

rimfire

SCANDIUM | COBALT | PGE's

Scandium – Uses, Supply and Rimfire

MARCH 2024

MININGNEWS **SELECT**

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.

RIMFIRE INVESTMENT HIGHLIGHTS



Projects located in richly endowed Lachlan Orogen and Broken Hill districts of NSW



Exploring for high - grade scandium, cobalt and PGE deposits



Very experienced geological team with local operating knowledge



High impact work programs and news flow over next 6 months



OUR PROJECTS

Fifield / Avondale – Scandium, Cobalt, PGEs

- Lachlan Orogen - centred on the Fifield District, 70 km NW of Parkes, NSW
- Exploration Partner (GPR) funding all activities
- Building an exploration and development pipeline of high-grade scandium opportunities

Broken Hill (RIM 100%) – Cobalt

- Broken Hill District, adjacent to Cobalt Blue's Broken Hill Cobalt Project
- Initial drilling confirms high-grade cobalt in sulphides
- Building a high-grade counter cyclic cobalt opportunity

Cowal (RIM 100%) – Copper, Gold

- Lachlan Orogen – located immediately east of the Cowal Gold Mine (9.6Moz gold)
- Multiple copper gold drill targets identified with Ordovician volcanic rocks
- Seeking an Exploration Partner

Valley (RIM 100%) – Copper

- Lachlan Orogen – located immediately west of the Northparkes Copper Gold Mine (1.96Mt copper & 2.33Moz gold)
- Rimfire drilling confirms Northparkes equivalent volcanic rocks at depth

CORPORATE OVERVIEW – RIM.ASX

2.22B
Shares on issue

253.6M
Options (1.25 – 2c)

\$0.035
Share price

~\$75M
Market cap
(undiluted)

\$1.2M*
Cash

Top 20 - 43%



* Cash reported at end Dec 23 Qtr. Excludes additional \$66K held in JV accounts and \$250K received from JV partner post Qtr.

PROVEN DISCOVERY 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.



Wolfgang Leyh
Technical Consultant

Broken Hill specialist geologist

Wolfgang has over 40 years of exploration experience, throughout Australia with a special expertise in the Broken Hill domain.

Wolfgang's experience ranges from in mine to greenfield exploration across a range of commodities. Pragmatic with an emphasis on "boots on ground" exploration, Wolfgang's geological knowledge of the Broken Hill domain is unparalleled.

SCANDIUM (Sc) MARKET

- Scandium is considered a critical mineral by western governments
- Principal uses; scandium – aluminium alloys (Sc Al) and solid oxide fuel cells (SOFCs)
- Sc Al alloys - lightweight, and high-strength (green solutions for the transport, aerospace, and defence manufacturing sector)
- Extremely high-value: Sc Oxide price up to US\$3.9M/tonne and Sc Metal price up to US\$153M/tonne¹
- Annual market (Sc Oxide) ~ 40tpa with significant increase forecast driven by aerospace industry and the Hydrogen economy
- But growth is SUPPLY CONSTRAINED (**geo-political risk**)
- Rio recognises this and has established a new Scandium business division (Element North 21)

“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

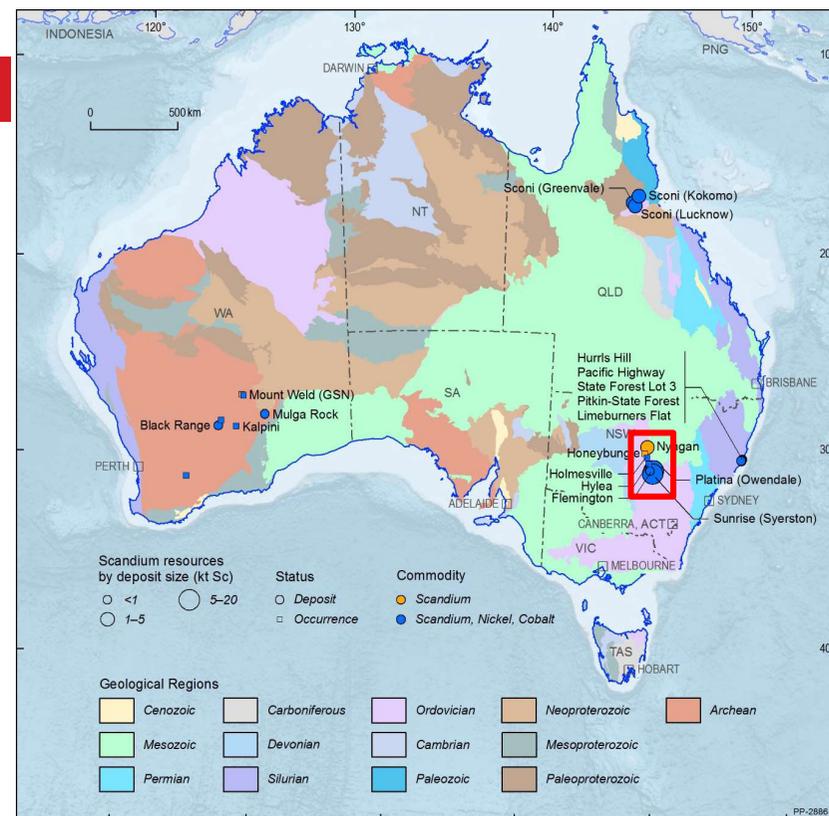
¹ USGS Mineral Commodity Summaries 2024 ² Rio Tinto website



AUSTRALIAN SCANDIUM RESOURCES

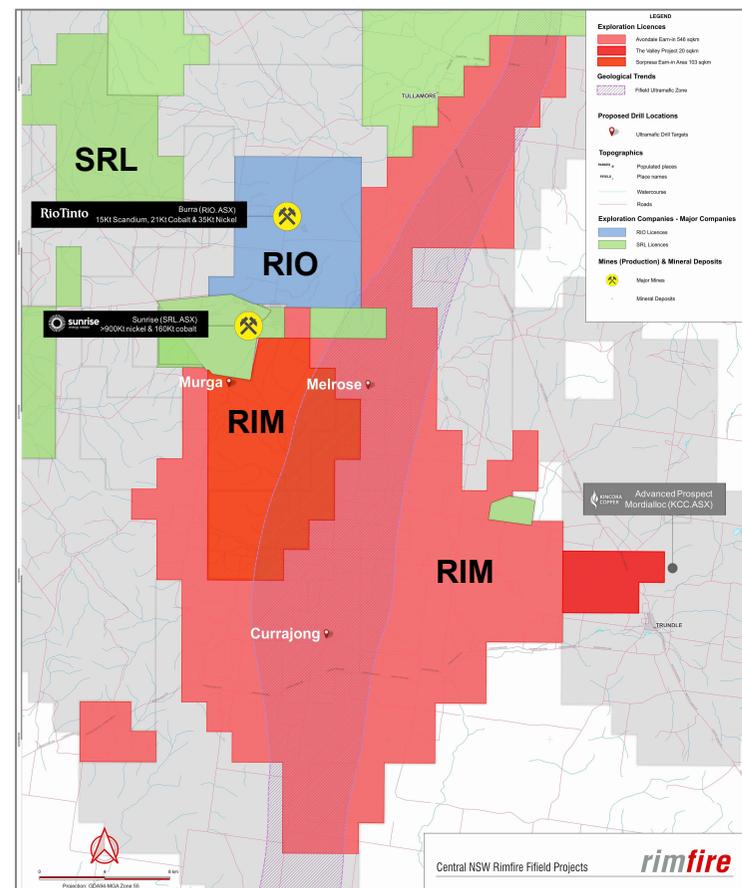
CENTRAL NSW EPICENTRE

- Australia represents a favourable “supply” jurisdiction for the US and its allies
- NSW has some of the highest-grade scandium deposits in the world
- Centred on the Fifield District, 70 km NW of Parkes, NSW
- NSW Government establishing Australia’s first Critical Minerals Hub at Parkes
- Existing NSW projects dominated by major companies, i.e., Rio Tinto (RIO.ASX) and Sunrise Energy Metals (SRL.ASX)



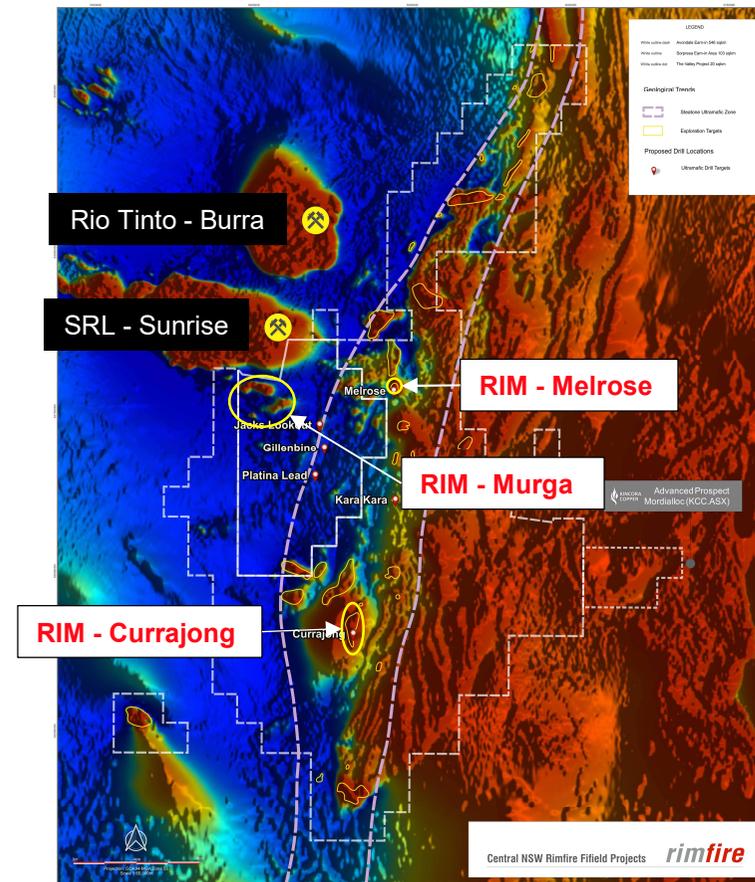
SCANDIUM – FIFIELD DISTRICT

- Rimfire's Fifield and Avondale Projects located 70 km NW of Parkes within the NSW Scandium epicentre
- **The major companies are moving in**
- Rio Tinto's recent purchase of Burra [Owendale] for US\$14M
- Evolution's recent purchase of Northparkes (80%) for US\$475M
- Rimfire is the only ASX – listed junior explorer actively pursuing scandium opportunities within the district
- All Rimfire's scandium exploration programs are sole - funded by exploration partner Golden Plains Resources (GPR)
- All programs designed and implemented by Rimfire technical personnel in consultation with GPR

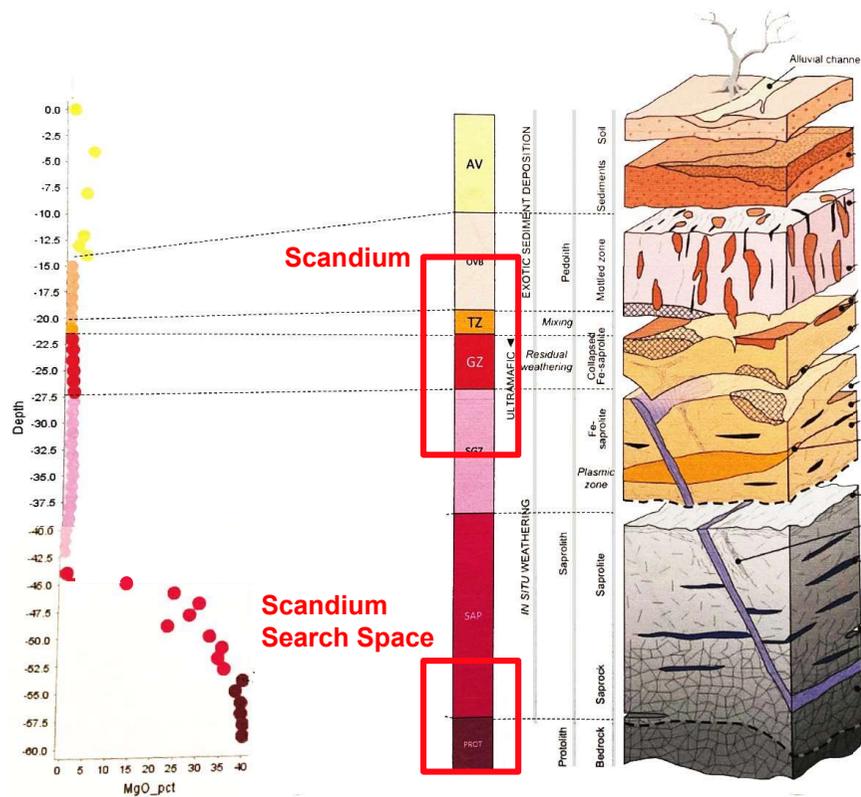


FIFIELD SCANDIUM GEOLOGY

- Ural Alaskan type mafic / ultramafic complexes
- Typically hosted by laterite and saprolitic clays
- Burra [Owendale] Total (Measured, Indicated and Inferred) Resource of 610Kt @ 655ppm Sc, 0.44g/t Pt, 0.20%Ni, and 0.14%Co (*PGM.ASX Announcement - 12 July 2016*)
- Sunrise Resource (Measured and Indicated) of 162.70Mt @ 76ppm Sc plus an Inferred Resource of 20.62Mt @ 283ppm Sc (*Sunrise Deposit NI 43-101 Technical Report - 25 June 2018*)
- **Rimfire controls 55km long belt of favourable host rock occurrences**
- **5 advanced scandium prospects identified to date – Melrose, Murga, Currajong, Forrest View, and Kars**
- **Generating further targets to rapidly build a growth pipeline**



FIFIELD SCANDIUM GEOLOGY



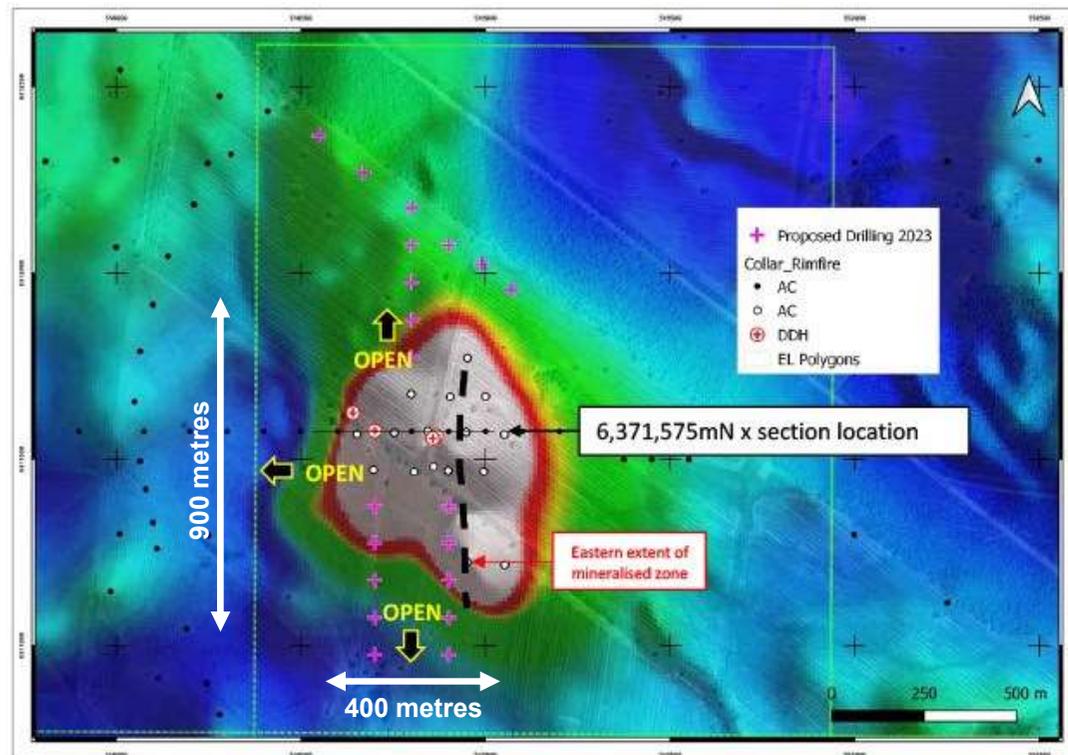
Schematic regolith profile – Sunrise Deposit

HOST ROCKS & WEATHERING

- During weathering of pyroxenite host rock – Scandium becomes enriched along with Al, Mn, Fe, Co and Pt
- Scandium present in weathered laterite and saprolite clays
- 5 - 10x increase in Sc grades in saprolite clays
- Sc dispersed more widely in saprolite compared to Ni & Co
- Rimfire has also identified new scandium search space in fresh pyroxenite and ultramafic rocks

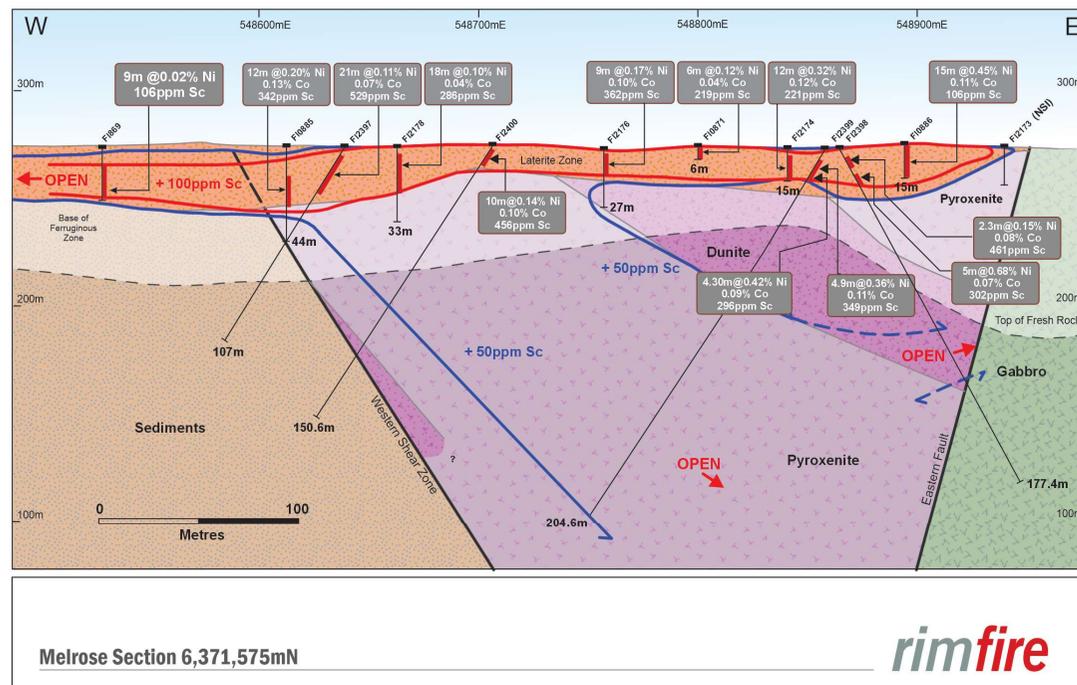
MELROSE SCANDIUM COBALT

- **Avondale Earn In Project with GPR.**
- GPR earning up to a 75% spending \$7.5M (\$1.9M spent to date)
- High-grade Sc Co (+PGEs) mineralisation within flat-lying laterite zone at surface
- First pass sighter leach test work achieves 40% Sc and 90% Co recoveries at atmospheric pressure
- **Ongoing leaching test work and JORC Resource drilling – 2nd Qtr. 2024**



MELROSE – HIGH GRADE DRILL INTERCEPTS AT SURFACE

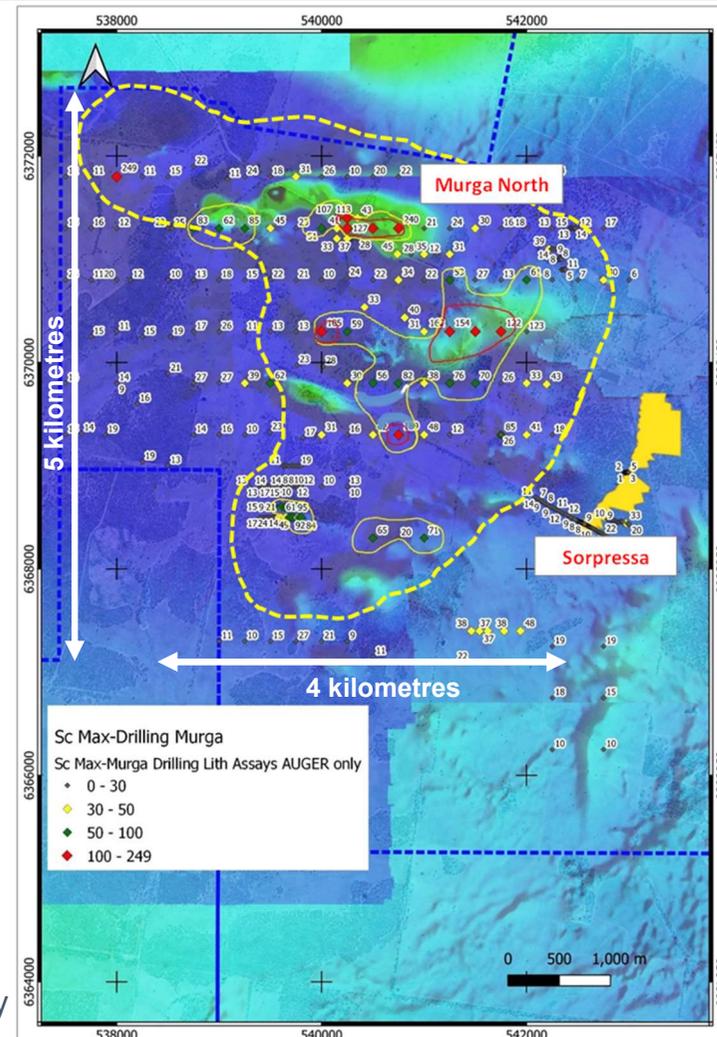
- 21m @ 0.11% Ni, 0.07% Co, and 529ppm Sc, from 3 metres in FI2397 including 9m @ 0.17% Ni, 0.15% Co and 688ppm Sc from 14 metres
- 2.3m @ 0.15% Ni, 0.08% Co and 461ppm Sc from 3 metres and 5.0m @ 0.68% Ni, 0.07% Co and 302ppm Sc from 16 metres in FI2398
- 4.9m @ 0.36% Ni, 0.11% Co and 349ppm Sc from 5 metres, and 4.3m @ 0.42% Ni, 0.09% Co and 296ppm Sc from 10.1 metres in FI2399
- 10.0m @ 0.14% Ni, 0.10% Co and 456ppm Sc from 1 metre in FI2400 including 5m @ 0.17% Ni, 0.17% Co and 568ppm Sc from 5 metres



MURGA SCANDIUM

- **Fifield Earn In Project with GPR.**
- GPR earning up to 50.1% by spending \$4.5M and committing to development funding (\$4.15M spent to date)
- Sc mineralisation within flat-lying laterite over pyroxenite host rocks
- Initial Rimfire drilling confirms Sc prospectivity
- 18m @ 164ppm Sc from surface in FI2426 *including 6m @ 208ppm Sc*
- 5m @ 125ppm Sc from 3 metres in FI2427
- 6m @ 131ppm Sc from 15 metres in FI2429,
- **100-hole aircore follow-up drill program (over ~ 20km² area) just finished with results due late April 2024**

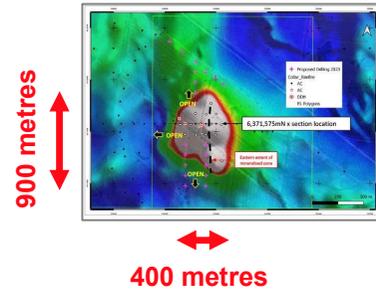
Murga Scandium Prospect – auger geochemistry



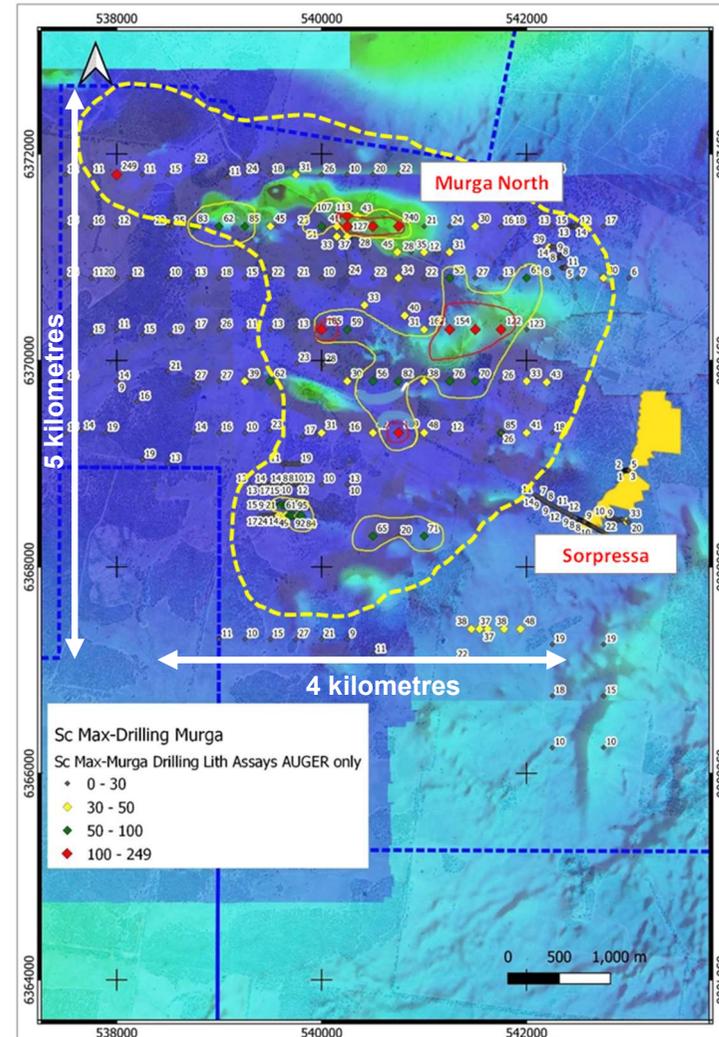
SIZE COMPARISON

- Murga vs Melrose at same scale

Melrose Scandium Prospect



Murga Scandium Prospect



INDICATIVE ACTIVITY AND NEWS FLOW SCHEDULE

Scandium

Avondale

Melrose – Metallurgical test work

Melrose – JORC Resource drill out

Regional Target Generation

Fifield

Murga – aircore drilling (100 holes)

Cobalt & Copper

Broken Hill

Complete Castillo transaction

Regional target generation

RC / Diamond drilling – Bald Hill

Cowal

Seeking an Exploration Partner

March 24 Qtr.

June 24 Qtr.



KEY RIMFIRE TAKEAWAYS

- ✓ Rimfire offers unique ASX Scandium exposure
- ✓ Located within the NSW Scandium epicentre
- ✓ Very experienced technical team with extensive local operating knowledge
- ✓ Multiple Scandium prospects **at surface** with target pipeline being rapidly developed
- ✓ Rimfire investigating LOW CAPEX metallurgical solutions
- ✓ Supportive exploration partner GPR funding all scandium exploration
- ✓ High impact work programs and news flow over next 6 months

APPENDICES – REFERENCES & ADDITIONAL INFORMATION

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

- Sunrise Energy Metals (ASX: SRL) – Sunrise Project Awarded Major Project Status, 6 Dec 2021
- Cobalt Blue Holdings (ASX: COB) – Grant of Australian Major Project Status, 2 Mar 2022
- 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) – High-grade cobalt targets identified at Broken Hill. 3 November 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) – Rimfire receives commitments of \$3.25 million. 14 December 2023
- Rimfire Pacific Mining (ASX: RIM) – Scandium drill program underway at Murga prospect. 12 February 2024
- Rimfire Pacific Mining (ASX: RIM) – Sc, Co, Ni recoveries demonstrated at atmospheric pressures 4 March 2024

MANAGEMENT TEAM



Ian McCubbing • Non-Executive Chair

Ian was appointed Non-Executive Director and Chairman of the Board in 2016. He has over 30 years 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

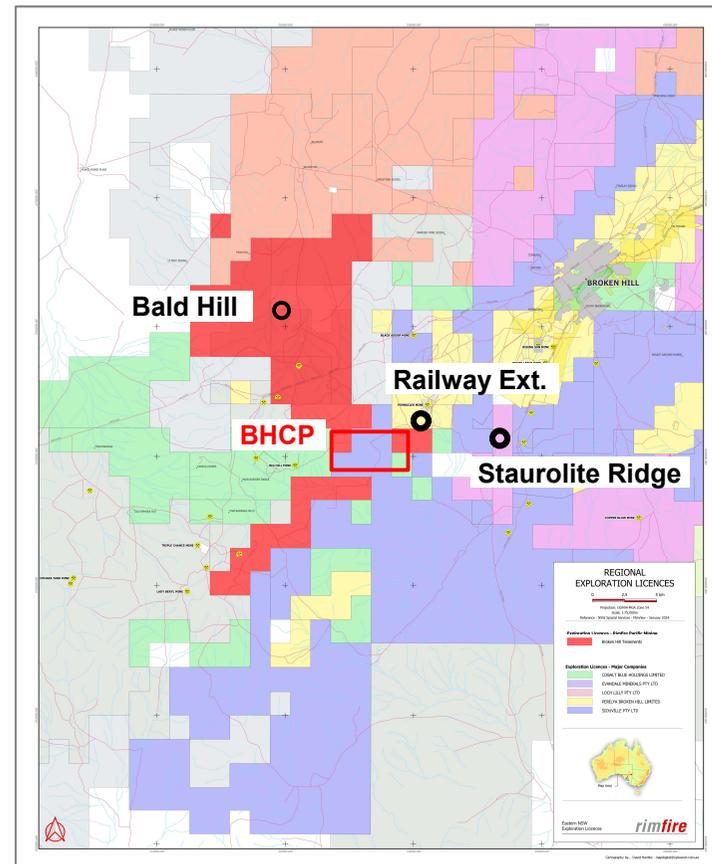
Andrew was appointed Non-Executive Director of the Board in March 2020. A qualified accountant he has over 35 years of resources experience principally in acquisitions, mergers and capital raisings for micro and low capital companies in the oil and gas and mining industries.

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.

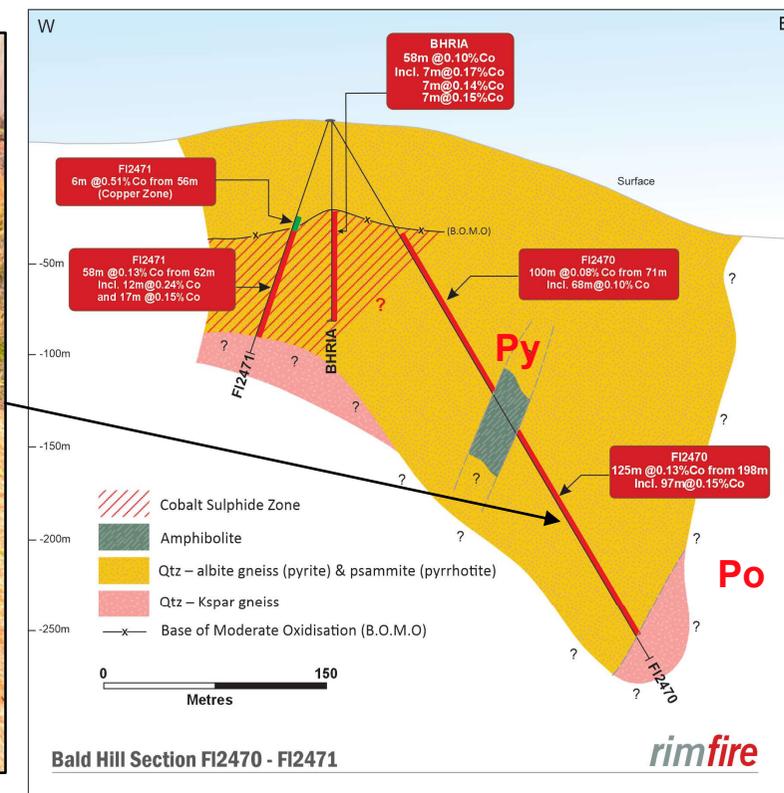
RIMFIRE 100% OWNED CRITICAL MINERAL PROJECTS

BROKEN HILL COBALT PROJECT

- A high-grade counter cyclic play for Rimfire
- Adjacent to Cobalt Blue's (COB.ASX) Broken Hill Cobalt Project (BHCP) – (Total Resources 123Mt @ 0.07% Co)
- COB's project has Federal Government Major Project Status with new technology unlocking value from cobalt sulphides
- Rimfire targeting **high-grade cobalt in sulphide** with first drill program at Bald Hill returning high-grade intercepts, i.e.;
- 125m @ 0.13%Co from 198m in FI2470 incl 97m @ 0.15%Co
- 58m @ 0.13%Co from 62m in FI2471 incl 12m @ 0.24%Co and 17m @ 0.15%Co
- New tenement acquisition from Castillo Copper (CCZ.ASX) more than doubles size of project.



BALD HILL COBALT SULPHIDES





*rim***fire**

For further information, please contact
Greg Keane (CFO / Investor Relations):



+61 (0) 497 805 918



[Rimfire Pacific Mining](#)



rimfire@rimfire.com.au



[@NIRimfire](#)