

The image features a sunset over a dark ocean. The sun is a bright yellow-orange circle on the horizon, with a red glow below it. The sky is a gradient of orange and yellow, with some clouds. The logo 'rimfire' is in the top left, with 'rim' in grey and 'fire' in red. On the right, the words 'Scandium', 'Cobalt', and 'PGEs' are listed vertically in white. At the bottom left, the text 'Investor Presentation - February 2024' is written in white.

***rimfire***

**Scandium**

**Cobalt**

**PGEs**

**Investor Presentation - February 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.

## 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

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Enviably tenement holding in world renowned Lachlan Orogen and Broken Hill Districts of New South Wales



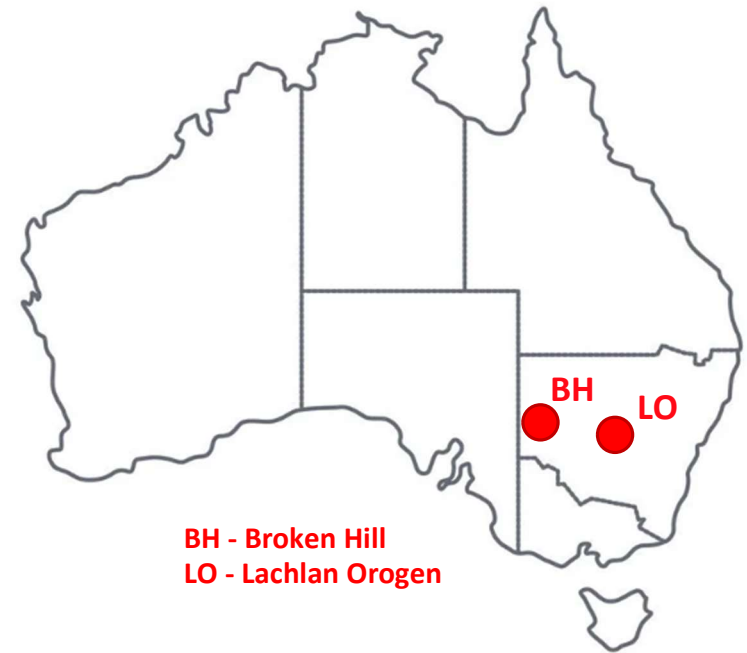
Demonstrated prospectivity for Critical Minerals



Very experienced hands-on geological team with successful exploration track record & local operating knowledge



High impact drilling and work programs planned for the next 6 months with supporting news flow

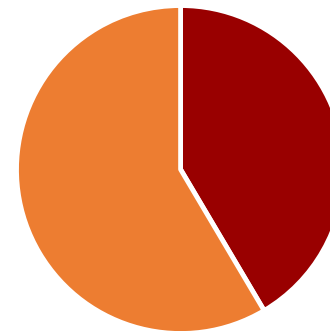


# Corporate Overview - RIM.ASX



<b>2.22B</b> Shares on issue	<b>253.6M</b> Options
<b>\$0.025</b> Share price	<b>\$61.84M</b> Market cap (fully diluted)
<b>\$1.2M*</b> Cash	<b>~\$60M</b> Enterprise Value

## 12 Month Share Price



- Top 20 - 41.48%
- Other - 58.52%

\* Cash 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.

# Why Critical Minerals?

- Critical minerals are metals, non-metals and minerals considered vital for the economic well-being of the world's major and emerging economies, yet whose supply may be at risk due to geological scarcity, geopolitical issues, trade policy or other factors
- They include Antimony, Beryllium, Bismuth, Chromium, **Cobalt**, Graphite, Lithium, Magnesium, Manganese, Nickel, Niobium, **Platinum Group Elements (PGEs)**, Rare Earth Elements, Rhenium, **Scandium**, Titanium / Zirconium, Tungsten, Vanadium and Zirconium
- They are required for the manufacture of solar PV plants, wind farms, electric vehicles, battery storage
- Demand increasing due to growth in the renewable energy and advanced manufacturing (defence, aerospace, medical) sectors
- **Critical Minerals plus metals such as copper required to underpin global decarbonisation**

Source: Australian Government's Critical Minerals List and Strategic Materials List – December 2023

# Scandium (Sc) Market

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- Scandium is silvery metallic element that is considered a critical mineral by leading global governments and industries.
- Principal uses in metal alloys and solid oxide fuel cells
- Scandium - aluminium alloys allows for lightweight, high-strength, and green solutions for the transport, aerospace, and defence manufacturing sector
- Recent Scandium Oxide price up to US\$927,000/tonne<sup>1</sup>
- Importance of stable long-term supply from favourable jurisdictions (current reliance on China and Russia)
- Demand forecast to increase >2.5x by 2040 driven by the aerospace industry and the Hydrogen economy
- Rio has entered the Scandium market with recent NSW acquisition next door to Rimfire

**“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”**

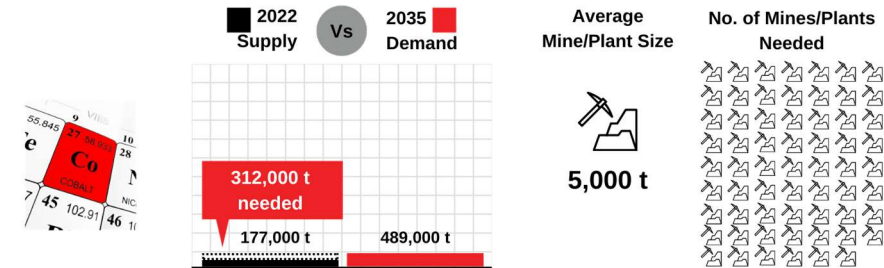
Rio Tinto<sup>2</sup>

7 <sup>1</sup> USGS Scandium Fact Sheet 2022 <sup>2</sup> Rio Tinto website



# Cobalt (Co) Market

- Cobalt is a key element in energy storage - preventing lithium-ion batteries from overheating & also have applications in renewable technologies such as wind turbines
- EV growth driving Co demand
- 80% of global cobalt production from DRC & Indonesia as by-products of copper & nickel mining – Child labour, dangerous working practices, pollutive, unstable regulatory environment
- The US Cobalt classify as a critical mineral – ensuring Australian Co projects are eligible for IRA funding
- EU also identify Cobalt as a critical mineral with the EU Battery Regulation requiring a battery passport by 2027 – sustainable cobalt material provenance is key

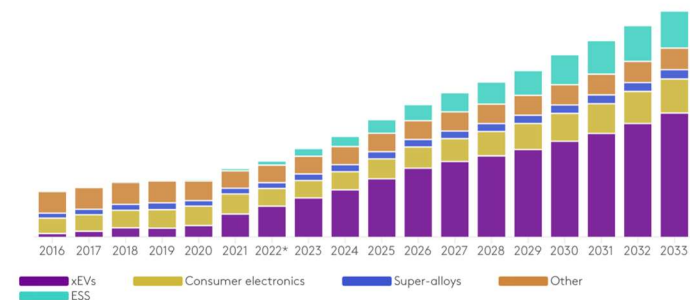


Source: Benchmark Mineral Intelligence

Without recycling, the world will need to build 62 new cobalt mining projects of 5,000 tonnes each by the end of 2035 to satisfy demand.

Cobalt demand from xEVs became the largest consuming end-use sector for cobalt in 2021

Thousand tonnes cobalt



Source: Fastmarkets \*Estimated. 2023-2033 data forecast



# Platinum Group Elements (PGEs) Market

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- The PGEs consist of six elements that are grouped together on the periodic table - Ruthenium (Ru), Rhodium (Rh), Palladium (Pd), Osmium (Os), Iridium (Ir), and Platinum (Pt)
- These elements have high melting points, outstanding wear and tarnish resistance, and superb catalytic capabilities
- Principal uses of PGEs in the automotive sector - catalytic converters with future use in Hydrogen Electrolysers and Fuel Cells
- Global PGE supply reliant on Southern Africa & Russia
- In 2022, the PGE Market was valued at US\$15B and is expected to reach US\$23B in 2032.
- From 2022 and 2032 this market is estimated to register a CAGR of 4.6%<sup>1</sup>

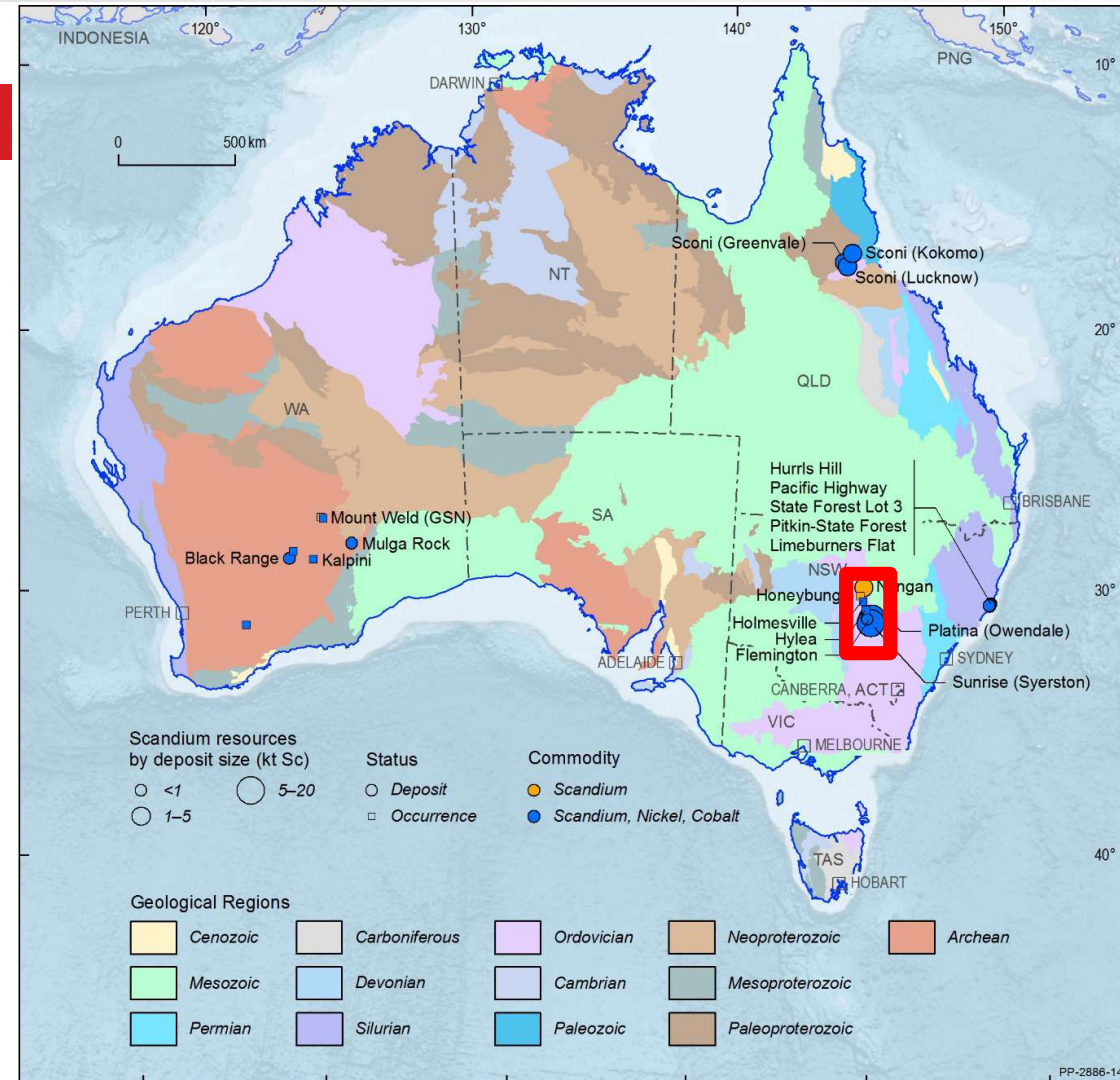
<sup>1</sup> <https://market.us/report/platinum-group-metals-market>



# Australian Scandium Resources

## Central NSW epicentre

- NSW has some of the highest-grade scandium deposits in the world
- NSW hosts scandium only projects and projects where scandium is a by-product alongside cobalt and nickel.
- Strategically located within the Parkes District
- 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)

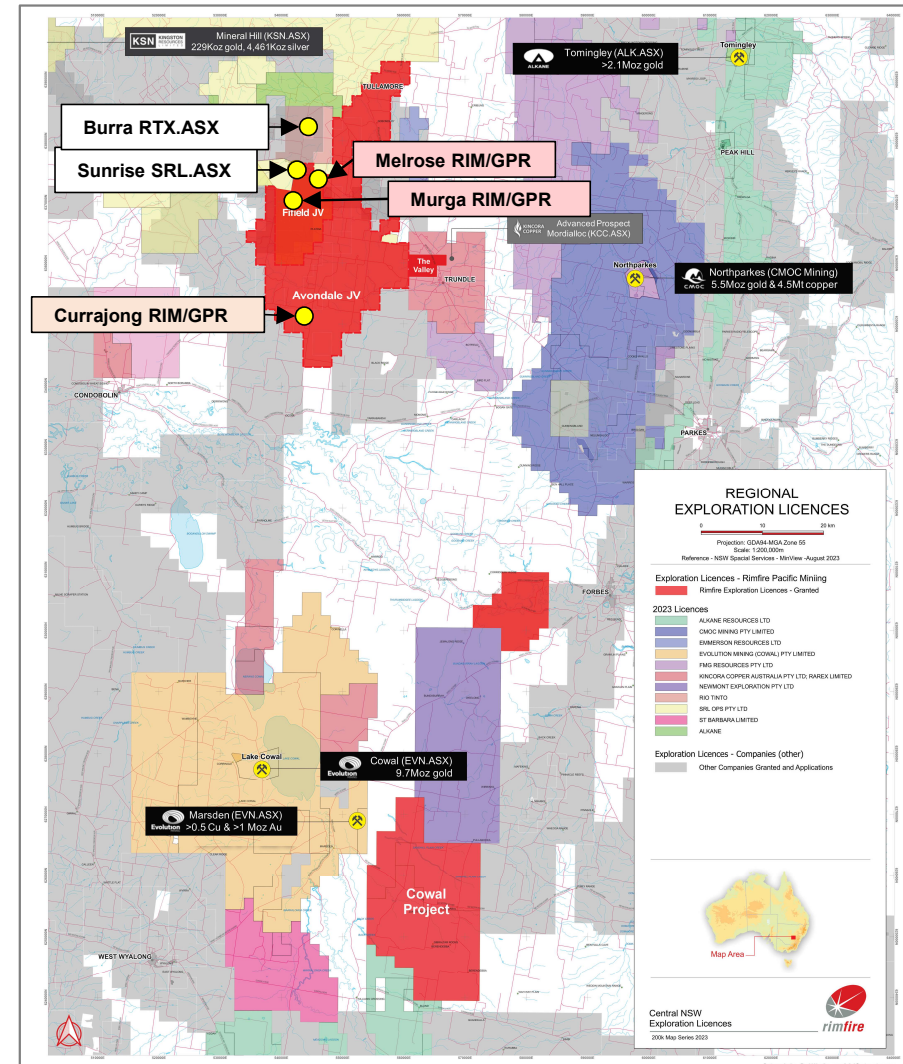




# Scandium – Fifield / Avondale

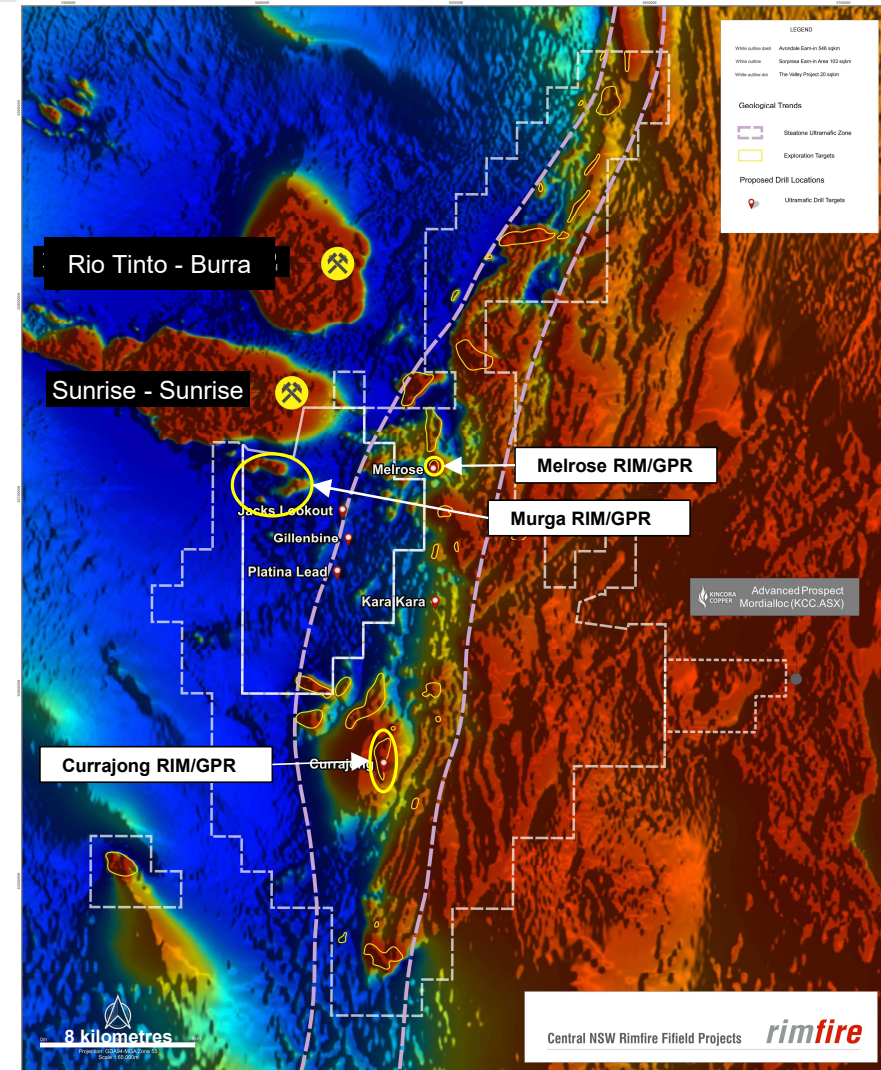


- Rimfire’s Fifield and Avondale Projects located within the NSW scandium epicentre 70 kilometres NW of Parkes
- **The major companies are moving in**
- Rio Tinto’s recent purchase of Burra [Owendale] for US\$14M next door to Rimfire’s Melrose Prospect (Avondale Project)
- Evolution’s recent purchase of Northparkes (80%) for US\$475M
- Rimfire is the only ASX – listed junior explorer actively pursuing scandium opportunities within the district
- Rimfire and its exploration partner - GPR have a well-established Management and Operating Committee in place
- All scandium exploration programs are funded by GPR, with programs designed and implemented by Rimfire technical personnel in consultation with GPR



# Shared scandium geology

- Fifield / Avondale scandium shares the same geology with Sunrise and Owendale
- All lie within a 10km radius of each other
- Scandium (+/- nickel and cobalt) mineralisation occurs within weathered laterite and saprolitic clays developed over Ordovician – age mafic / ultramafic intrusive rocks
- 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 dated 12 July 2016*)
- Sunrise Scandium 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 dated 25 June 2018*)
- Rimfire has size and high-grade potential with 3 advanced prospects – **Melrose, Murga, Currajong**
- **Building a scandium target pipeline with ongoing regional work**



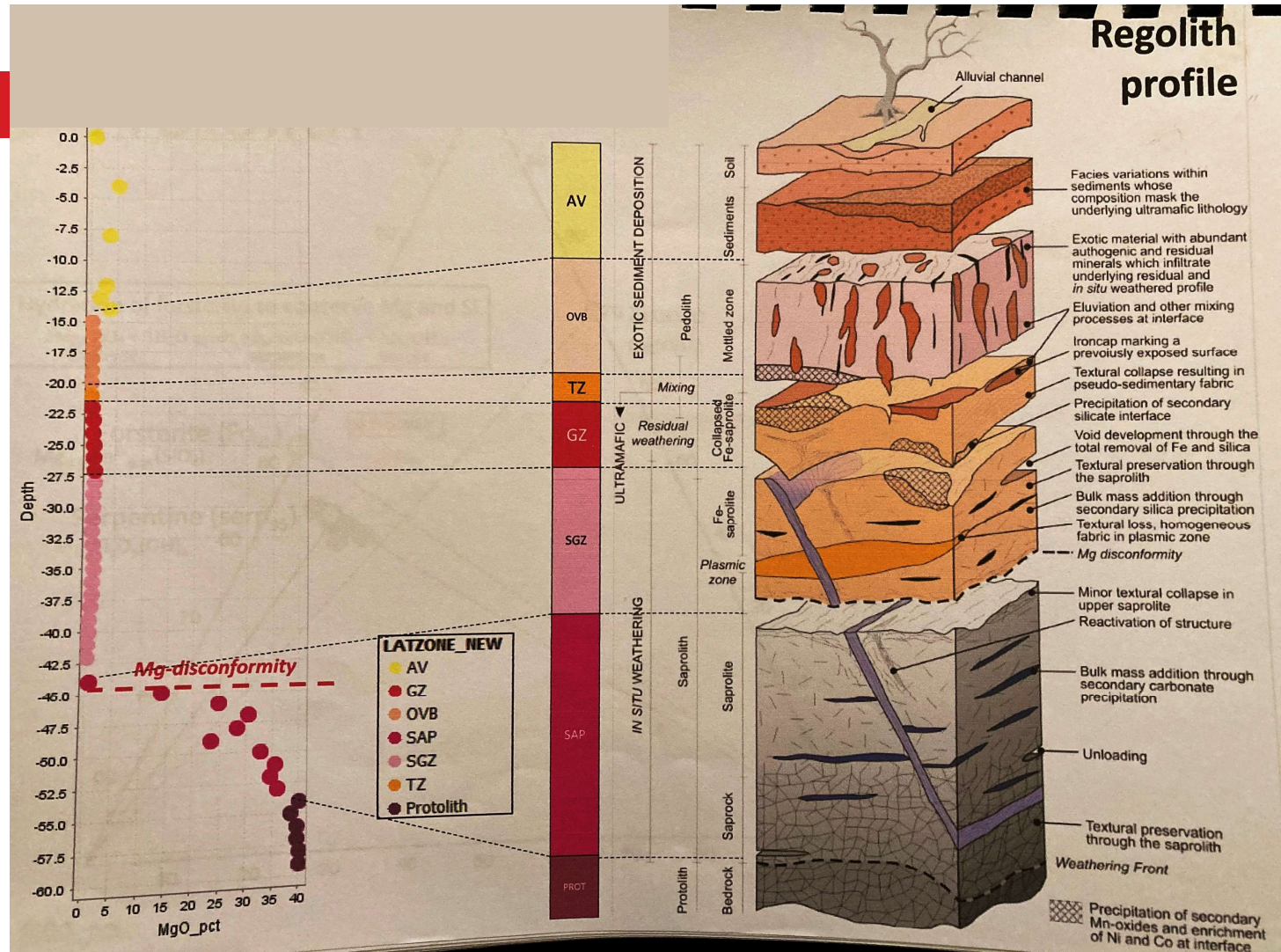


# The geology of Fifield scandium

## Host rocks & weathering

- Scandium – bearing pyroxenite host rocks (Ordovician age)
- Variably magnetic host rocks
- During weathering of pyroxenite – Sc becomes enriched along with Al, Mn, Fe, Co and Pt
- 5 - 10x increase in Sc grades in saprolite clays
- Sc dispersed more widely in saprolite compared to Ni & Co
- Sc only (Murga) or associated with nickel and cobalt (Melrose)

Schematic regolith profile – Sunrise Deposit





# What Sc mineralisation looks like in drill core

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Downhole from surface →



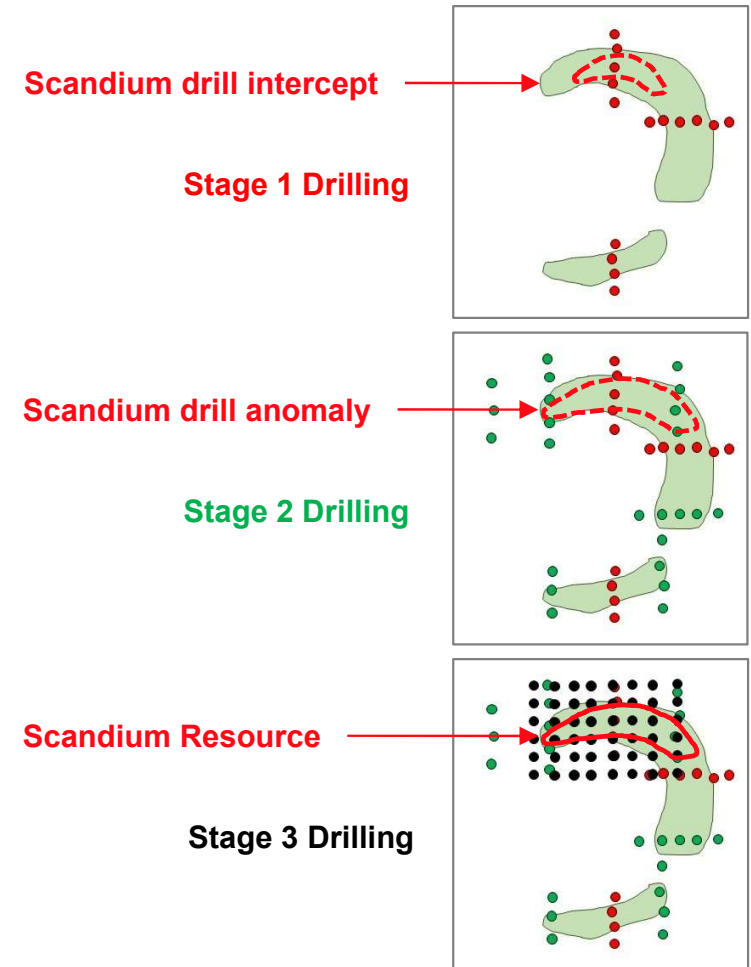


# A staged and systematic exploration approach

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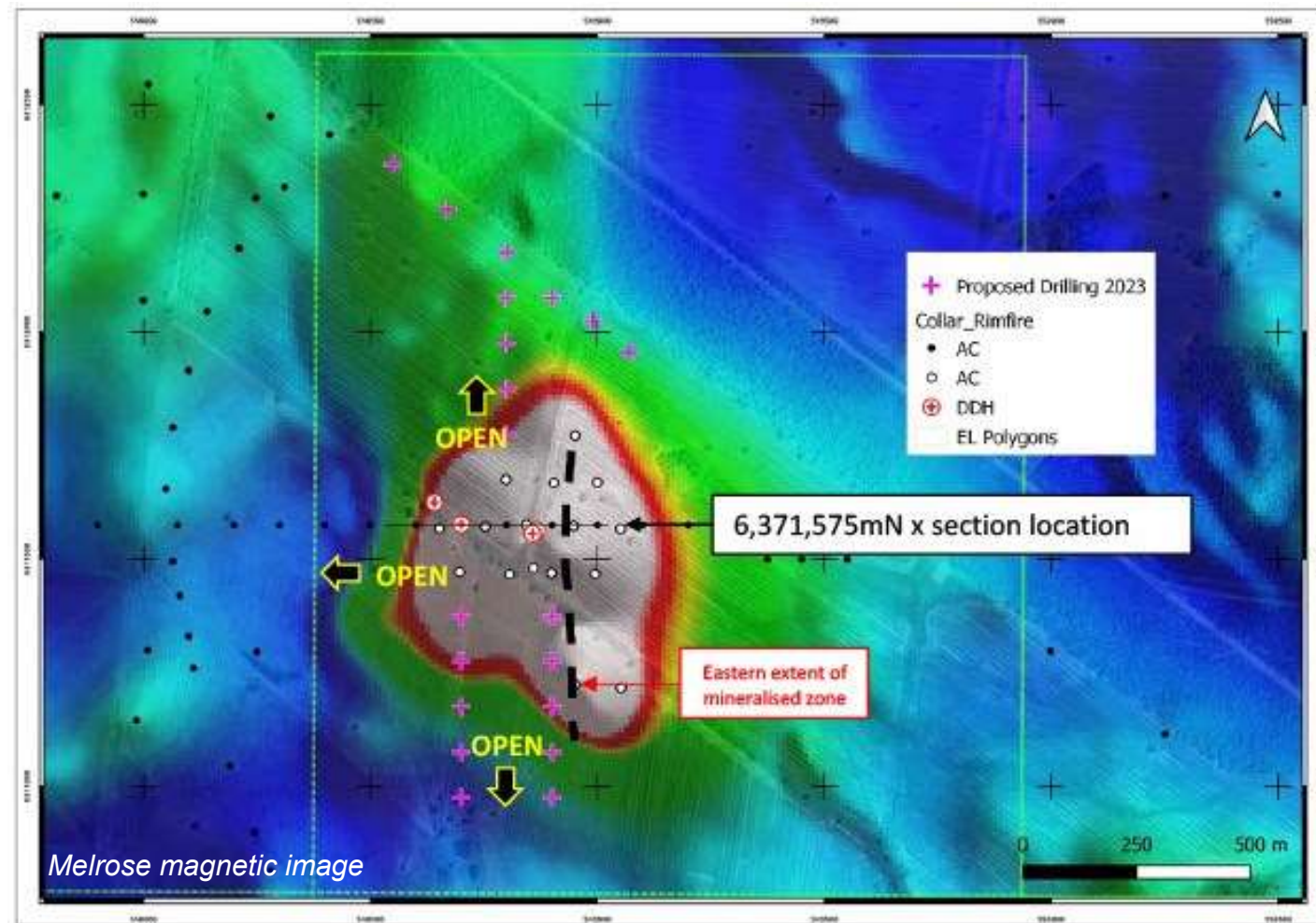
## Managing geological complexity

- Issues to consider; spurious magnetic effects, lateral geochemical dispersion, non – uniform weathering
- **Stage 1** – Reconnaissance drilling to determine significance of magnetic anomaly “PROOF OF CONCEPT”
- **Stage 2** – Assuming Stage 1 identifies prospective rock types then additional drilling to define extent of host rocks and Sc “SCOPING”
- **Stage 3** – Assuming Stages 1 and 2 successful and metallurgical test work demonstrates commercial potential, then infill drilling to estimate a Resource “RESOURCE”



# Melrose Scandium Cobalt

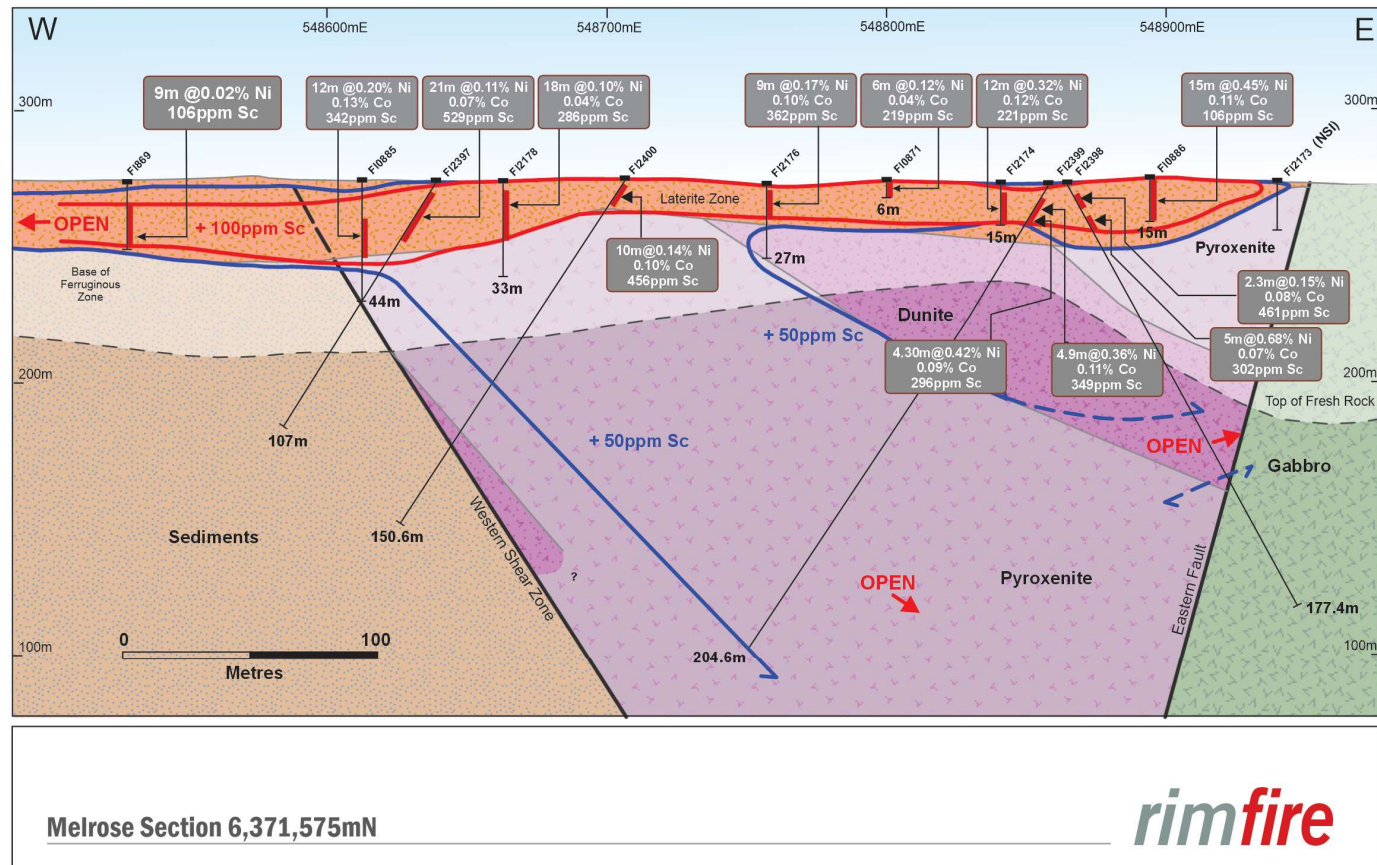
- Avondale Earn In Project with GPR.
- GPR funding all work
- GPR right to earn up to a 75% interest by completing expenditure of \$7.5M (\$1.65M spent to date)
- High-grade Sc Co Ni (+PGEs) mineralisation within flat-lying laterite zone over pyroxenite host rocks
- New Sc search space in underlying fresh pyroxenites
- Metallurgical test work investigating conceptual flowsheet for producing combined Sc Co Ni product – results due 2<sup>nd</sup> Qtr. 2024
- Resource drilling – 2<sup>nd</sup> Qtr. 2024





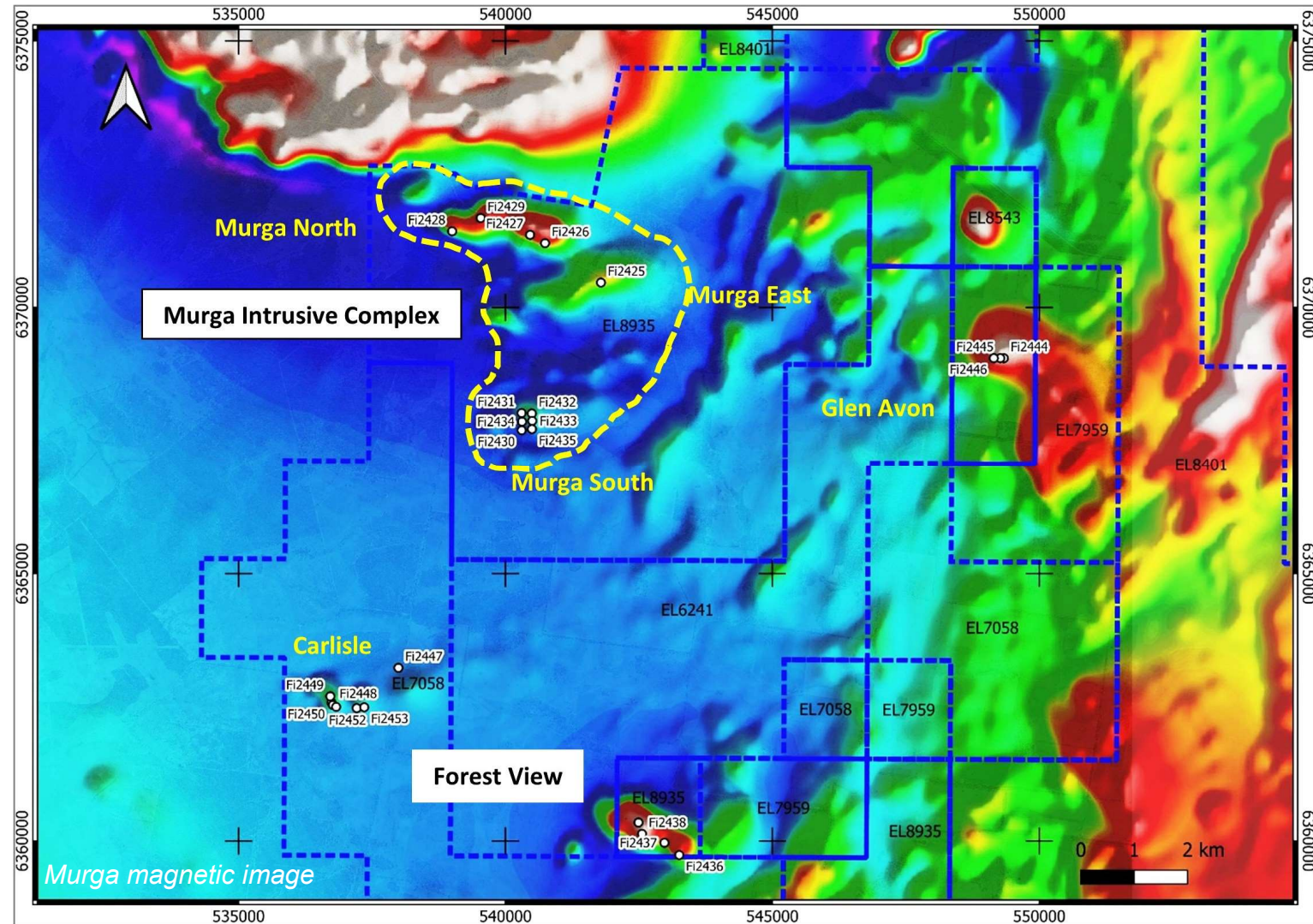
# Melrose – high grade Sc drill intercepts

- 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 funding all work
- GPR earning up to a 50.1% interest by completing expenditure of \$4.5M and committing to development funding (\$4.15M spent to date)
- Sc mineralisation within flat-lying laterite zone over pyroxenite host rocks
- Little if any previous exploration for Sc
- Rimfire / GPR drilling in 2023 highlights Sc prospectivity





# Murga Scandium – initial drill intercepts

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- 3m @ 132ppm Sc from 3 metres in FI2425
- 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,
- 6m @ 106ppm Sc from 3 metres in FI2430
- 27m @ 188ppm Sc from surface in FI2434 *including 12m @ 224ppm Sc*
- **4,000m aircore drill program commencing February 2024**



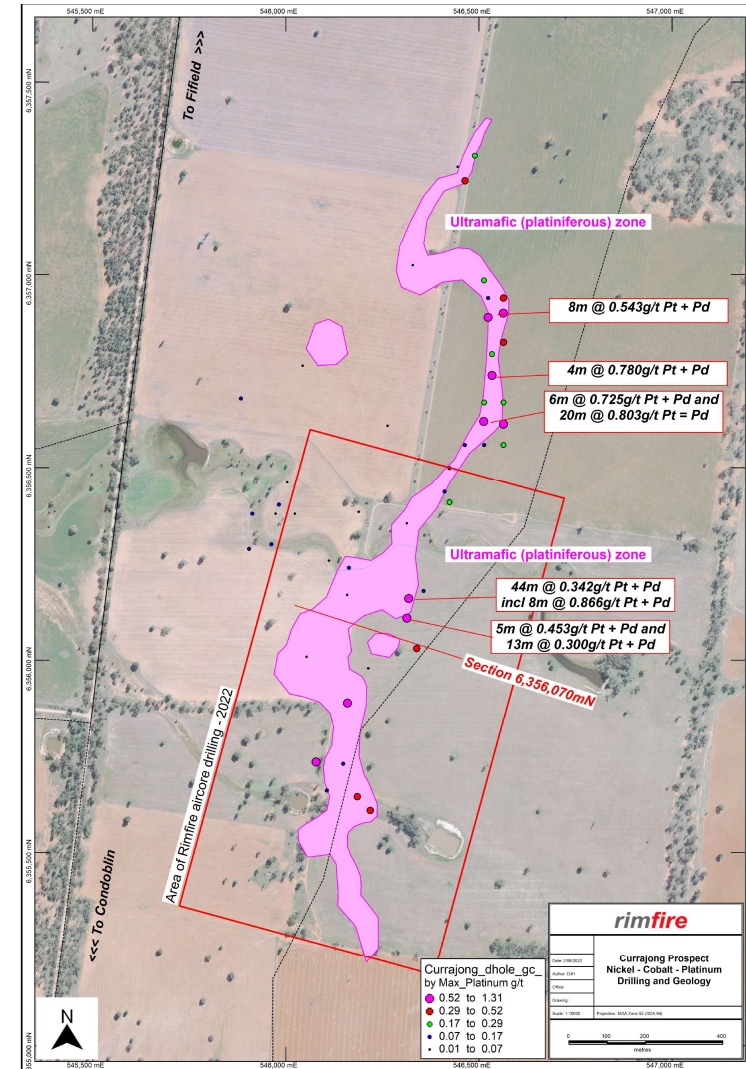
Murga landscape

# Currajong Scandium Cobalt PGEs



- **Avondale Earn In Project with GPR**
- Scandium cobalt mineralisation within laterite zone developed over 2.5 km long ultramafic intrusive unit
- 34m @ 0.29% Ni, 0.15% Co, and 101ppm Sc from 6 metres *including* 16m @ 0.27% Ni, 0.22% Co, and 120ppm Sc
- Historic PGE drill intercepts within fresh ultramafic rock require follow-up
- 44m @ 0.34g/t Pt + Pd from 8 metres including 8m @ 0.87g/t Pt + Pd from 10 metres and 2m @ 1.34g/t Pt + Pd from 12 metres
- 6m @ 0.72g/t Pt + Pd from 26 metres and 20m @ 0.80g/t Pt + Pd from 52 metres (Hole ended in mineralisation)
- Infill drilling testing both Sc and PGEs planned for northern end of prospect

Currajong ultramafic sill outline on aerial photography image



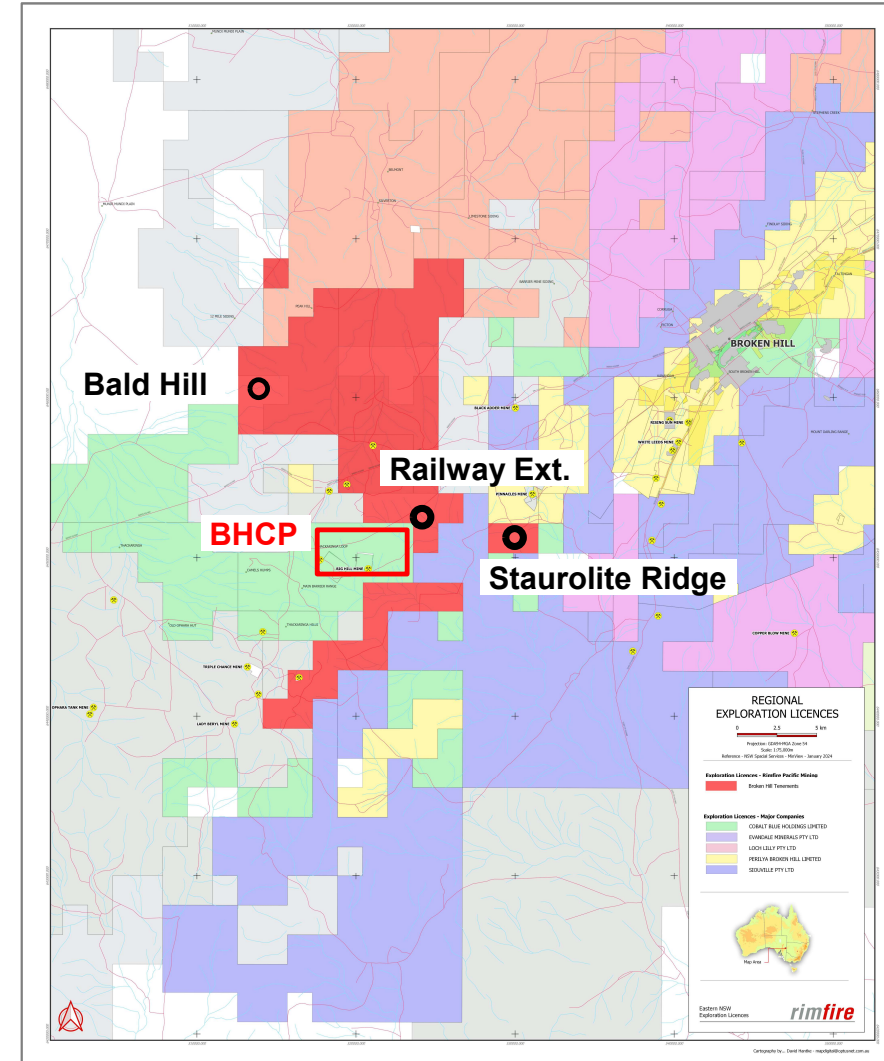


# Rimfire 100% Critical Mineral Projects

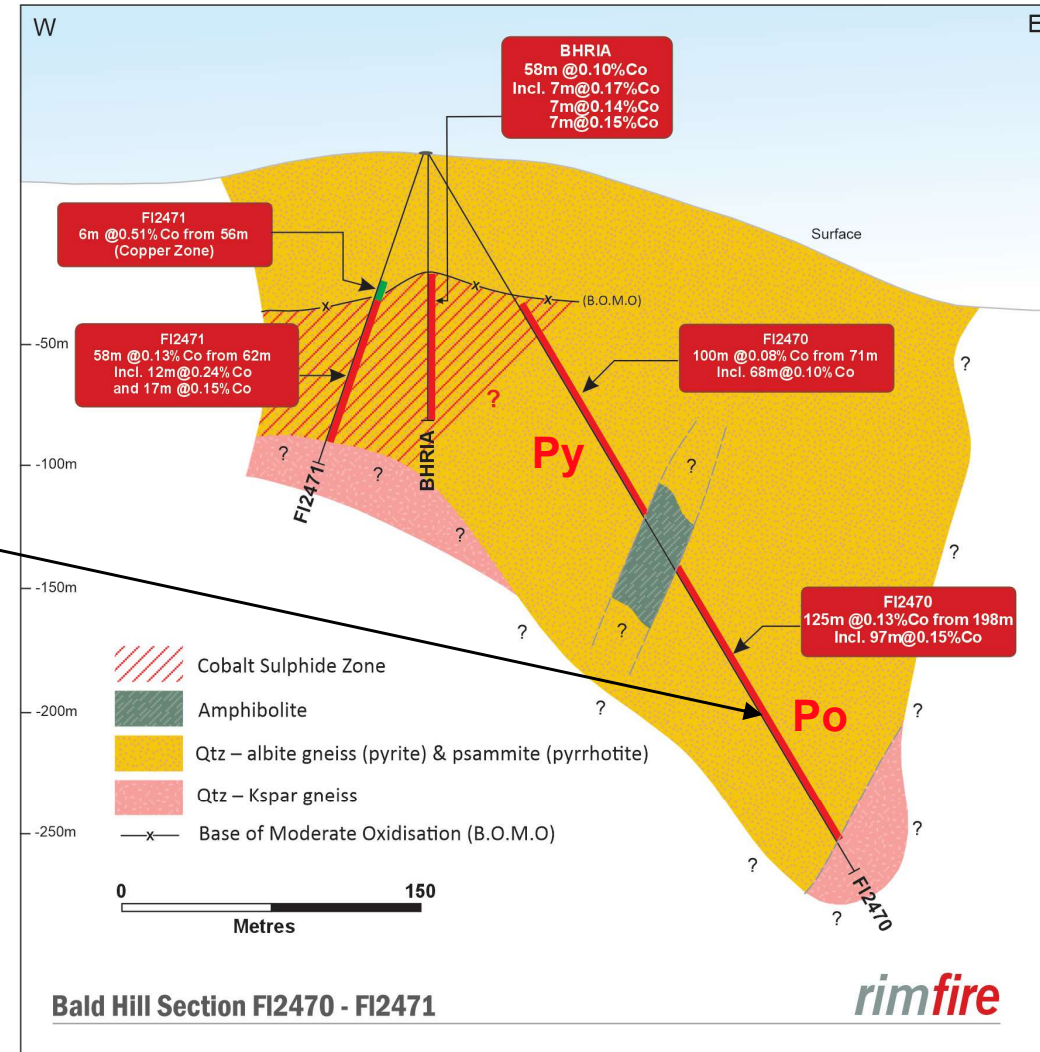


## Broken Hill Cobalt Project

- 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





# Other Rimfire Projects – partnership opportunity?

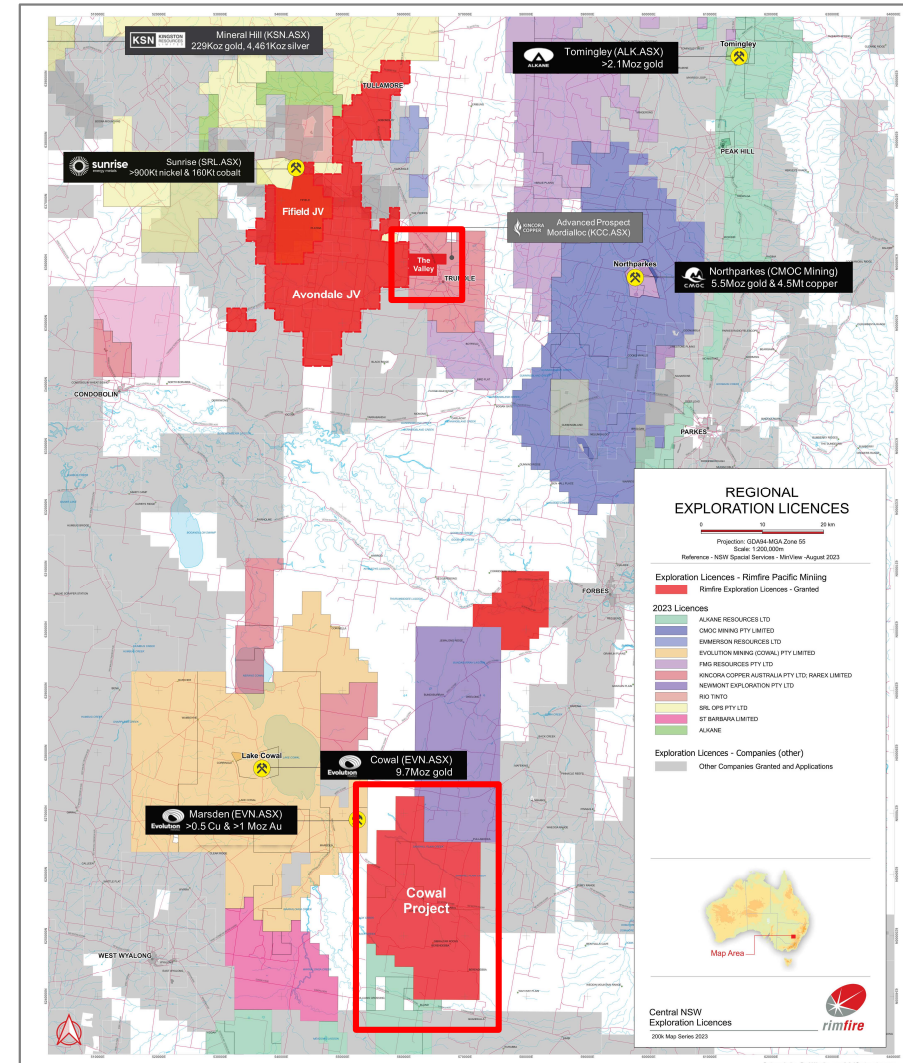


## Valley Copper – Gold (100% owned)

- 34 km west of CMOC's Northparkes Copper Gold Mine (1.96Mt copper & 2.33Moz gold)
- Rimfire drilling has confirmed Northparkes host rocks
- Near surface copper potential requires testing

## Cowal Copper – Gold (100% owned)

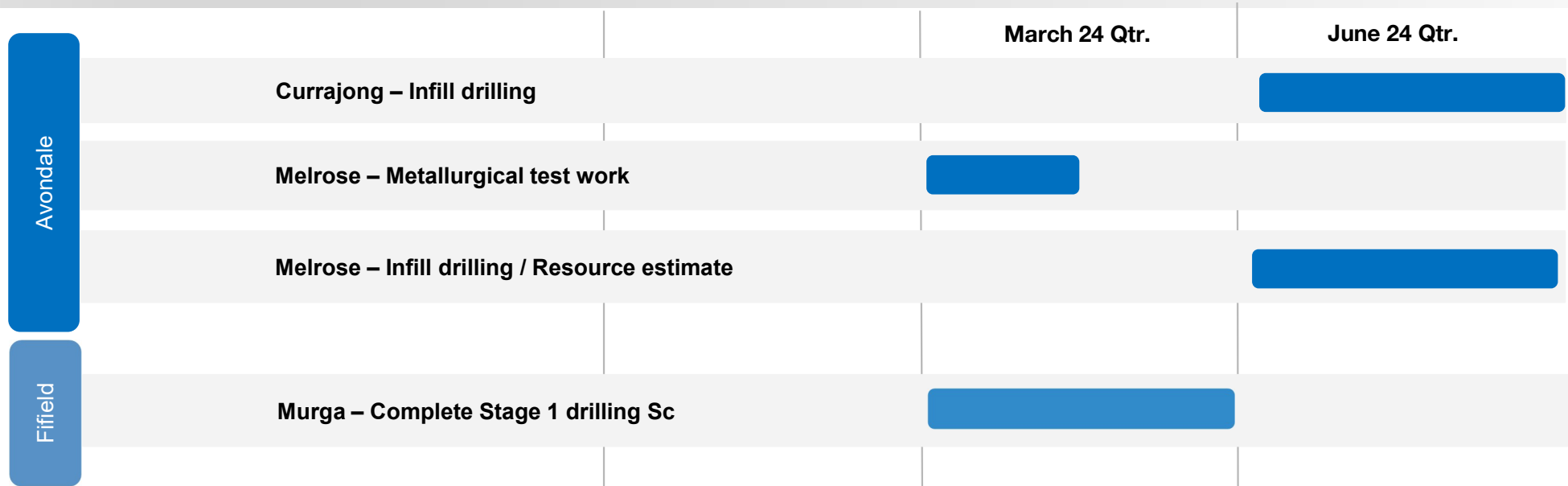
- Adjacent to Evolution Mining's (EVN.ASX) Cowal Gold Mine (mining depleted Mineral Resource of 305.3Mt @ 0.98g/t gold [9.6Moz] as at 16 February 2022)
- North south gravity ridge with multiple historic gold and copper drill intercepts including recently purchased Porters Mount prospect
- Rimfire's neighbours - Evolution Mining (EVN.ASX), Alkane (ALK.ASX), Fortescue (FMG.ASX) and Newmont



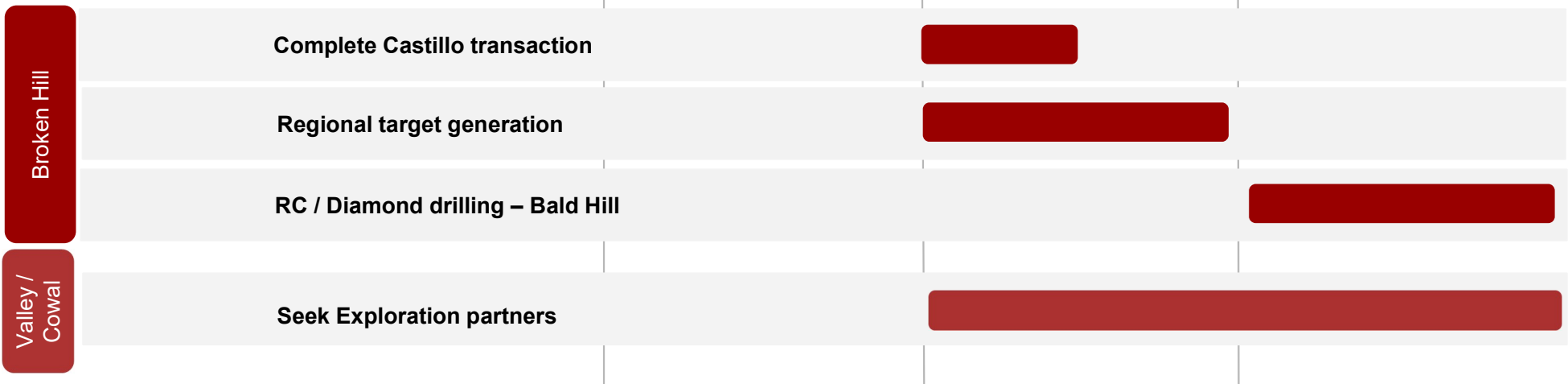
# Indicative Activity and News flow Schedule



## Scandium & PGEs



## Cobalt & Copper



- ✓ Enviable tenement holding in world renowned Lachlan Orogen and Broken Hill districts of NSW
- ✓ Critical Minerals – Scandium, Cobalt, PGEs
- ✓ Rimfire offers unique ASX Scandium exposure
- ✓ Focussed on High-Grade
- ✓ Very experienced technical team with extensive local operating knowledge
- ✓ Exploring in a systematic and staged way to manage geological complexity and risk
- ✓ Supportive exploration partner GPR funding all scandium exploration
- ✓ High impact drilling and work programs planned for next 6 months with supporting news flow

# 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.

# Appendix 1 – References



## 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) – 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) – 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) – Broad zones of high-grade cobalt at Bald Hill. 18 August 2023
- Rimfire Pacific Mining (ASX: RIM) – Acquisition of Porters Mount Project. 11 September 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) – Rimfire doubles Broken Hill Cobalt Project footprint. 11 January 2024





# *rimfire*

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