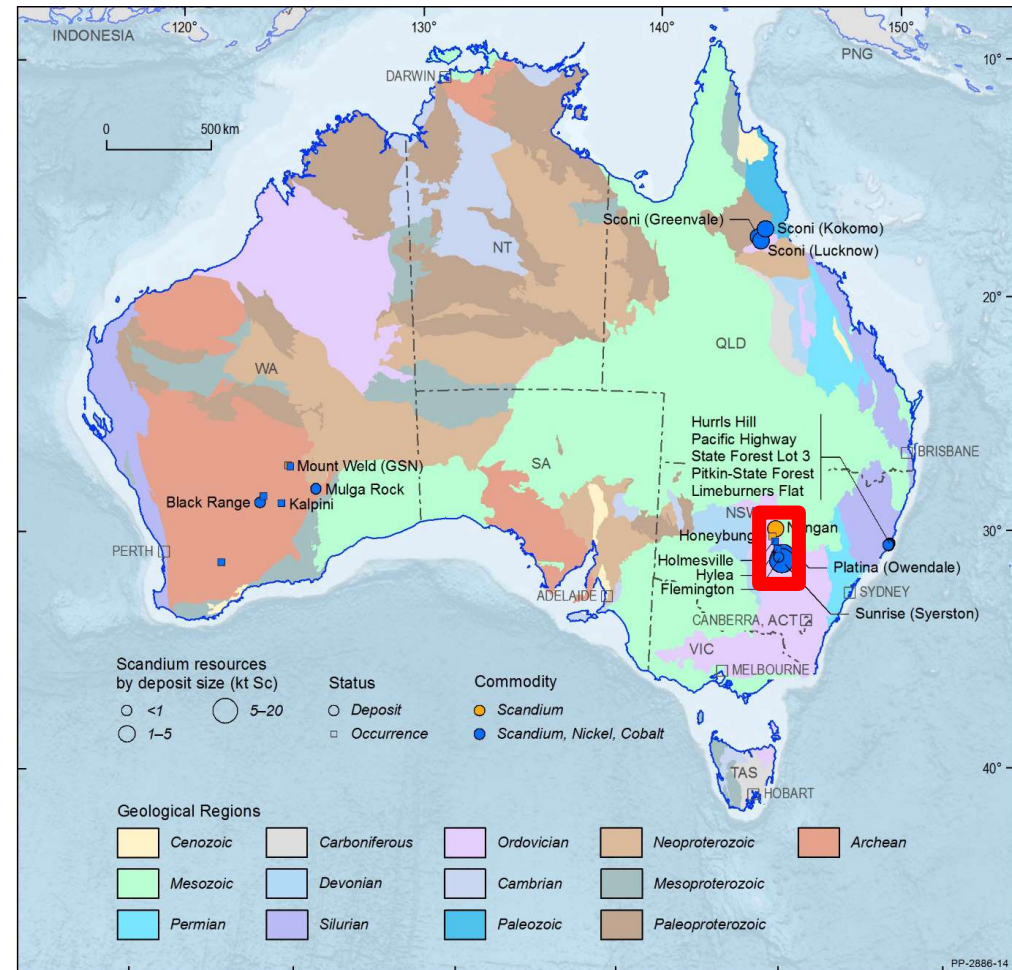
# THE SCANDIUM MARKET

- Scandium is on the **Critical Minerals List** for Australia, Canada, the European Union and the United States
- Estimated annual global consumption of 30-40 metric tons of scandium<sup>1</sup> – however difficult to accurately estimate due to “secret” military applications
- **Uptake and future demand growth is SUPPLY CONSTRAINED due to GEOPOLITICAL RISK**
- The US and its western allies are totally dependent on imports from China, Kazakhstan, Philippines, Russia and Ukraine
- **All scandium produced as a by-product, i.e. no single scandium mine source exists**
- Western economies are seeking **long term stable supply from allied nations such as Australia**
- Price estimates vary - Scandium Oxide (US\$2.1 - US\$3.9 million / tonne<sup>1</sup>)
- Rio has entered the Scandium market with the acquisition of the Burra Project next door to Rimfire<sup>2</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>2</sup>)**

<sup>1</sup> USGS Scandium Fact Sheet 2024 <sup>2</sup> Rio Tinto website

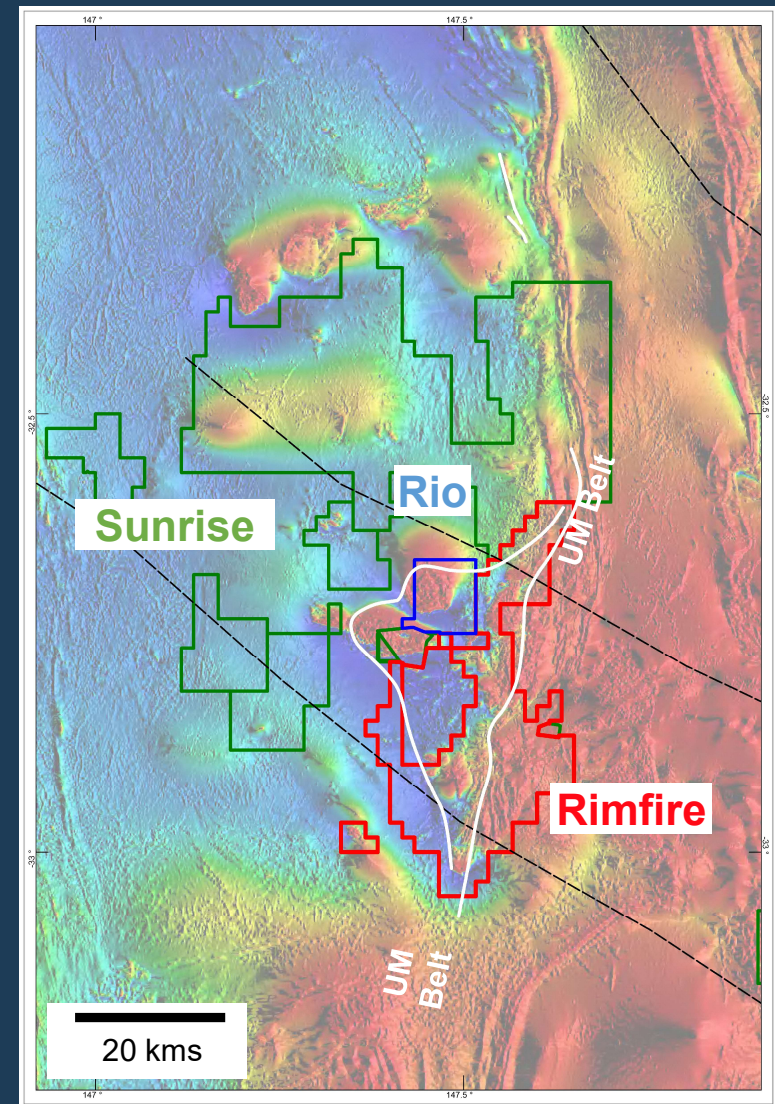
# NEW SOUTH WALES IS THE FUTURE OF SCANDIUM SUPPLY

- Fifield District in central NSW has **unique geology** that hosts some of the highest-grade scandium deposits in the world
- Located immediately west of Parkes with **existing Infrastructure** and a **skilled mining workforce**
- Existing NSW projects dominated by two major companies, i.e., Rio Tinto (RIO.ASX) and Sunrise Energy Metals (SRL.ASX)
- Rimfire (RIM.ASX) is the **only ASX listed Scandium junior** in the Fifield District
- Rimfire has one of the **largest scandium prospective tenement holdings** (~700km<sup>2</sup>) in Fifield



# WHATS SPECIAL ABOUT FIFIELD?

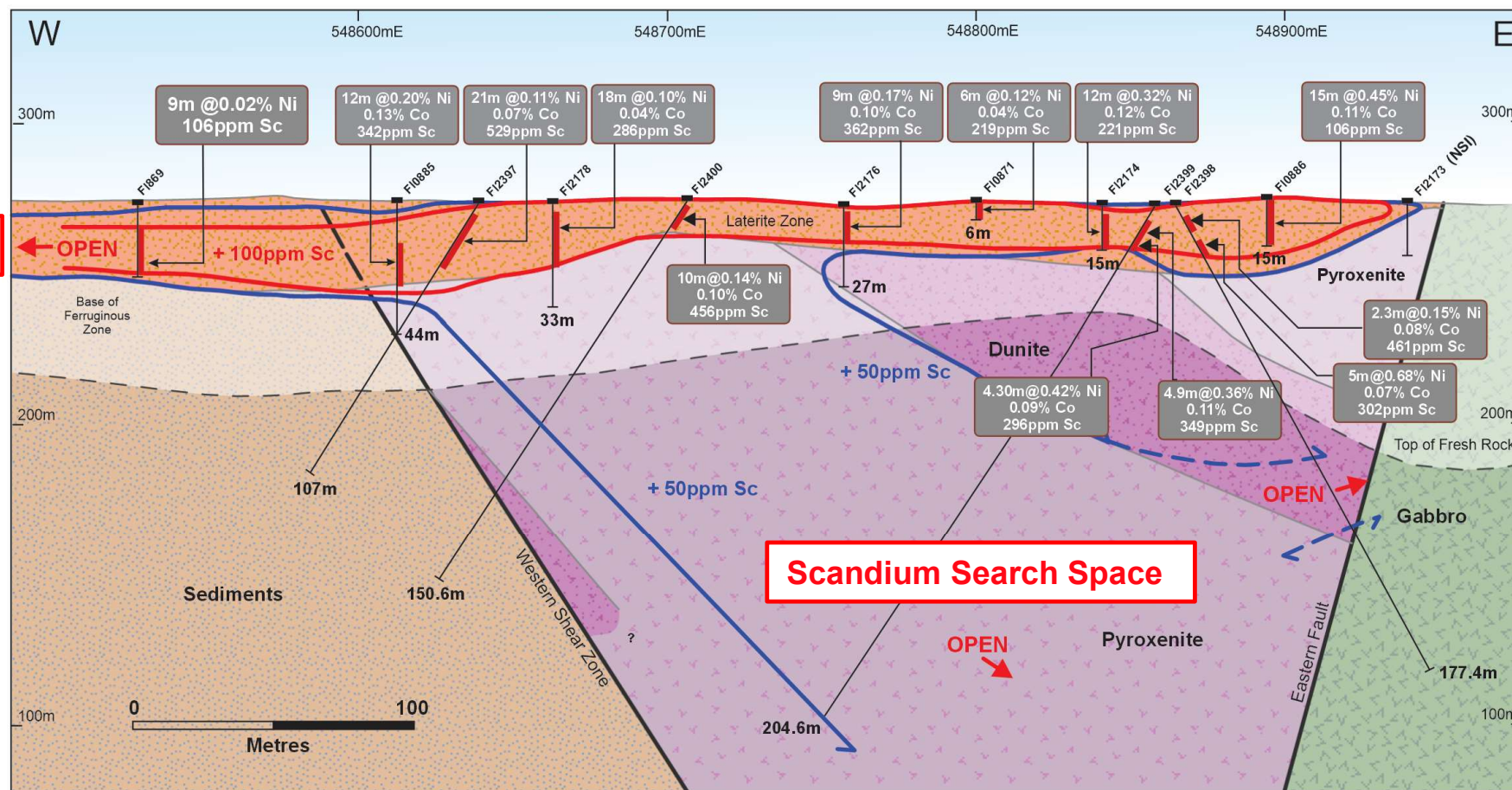
- N-S linear belt of Ordovician (Alaskan – type) mafic / ultramafic rocks (scandium source rocks) – *marked as white outlines on map opposite.*
- 350km long belt with thickest portion in Fifield area due to NW – SE structures
- Scandium (+/- nickel and cobalt) mineralisation occurs within weathered laterite and saprolitic clays developed over the pyroxenite units
- **Rio's purchase of Burra reinforces Fifield as the Scandium epicentre of Australia**





# SCANDIUM IN LATERITE AND BASEMENT

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Melrose 6,371,575mN cross section



# SCANDIUM IN DRILL CORE

Downhole from surface

21m @ 529ppm Sc from 3 metres

Melrose drillhole – FI2397 0.0 to 29.7 metres

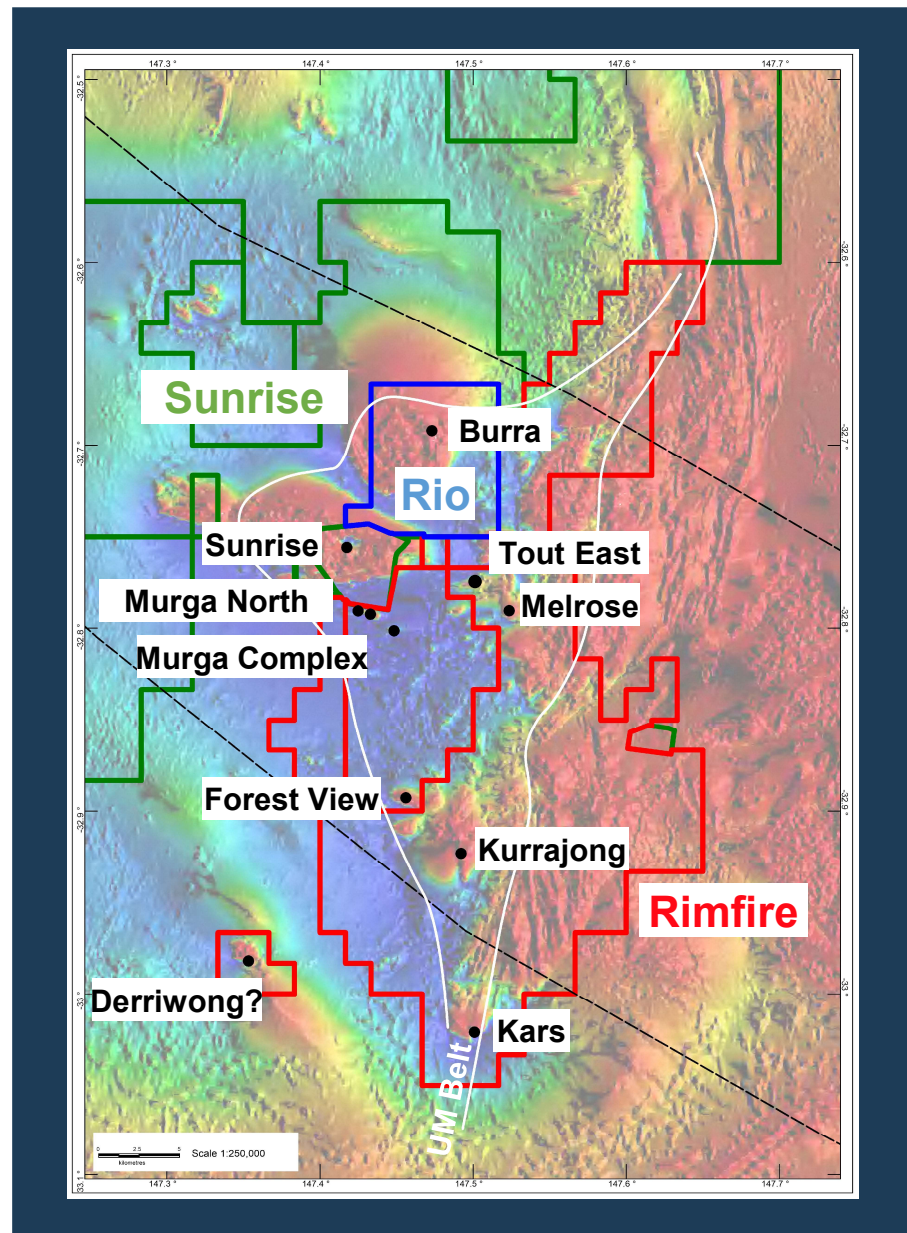


# RIMFIRE HAS THE UPSIDE

- **Existing Third-Party Resources** - Burra (9.8Kt Sc metal / 15Kt Sc oxide<sup>1</sup>) and Sunrise (12Kt Sc metal / 19Kt Sc oxide <sup>2</sup>) **are constrained**
- **Rimfire has upside** with tenements covering the largest area of Sc prospective ultramafic rocks in the Fife 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
- Diamond drilling – twin aircore / met sample / density
- XRD
- Planned for October – December 2024

**Convert Murga Exp Target to MRE**

- Aircore drilling – 100m x 100m
- Surface Topography DTM
- Planned for October – December 2024

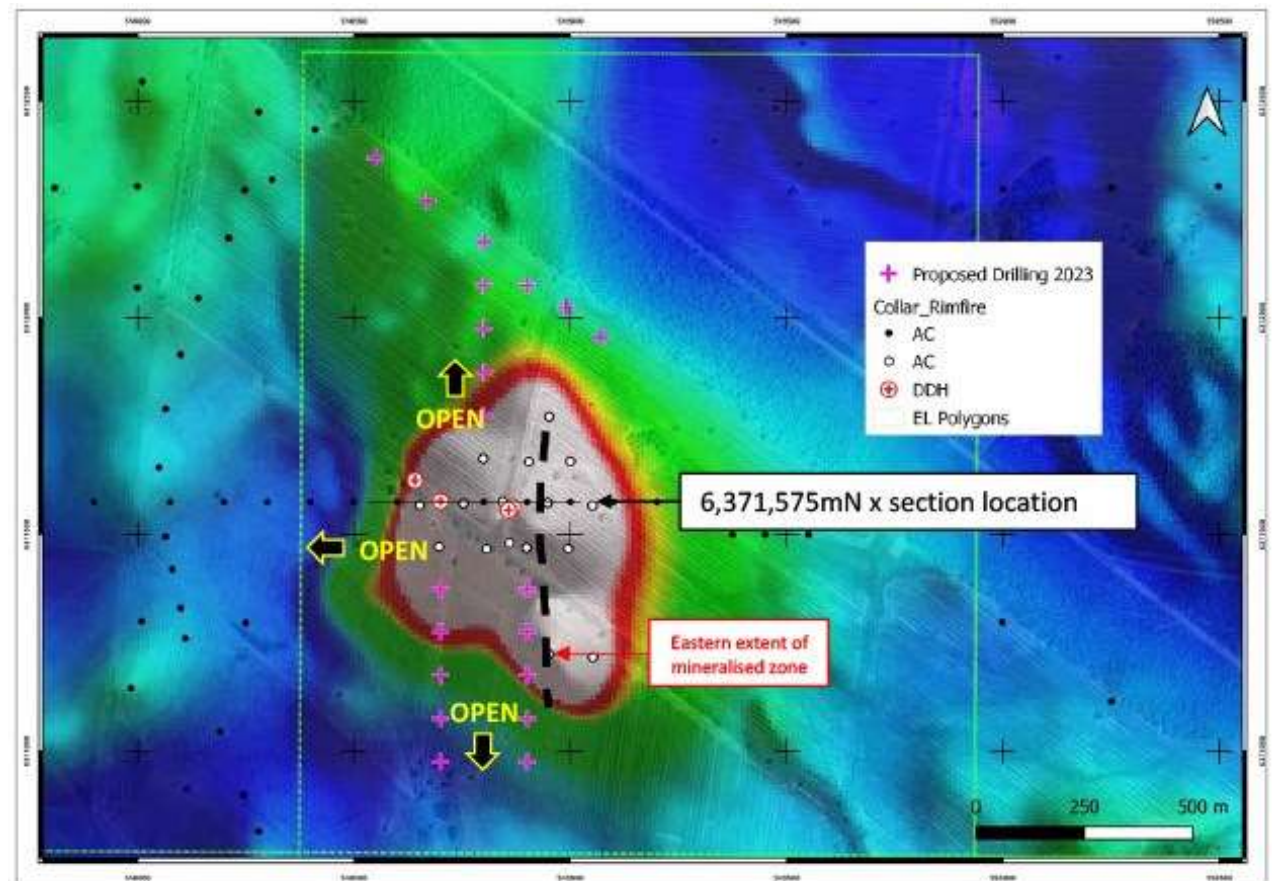
**Drill test target pipeline**

- Currajong / Forrest View / Tout East / Derriwong / Kars / Murga Basement
- Review historic data for follow up drilling
- Planned January – March 2025

**Concurrent Stage 2 Metallurgical Test work – investigating AL and HPAL**

# MELROSE SCANDIUM

- Avondale Earn In Project with GPR.
- GPR funding all planned work
- GPR right to earn up to a 75% interest
- High-grade Sc Co Ni (+PGEs) mineralisation from surface within flat-lying laterite zone over pyroxenite host rocks

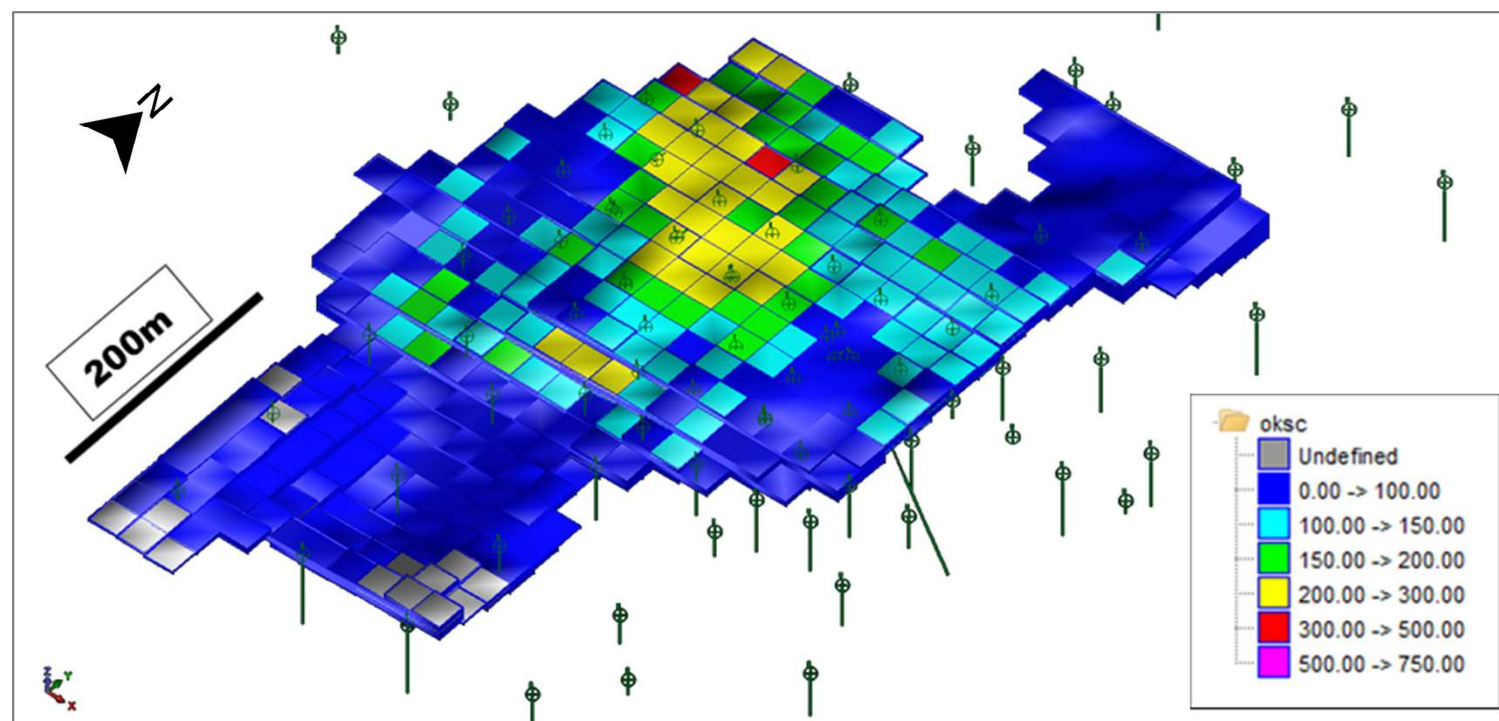


Melrose TMI magnetic image and drillholes



# MELROSE MINERAL RESOURCE

- Areal extent of mineralised laterite - 0.75km by 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
- MRE – 1,120t Sc Oxide
- Indicated and Inferred
- Largely closed off



Melrose grade block distribution – plan view

## MELROSE – 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

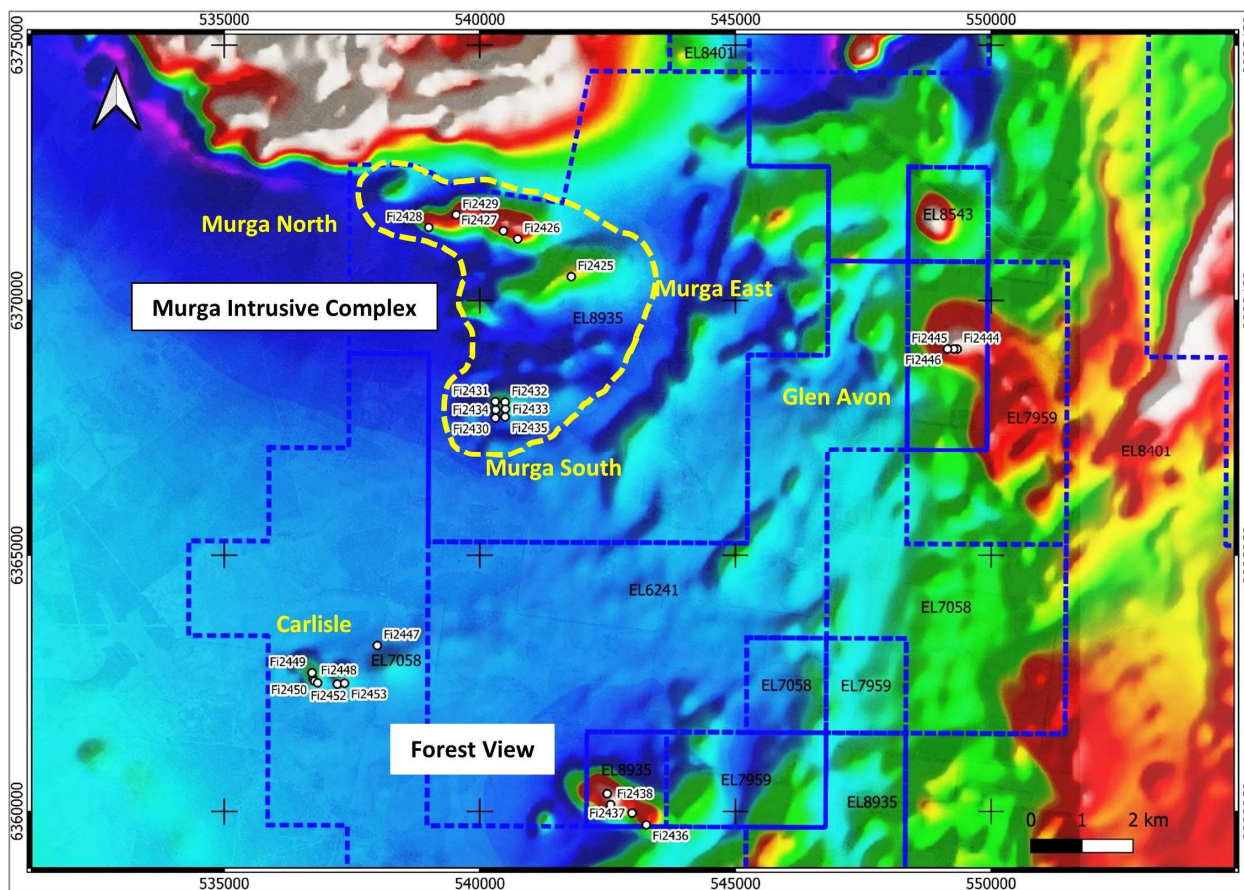
<sup>1</sup> Rimfire ASX Announcement dated 13 May 2024





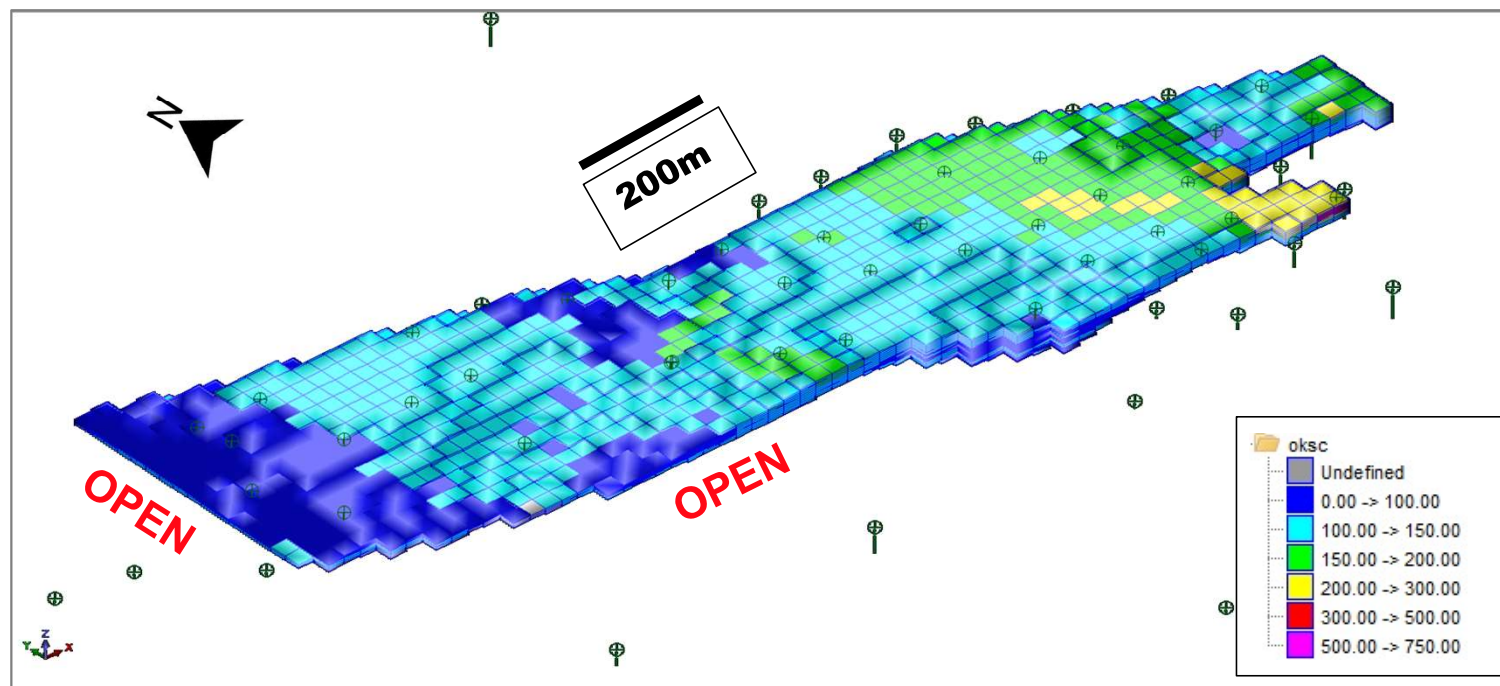
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# MURGA NORTH MINERAL RESOURCE

- Areal extent 1.6km by 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
- MRE – 4,050t Sc Oxide
- Inferred
- Open to south and west



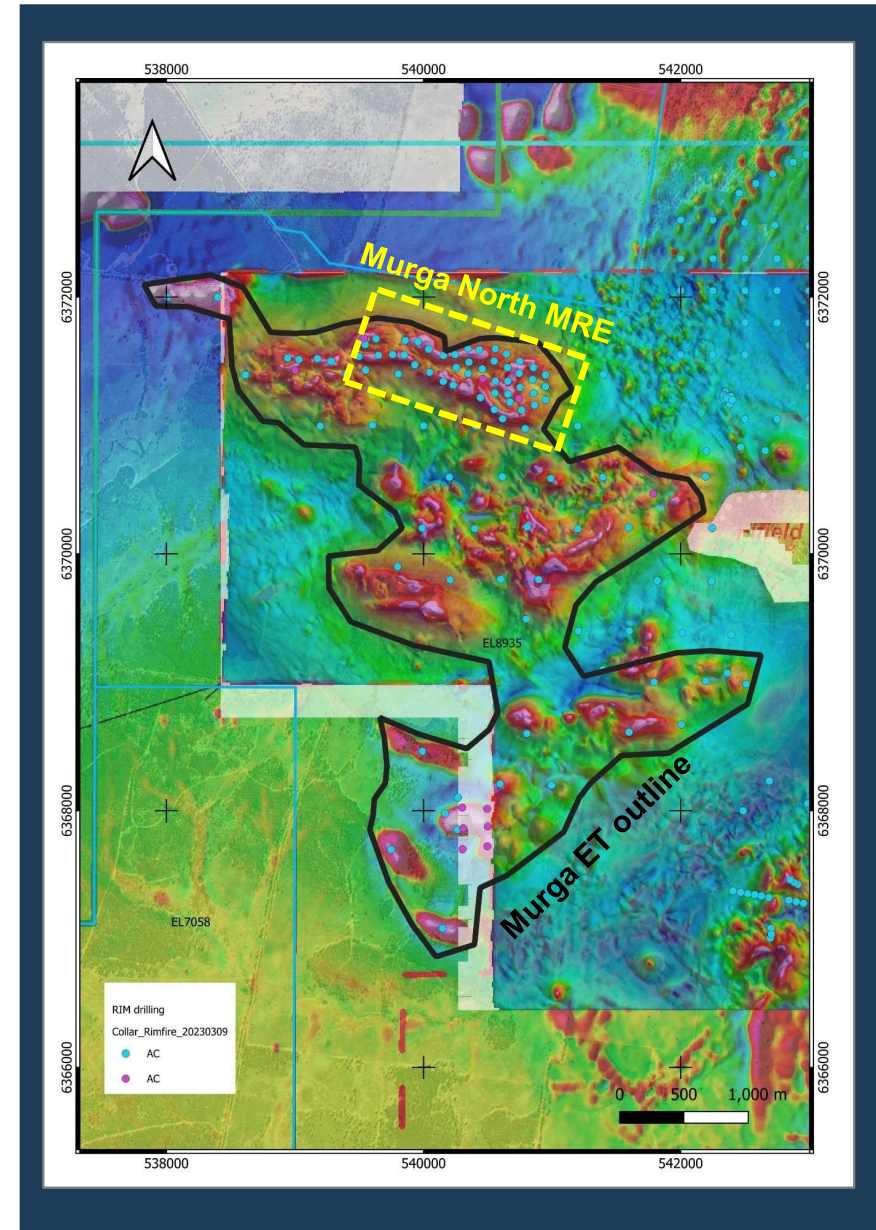
Murga North grade block distribution – plan view



# MURGA EXPLORATION TARGET

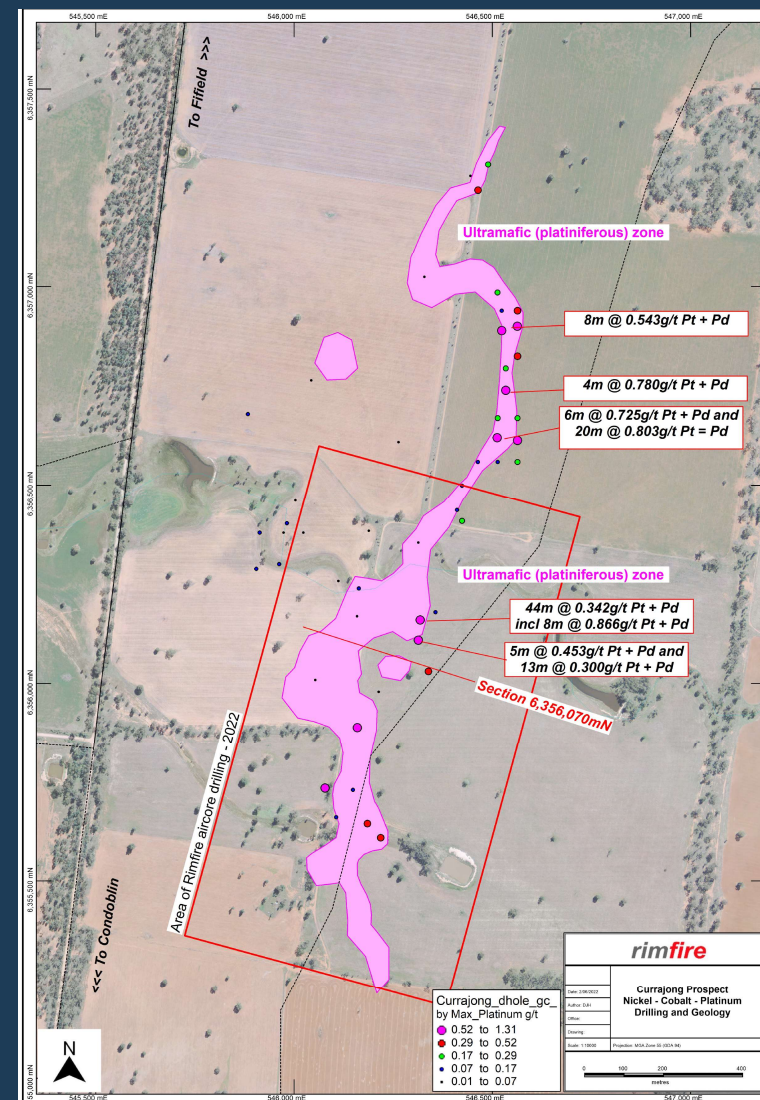
- Exploration Target based on magnetic interpretation and positive results from Rimfire 2024 aircore drilling
- Conservative with only 50% of the outline area classified as the Exploration Target
- Rimfire 2024 air core drilling on 400m x 400m centres returned anomalous Sc in multiple holes, i.e.;
  - 13m @ 188ppm Sc from 3 metres in FI2514 *including 4m @ 248ppm Sc from 7 metres*,
  - 3m @ 127ppm Sc from 13 metres in FI2549,
  - 18m @ 174ppm Sc from 1 metre in FI2561 *including 3m @ 226ppm Sc from 7 metres*,
  - 27m @ 188ppm Sc from 0 metres in FI2434 *including 12m @ 224ppm Sc from 3 metres*
- Average thickness of 15m and a default density of 2.15t/m<sup>3</sup>
- **Exploration Target of 100 to 200Mt at 100 to 200ppm Sc, i.e.;**  
**(15 – 45Kt Sc Oxide)**

Note Cautionary Statement on slide 5



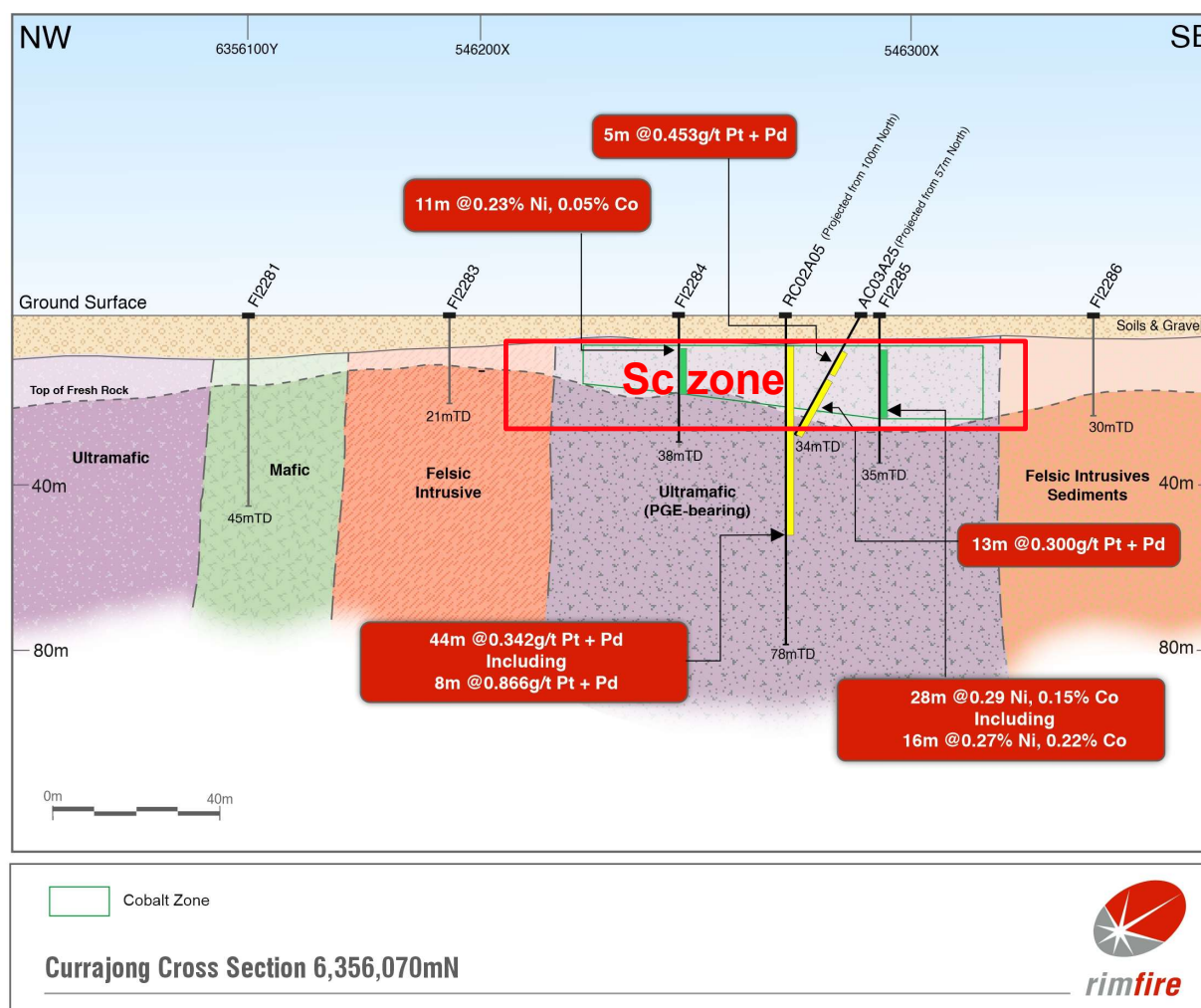
# CURRAJONG SCANDIUM PGEs

- Avondale Earn In Project with GPR
- GPR funding all planned work
- GPR right to earn up to a 75% interest
- Sc Co Ni (+PGEs) mineralisation within flat-lying laterite zone developed over ~ 2.4km long mafic / ultramafic sill complex
- Rimfire 2022 aircore drilling highlighted scandium potential although drilling was Ni Co PGE focussed;
- 34m @ 0.29% Ni, 0.15% Co, and 101ppm Sc from 6 metres in FI2285 **including 16m @ 0.27% Ni, 0.22% Co, and 120ppm Sc**
- 11m @ 0.23% Ni, 0.05% Co, and 118ppm Sc from 8 metres in FI2284
- 24m @ 0.18% Ni, 0.05% Co, 310ppm Sc from 20 metres in FI0904
- No Scandium follow-up



Currajong ultramafic sill outline on aerial photography image







# INVESTMENT HIGHLIGHTS



Enviably land holding in world renowned Lachlan Orogen and Broken Hill Districts NSW



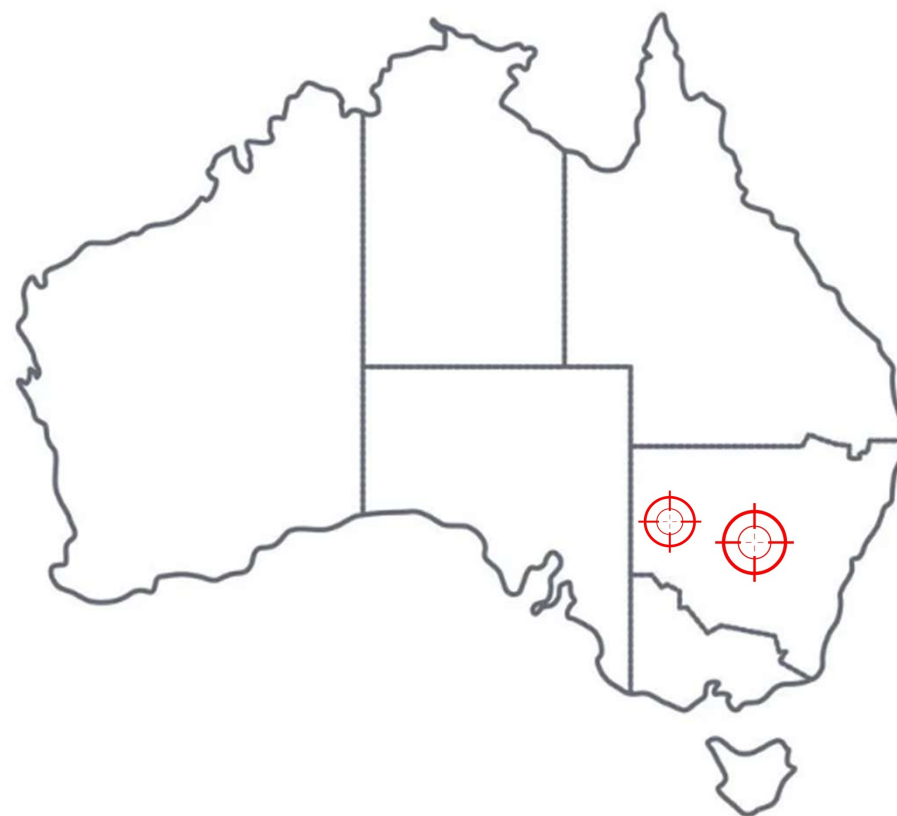
**Initial MRE of 5Kt Scandium Oxide and Exploration Target of 15 – 46Kt Scandium Oxide**



Highly experienced team with successful track record & local operating knowledge



**High impact programs over next 6 months fully funded by GPR - focussed on delivering Scandium Resource upgrades**



# 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 1 – 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) – Significant Ni, Co and Pt drilling results at Currajong. 8 June 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





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For further information, please contact  
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[@NIRimfire](#)