

24 July 2024

## RIMFIRE PACIFIC MINING LTD

**ASX: RIM** 

"Critical Minerals Explorer"



**David Hutton** MANAGING DIRECTOR / CEO

Dr Peter Crowhurst EXPLORATION MANAGER

**Michael Love GEOLOGICAL CONSULTANT** 

**Paul Wright GEOLOGICAL CONSULTANT** 

**Greg Keane** CHIEF FINANCIAL OFFICER and ALTERNATE DIRECTOR for lan McCubbing

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## **June 2024 Quarter - Activities Report**

## **Highlights**

- Multiple work programs focused on high-value critical minerals scandium, cobalt, and copper across Rimfire's NSW projects
- Thick zones of strong scandium anomalism from surface across multiple locations across the 20km<sup>2</sup> Murga Intrusive Complex;
  - 22m @ 273ppm Sc from surface incl 12m @ 353ppm Sc
  - 22m @ 172ppm Sc from 2m incl 5m @ 226ppm Sc
  - 28m @ 158ppm Sc from 4m incl 6m @ 320ppm Sc
  - 25m @ 163ppm Sc from 2m incl 5m @ 242ppm Sc
  - 27m @ 162ppm Sc from 3m incl 4m @ 270ppm Sc
- Further Melrose leaching test work generates up to 90% scandium recoveries at atmospheric pressures
- Estimation of a combined JORC Mineral Resource for both Murga North and Melrose Scandium Prospects (Fifield and Avondale Earn-In Projects) underway ahead of completion within the coming weeks subject to receiving outstanding drill assays from the laboratory
- Drilling programs are planned for September 2024 Quarter designed to test copper cobalt targets at Broken Hill and scandium targets at Fifield
- Rimfire completes a placement to raise \$1.15M post end of Quarter

Commenting on the Quarterly Activities report, Rimfire's Managing Director Mr David Hutton said: "Rimfire continues to explore for and discover the critical minerals that are associated with global decarbonisation strategies. We are leveraged to and provide unique ASX investment exposure to scandium – an extremely valuable metal.

Buoyed by the success of our scandium drilling and metallurgical studies carried out during the Quarter we have made the decision to estimate a maiden JORC Mineral Resource for both the Melrose and Murga North Prospects with the work underway.

We expect to announce both resources in the coming weeks with just some Melrose drilling assays awaited on to complete the estimation process.

Looking ahead, the September 2024 Quarter will be pivotal for Rimfire and its shareholders with maiden scandium resources, further scandium drilling and the resumption of copper-cobalt drilling at Broken Hill".

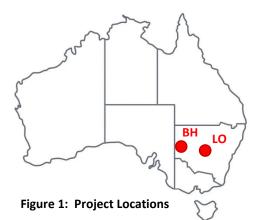




## **Introduction and Operational Summary**

Rimfire Pacific Mining (ASX: RIM, "Rimfire" or the "Company") is an ASX-listed Critical Minerals exploration company which is advancing a portfolio of projects within the highly prospective Lachlan Orogen ("LO") and Broken Hill ("BH") districts of New South Wales (Figures 1, 2 and 4).

During the June 2024 Quarter (the "Quarter"), Rimfire's exploration activities were focused on advancing the Murga and Melrose Scandium Prospects (Fifield and Avondale Earn In Project) with 100 aircore holes (2,664 metres) drilled.



The drilling successfully intersected strongly anomalous scandium at multiple locations across the Murga Intrusive Complex with subsequent re-assaying of anomalous drill samples demonstrating a significant increase in grade.

Buoyed by the success of the drilling, Rimfire has commenced the estimation of a combined JORC Mineral Resource for both the Murga North and Melrose Scandium Prospects.

Also, two further sighter leach tests focused on maximising scandium recovery at atmospheric pressures from Melrose laterite-hosted mineralisation returned recoveries of 62.6% and 90.1% scandium respectively. The latest results represent a significant improvement on previous best scandium recovery of 40% and can be attributed to increased acidity (sulphuric acid) and addition of reagents (NaCl).

To guide the Company's future metallurgical studies, Rimfire also engaged highly experienced hydrometallugist Mr Boyd Willis as Process Consultant.

The exploration activities at the Fifield and Avondale are funded by Rimfire's exploration partner Golden Plains Resources (GPR) and looking ahead to the September 2024 Quarter, Rimfire will complete the estimate of the combined JORC Mineral Resource for the Murga North and Melrose Scandium Prospects, as well as undertaking further aircore and diamond drilling at Murga to build on the initial resource.

Separately on its 100% - owned projects, Rimfire is preparing to carry out a further round of diamond drilling at its Bald Hill Copper Cobalt prospect commencing in August 2024.



## Operational Review – Earn In projects

#### Multiple Thick Scandium Zones at Murga

During the Quarter, Rimfire completed an air core drilling program (100 holes / 2,664 metres) to determine the extent and continuity of scandium mineralisation at the Murga Scandium Prospect (Fifield Earn In Project) (Figures 2 and 3. See Rimfire ASX Announcements dated 6 May 2024 and 12 June 2024).

The drilling successfully intersected strongly anomalous scandium in multiple drillholes with subsequent re-assaying of anomalous drill samples demonstrating a significant increase in grade.

Original assaying of drill samples was undertaken using a 4-acid digestion / ICP analysis technique which is considered a "partial digest" analytical method and was used by Rimfire to cost effectively "screen" the large numbers of drill samples generated by the drill program.

Re-assaying of 260 of the most anomalous samples (greater than 120ppm Sc) from the drilling was undertaken using the more expensive lithium borate fusion XRF method.

The lithium borate fusion XRF method is a "whole digest" analytical method whereby a fused disk of the sample is created and analysed with XRF spectroscopy. The assay grade achieved by this method is considered to be a more representative scandium assay value.

At Murga, the lithium borate fusion XRF assaying returned an average increase in scandium assay values of 11% compared to the corresponding assay value obtained from the 4-acid digestion / ICP analysis method. There were also several individual samples that showed an increase in scandium grade of 25 – 50%.

At Murga, scandium occurs within a flat - lying weathered saprolite (clay) horizon overlying magnetic ultramafic (pyroxenite) intrusive rocks of the Ordovician-age Murga Intrusive Complex, which have been demonstrated from previous drilling at both Murga and the adjacent Melrose Prospect to be intimately associated with scandium mineralisation (See Rimfire ASX Announcement dated 6 December 2023).

The most recent air core holes were drilled on 100 x 100 metre centres at Murga North and on 400 x 400 metre centres over the remainder of the Murga Intrusive Complex. In total the drilling was carried out over an area of approximately 20km<sup>2</sup> (Figure 3).

The drilling has successfully defined an initial 4 areas - Murga North, Murga Northwest, Murga East and Murga South within the Murga Intrusive Complex for immediate drill follow up.

All are characterised by thick vertical widths of strong scandium anomalism (+100ppm) with little or no associated nickel and / or cobalt anomalism which is in contrast to other scandium prospects in the area.



Significantly all the areas remain open and further drilling is required to determine the lateral extents of the scandium at each location.

Also, several magnetic features within the Murga Intrusive Complex that were not assessed by this phase of air core drilling have (based on the latest drilling results) been subsequently identified as new scandium targets for drill testing. These targets are additional to the 4 areas detailed below and include a +1 kilometre - long, WNW trending linear magnetic feature immediately west of the Murga East scandium area (Figure 3).

#### **Murga North**

Murga North is an east-west trending elongate magnetic anomaly, drilling of which has returned multiple scandium drill intercepts over an area of approximately 2 kilometres strike length with widths ranging from 200 to 500 metres, and with intercepts remaining open along strike and to the north. Assaying using the 4-acid digestion / ICP "partial digest" analytical method returned multiple anomalous intercepts, i.e.;

- 22m @ 232ppm Sc from 0 metres in FI2475 including 12m @ 305ppm Sc from 5 metres,
- 22m @ 156ppm Sc from 2 metres in Fl2480 including 4m @ 220ppm Sc from 6 metres,
- 28m @ 148ppm Sc from 5 metres in FI2482 including 6m @ 291ppm Sc from 5 metres,
- 23m @ 164ppm Sc from 3 metres in FI2487,
- 25m @ 147ppm Sc from 5 metres in FI2490 including 5m @ 211ppm Sc from 4 metres,
- 27m @ 143ppm Sc from 3 metres in FI2496 including 4m @ 221ppm Sc from 4 metres,

Re-assaying of the drill intercepts using the lithium borate fusion XRF "whole digest" analytical method increased the grade of each intercept, i.e.;

- 22m @ 273ppm Sc from 0 metres in FI2475 including 12m @ 353ppm Sc from 5 metres,
- 22m @ 172ppm Sc from 2 metres in Fl2480 including 5m @ 226ppm Sc from 6 metres,
- 28m @ 158ppm Sc from 4 metres in FI2482 including 6m @ 320ppm Sc from 5 metres,
- 23m @ 179ppm Sc from 3 metres in FI2487,
- 25m @ 163ppm Sc from 2 metres in FI2490 including 5m @ 242ppm Sc from 4 metres,
- 27m @ 162ppm Sc from 3 metres in FI2496 including 4m @ 270ppm Sc from 4 metres,

#### Murga Northwest

Murga Northwest is a sparsely drilled isolated magnetic anomaly located in the northwest corner of the Murga Intrusive Complex. Two air core holes drilled 400 metres apart during the recent program both returned anomalous scandium (calculated using the 4-acid digestion / ICP "partial digest" analytical method) with the intercepts remaining open in all directions;

- 13m @ 188ppm Sc from 3 metres in FI2514 including 4m @ 248ppm Sc from 7 metres,
- 6m @ 111ppm Sc from 6 metres in FI2513,



#### Murga East

Murga East is a roughly east-west trending elongate magnetic anomaly located in the central eastern portion of the Murga Intrusive Complex, wide spaced (400m x 400m) drilling of which has returned multiple scandium drill intercepts over an area of approximately 1.5 kilometres strike length x 700 metres width with intercepts (calculated using the 4-acid digestion / ICP "partial digest" analytical method) remaining open in all directions;

- 21m @ 106ppm Sc from 3 metres in Fl2547,
- 3m @ 127ppm Sc from 13 metres in FI2549,
- 6m @ 106ppm Sc from 9 metres and 6m @ 108ppm Sc from 24 metres in FI2549

Several magnetic features in the Murga East area have not been drilled and represent targets for future drilling.

#### **Murga South**

Murga South is a sparsely drilled isolated magnetic anomaly located in the southern portion of the Murga Intrusive Complex. Air core drilling on nominal 200 x 200m centres (including several reconnaissance holes drilled by Rimfire in 2023) has returned multiple scandium drill intercepts over an area of approximately 400 metres strike length x 400 metres width with intercepts (calculated using the 4-acid digestion / ICP "partial digest" analytical method) remaining open in all directions;

- 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,

Going forward Rimfire will submit future drill samples from areas of known scandium mineralisation at Murga for analysis using the lithium borate fusion XRF method.

#### Melrose leaching test work generates up to 90% scandium recoveries

Two further leaching tests conducted on scandium - mineralised laterite material from the Melrose prospect during the Quarter have significantly improved the recovery of scandium into solution compared to previous leaching tests (See Rimfire's ASX Announcement dated 13 May 2024).

The two latest leach tests (LT09 and LT10) were undertaken by Perth specialist metallurgical services group - Independent Metallurgical Operations Pty Ltd (IMO) and follow on from eight (8) leach tests (LT01 to LT08) previously undertaken by IMO (see Rimfire's ASX Announcement dated 4 March 2024).

To underpin all the leaching tests, 260 kg of mineralised PQ three quarter diamond drill core from holes FI2397 - 2400 previously drilled by Rimfire at Melrose was supplied to IMO in Perth last year.



All interval samples were combined to generate one Master Composite. The Master Composite was crushed to P100 50 mm, homogenized, and then representatively split into ten (10) subsamples in preparation for metallurgical test work.

Assaying of a representative sub-sample of the Master Composite returned the following head assay grades; 0.33% nickel, 0.12% cobalt, and 380ppm scandium (see Rimfire's ASX Announcement dated 4 March 2024). Two subsamples from the Master Composite were used for LT09 and LT10 (1 each).

The previous 8 tests focused on recovering a combined nickel – cobalt – scandium product into solution with LT08 achieving the highest extractions of 89.3% for cobalt, 87.5% for manganese, 58.1% for nickel and 39.9% for scandium with higher extractions attributed to an increase in acid strength (see Rimfire's ASX Announcement dated 4 March 2024).

Following the completion of LT08, the latest leaching tests (LT09 and LT10) were carried out with a particular emphasis on maximising scandium recovery into solution. Both tests were acidchloride whole-of-ore leach tests carried out at atmospheric pressure and at 82°C.

The acid-chloride component consisted of sulphuric acid of 98% H2SO4 being diluted in distilled water and NaCl (salt) dosed to 35 g/l as the source of chloride ions. A P<sub>100</sub> 75 µm grind size was applied to the LT09 to LT10 samples.

The metal recovery and solution grades results presented in Tables 1 and 2 reveal that after 48 hours, LT09 achieved recoveries into solution of 51.3% for cobalt, 67.4% for nickel and 62.6% for scandium, and LT10 achieved recoveries into solution of 92.5% for cobalt, 90.4% for nickel and 90.1% for scandium

The improvement in LT09 and LT10 performance compared to LT08 is attributed to leaching in very high concentrations, and large quantities of acid [2.6 M H<sub>2</sub>SO<sub>4</sub> and 5.2 M H<sub>2</sub>SO<sub>4</sub> respectively] at 82°C and potentially, the addition of NaCl as a reagent.

The acid dosages for LT09 and LT10 were deliberately set high and resulted in consumptions of 602 kg H<sub>2</sub>SO<sub>4</sub> / dry tonne of ore (LT09) and 1,604 kg H<sub>2</sub>SO<sub>4</sub> / dry tonne of ore (LT10).

It is noted that the acid consumptions used in LT09 and LT10 were used in the tests to better understand conceptual leaching parameters ("parameter boundaries").



Table 1: LT09 Metal Extractions and Grades (H₂SO₄ – NaCl System at 82°C – Fine Grind)

Time	Extraction						
Time	Al	Со	Fe	Mg	Mn	Ni	Sc
(hours)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
48	30.6%	51.3%	39.2%	81.9%	57.9%	67.4%	62.6%
Timo	Pregnant Solution Grades						
Time	Al	Со	Fe	Mg	Mn	Ni	Sc
(hours)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
48	7,277	287	74,295	4,307	3,345	1,040	122

Table 2: LT10 Metal Extractions and Grades (H₂SO₄ – NaCl System at 82°C – Fine Grind)

Time		Extraction					
Time	Al	Со	Fe	Mg	Mn	Ni	Sc
(hours)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
48	80.1%	92.5%	85.9%	85.4%	90.9%	90.4%	90.1%
Time	Pregnant Solution Grades						
Time	Al	Со	Fe	Mg	Mn	Ni	Sc
(hours)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
48	14,657	373	124,489	3,250	3,802	1,002	130

The results of the two additional leaching tests are significant as they show that the recovery of scandium into solution at atmospheric pressures can be significantly improved with increased acidity and the addition of NaCl as a reagent.

Having demonstrated that up to 90.1% of the scandium can be recovered into a "pregnant" solution by leaching Melrose mineralised material at atmospheric pressures, our attention is now turning to maximising the subsequent extraction of scandium (metal and / or oxide) from the pregnant solution.

Rimfire is conducting a review of existing publicly available extraction technologies and has engaged highly experienced hydrometallugist Mr Boyd Willis as Process Consultant to guide this work.

Boyd has 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.



To generate bulk sample material for future metallurgical studies, 4 diamond holes were recently drilled at Melrose with additional diamond drilling planned (subject to regulatory approval) at the Murga prospect during the September 2024 Quarter.

Mineralised half core samples from both locations will be composited into separate bulk samples in preparation for future test work.

#### Fifield and Avondale Earn In Projects Exploration Partner

All exploration activities at the Fifield and Avondale are funded by Rimfire's exploration partner -Golden Plains Resources (GPR), the ownership of which is currently subject to a legal dispute. Rimfire has taken independent legal advice as to its obligations and rights with respect to this matter and continues to operate in accordance with that advice.

#### Next Steps - Earn In projects

The company is greatly encouraged by the latest Murga drilling results and strongly believes that Murga has the potential to host a large-scale scandium resource.

Consequently, Rimfire will estimate a JORC Resource for the Murga North area at Murga which will be undertaken in conjunction with the Melrose JORC Resource estimate which is currently underway.

Last week, all drilling and geological information for Murga North was delivered to an independent resource geologist to enable the resource estimation process to commence.

For the Melrose resource, geological wire framing and collection of density measurements have now been completed by the same resource geologist, with the company just waiting on final lithium borate fusion XRF assay results for the balance of infill RC / diamond drilling conducted at the end of last Quarter at Melrose to complete the Melrose estimate.

Rimfire has been advised that the laboratory is working to resolve some issues with their XRF equipment to complete the analysis of the Melrose samples as soon as possible.

Subject to receiving outstanding drill assays from the laboratory, Rimfire expects to complete the combined JORC Mineral Resource for Murga North and Melrose Scandium Prospects within the coming weeks.

As detailed above, the Murga Intrusive Complex hosts multiple prospects which collectively have the potential to substantially add to the Murga North resource. As such further aircore drilling (on nominal 100 metres centres) will be undertaken over the Murga Northwest, Murga East and Murga South prospects with diamond drilling also planned to obtain samples for metallurgical test work and to provide further geological information about the underlying ultramafic rock types.

Subject to regulatory approval, drilling is scheduled to commence in early September 2024.



## Operational Review – 100% owned projects

#### **Broken Hill**

At the end of the March 2024 Quarter, Rimfire identified multiple cobalt, copper, and Rare Earth Element [REE] targets at its 100% - owned Broken Hill Project, which is located 17-30 kilometres west of Broken Hill, NSW (Figure 4, and see Rimfire ASX Announcement dated 15 April 2024).

Drilling by Rimfire in 2023 at the priority Bald Hill Cobalt Copper Prospect successfully intersected high-grade cobalt (Co) associated with strongly disseminated to semi massive sulphide (pyrite, pyrrhotite and trace chalcopyrite + sphalerite) mineralisation (See Rimfire ASX Announcement dated 18 September 2023), i.e.;

- 125m @ 0.13% Co from 198 metres in Fl2470 incl. 97m @ 0.15% Co
- 58m @ 0.13% Co from 62 metres in Fl2471 incl. 2m @ 0.24% Co and 17m @ 0.15% Co
- 33m @ 0.11% Co from 58 metres incl. 4m @ 0.23% Co and 2m @ 0.21% Co, and
- 100m @ 0.08% Co from 71 metres in Fl2470 incl. 68m @ 0.10% Co

Higher grade cobalt at Bald Hill is typically associated with a greater abundance of sulphides with zones of coarse-grained semi-massive pyrite / pyrrhotite hosting individual 1 - metre grades of up to 0.79% Co (Fl2471 - 67 to 68 metres) (see Rimfire ASX Announcement 18 September 2023).

FI2471 also intersected a weathered gossanous zone immediately up hole of the cobalt mineralisation, assaying of which returned strongly anomalous copper (Cu) - 6m @ 0.51% Cu from 56 metres.

Detailed ground magnetic surveying [on 50-metre spaced east west lines] undertaken post drilling has identified a very strong magnetic anomaly [peak value - 57,744nT] coincident with and extending from cobalt and copper mineralisation intersected in Rimfire's 2023 drilling at Bald Hill.

The Bald Hill magnetic anomaly trends NNE, dips to the southeast, and has a near surface extent of 450 x 400 metres and extends to a vertical depth of approximately 300 metres below surface. 3D modelling suggests that the anomaly plunges to the southeast with Rimfire's diamond holes just "clipping" the top of the anomaly.

This is highly significant as the Bald Hill mineralisation is intimately associated with magnetic minerals, i.e. pyrrhotite and magnetite, and as such the magnetic anomaly is interpreted to be "mapping" a potential extension to existing cobalt and copper mineralisation.

#### Next Steps - 100% owned projects

Rimfire has recently executed Access Agreements with relevant Landowners to allow further diamond drilling at Bald Hill which is scheduled to commence in August 2024.



## **Corporate Activities**

#### Successful Placement

Subsequent to the end of the Quarter Rimfire raised \$1.15M through a Share Placement pursuant to Section 708 of the Corporations Act (Cth). The share placement was supported from a new and several existing shareholders who elected to increase their shareholdings. The proceeds of the share placement will be used to accelerate exploration of copper - cobalt targets at the Company's 100% - owned Broken Hill Project and provide for general working capital.

The placement comprised the issue of a total of 45,800,000 fully paid ordinary shares at an issue price of \$0.025 (2.5 cents) per share. The issue price representing a 10.7% discount to the closing share price on 28 June 2024 and a 150% premium to the issue price of the Company's last placement (see Rimfire's ASX Announcement dated 14 December 2023).

In addition, 15,266,665 free attaching unlisted options were also issued on a one (1) for three (3) basis, being one (1) free attaching unlisted option for every three (3) new shares subscribed for and issued under the placement with an exercise price of \$0.05 (5 cents) each, and an expiry date of 31 December 2025.

The 45,800,000 placement shares were issued under Rimfire's existing ASX Listing Rule 7.1A placement capacity and the 15,266,665 unlisted options were be issued under Rimfire's existing ASX Listing Rule 7.1 placement capacity.

The new shares rank equally with existing Rimfire fully paid ordinary shares quoted on the ASX.

#### JMEI Credits

During the Quarter, the Company applied for the 2024 / 2025 Financial Year Federal Government's Junior Minerals Exploration Scheme ("JMEI") which amongst other things, encourages investment in minerals exploration companies that carry out greenfields exploration in Australia.

After the Quarter, Rimfire was notified that its application had been accepted and that exploration credits of \$750,000 had been allocated to the Company for distribution to eligible shareholders during the 2024 / 2025 Financial Year.

Further information about the JMEI credits can be found by accessing the following link on the Australian Taxation Office's website - Junior Minerals Exploration Incentive

JMEI credits will apply to participants in the recent \$1.15M Placement and any other participant in subsequent capital raisings and exercise of Options (during the 2024 / 2025 Financial Year).



#### Cash, Capital Structure, and Funding

At 30 June 2024, Rimfire had access to \$0.2M of funding (plus an additional \$1.15M raised by the Placement and an additional \$0.1M held in the Fifield and Avondale Earn In Project accounts for exploration activity on those Projects).

Related party transactions of \$109K (section 6.1 and 6.2 of the June 2024 Quarter Appendix 5B) are payments for salary and statutory superannuation to David Hutton (MD and CEO) and Non-Executive Director fees paid during the June 2024 Quarter.

During the Quarter the Company received \$250K from GPR.

Also 4,700,000 unlisted employee options were exercised by employees during the period via cashless exercise and cash payment of option price, resulting in the issue of 3,396,855 ordinary fully paid shares.

With the issues and exercising of unlisted options the capital structure of the Company as at writing (including the Placement finalised at the beginning of July 2024);

- Ordinary Fully Paid Shares 2,294,401,078
- Unquoted Options expiring with various dates and prices, issued to staff, consultants, and directors - 96,600,000
- Unquoted Options expiring 28 February 2025 @ \$0.02 (2 cents) 143,333,330
- Unquoted Options expiring 31 December 2025 @ \$0.05 (5 cents) 15,266,665



### **Rimfire Tenement Schedule**

Below is a listing of the exploration licences held by Rimfire at the 30<sup>th of</sup> June 2024.

Project	Location	Licence	Interest	Interest Acquired / Farmed in during Qtr.	Interest Reduced / Farmed out during Qtr.
	Broken Hill	EL5958	100%	-	-
Broken Hill		EL8572	100%	-	-
		EL8599	100%	-	-
The Valley	Fifield	EL8542	100%	-	-
The valley		EL8401	100%	-	-
	Cowal	EL8804	100%	-	-
Cowal		EL8805	100%	-	-
Cowai		EL9397	100%	-	-
	Porters Mount	EL8329	100%	-	-
	Fifield	EL8935	100%	-	-
Fifield <sup>2</sup>		M(C)L305	100%	-	-
		EL6241	100%	-	-
	Fifield	EL5565	100%	-	-
		EL7058	100%	-	-
		EL7959	100%	-	-
Avondale³		EL8401	100%	-	
		EL8542	100%	-	-
		EL8543	100%	-	-
		EL8935	100%	-	-

<sup>&</sup>lt;sup>2</sup> Subject to Fifield Project Earn-in entered during the June 2020 Qtr. however no interest in tenements to be ceded until earn-in conditions met in full.

<sup>&</sup>lt;sup>3</sup> Subject to Avondale Project Earn-in entered during the June 2021 Qtr., however no interest in tenements to be ceded until earn-in conditions met in full



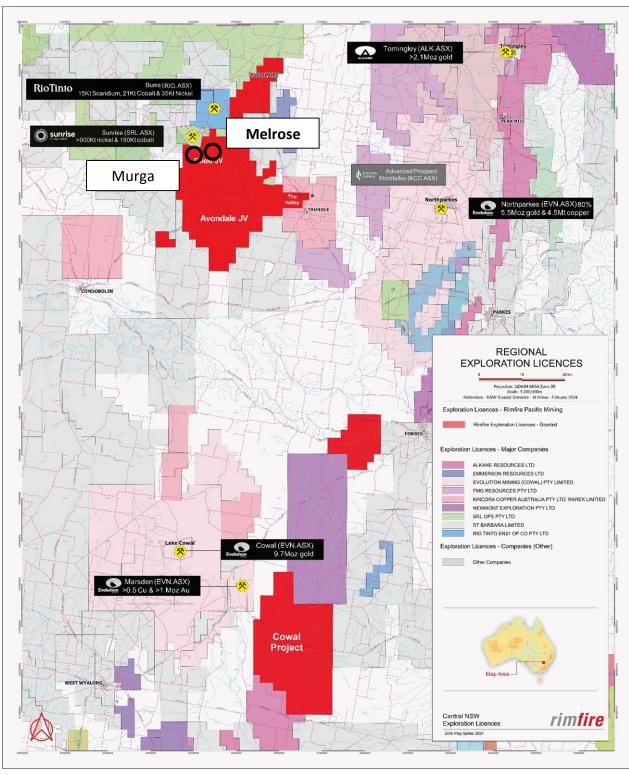


Figure 2: Rimfire Broken Hill Cobalt Project (red blocks), regional tenement holders and target locations



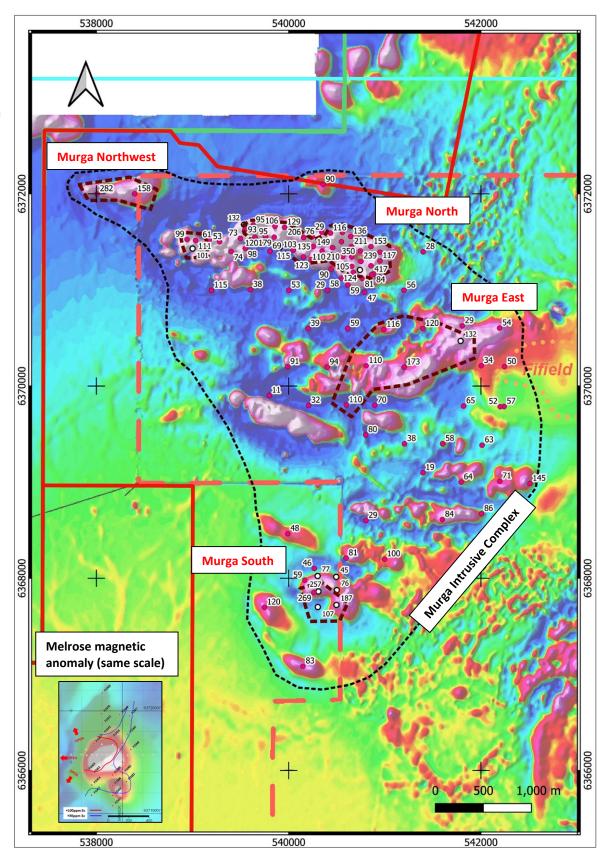


Figure 3: Murga drill collars on TMI image - max downhole Sc (ppm) & +100ppm Sc zones



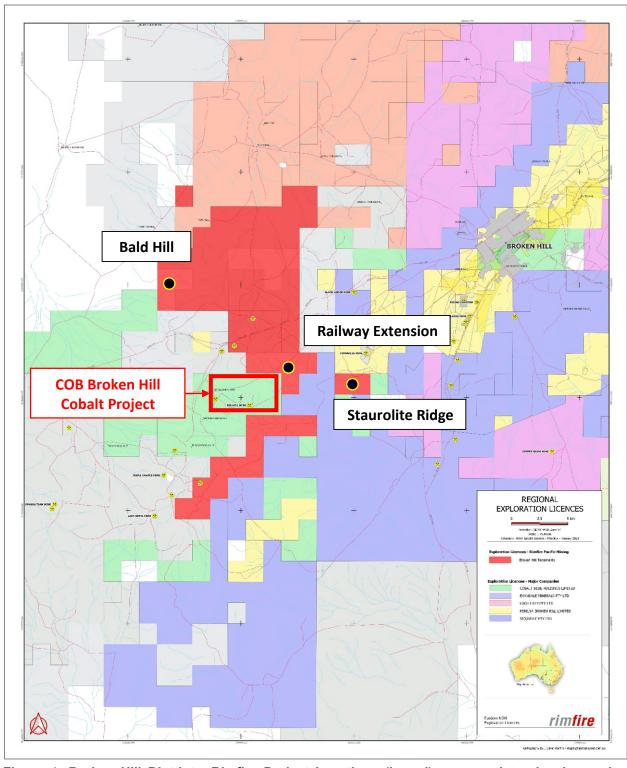


Figure 4: Broken Hill District - Rimfire Project Locations (in red) compared to showing major competitors' and key prospects.

**ENDS** 



This announcement is authorised for release to the market by the Board of Directors of Rimfire Pacific Mining Limited.

#### For further information please contact:

Mr David Hutton (MD & CEO) +61 417 974 843 or Mr Greg Keane (CFO / Investor Relations) +61 497 805 918

#### About Rimfire

Rimfire Pacific Mining (ASX: RIM, "Rimfire" or the "Company") is an ASX-listed Critical Minerals exploration company which is advancing a portfolio of projects within the highly prospective Lachlan Orogen and Broken Hill districts of New South Wales, comprising;

The 100% - owned Broken Hill Cobalt Project located immediately west of Broken Hill, NSW and includes;

- Bald Hill, where Rimfire's recent drilling successfully intersected high-grade cobalt (Co) in sulphide mineralisation - see Rimfire ASX Announcement dated 18 September 2023 Broad zones of highgrade cobalt at Bald Hill, and
- Railway Extension, which is the interpreted along strike extension to Cobalt Blue Holdings' Railway Cobalt Deposit (COB: ASX).

The 100% - owned Valley and Cowal Projects located west of Parkes and Orange in central NSW:

- The Valley Project located 35km west of the Northparkes Copper Gold Mine where Evolution Mining (EVN: ASX) has just acquired an 80% interest in the mining operation for up to US\$475M - see Evolution Mining ASX Announcement dated 5 December 2023 Acquisition of an 80% interest in Northparkes Copper Gold Mine, and
- The Cowal Project located to the east of Evolution's Lake Cowal Copper / Gold mine (EVN: ASX), which includes the newly acquired Porters Mount Project - see Rimfire ASX Announcement dated 11 September 2023 Acquisition of Porters Mount Project

Rimfire has two additional projects in the Lachlan Orogen which are being funded by Rimfire's exploration partner - Golden Plains Resources (GPR):

- Avondale Project (GPR earning up to 75%) & Fifield Project (GPR earning up to 50.1%)
- Both projects are prospective for high-value critical minerals scandium, cobalt, nickel, gold, and PGEs - which are essential for renewable energy, electrification, and green technologies.
- Adjacent to both projects is the;
  - development ready Sunrise Energy Metals Nickel Cobalt Scandium Project (ASX:SRL),
  - Platina Scandium Project (Owendale Scandium Deposit), which was acquired by Rio Tinto (ASX:RIO) - see RIO News Release dated 28 April 2023 Rio Tinto acquires high-grade scandium project in Australia
- The Fifield Project hosts the historic Platina Lead mine, the largest historic producer of Platinum in Australia.

For more information on the Avondale and Fifield Earn In and Joint Venture Agreements see:

ASX Announcement: 4 May 2020 - Rimfire enters \$4.5m Earn-in Agreement ASX Announcement: 25 June 2021 - RIM Secures \$7.5m Avondale Farm Out



#### **Competent Persons Declaration**

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

Mr Hutton has over 30 years' experience in the minerals industry and is the Managing Director and CEO of Rimfire Pacific Mining. 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'.

Mr 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, 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".

## Appendix 5B

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Rimfire Pacific Mining Limited

ABN Quarter ended ("current quarter")

59 006 911 744 30 June 2024

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(114)	(404)
	(e) administration and corporate costs	(179)	(869)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	2	8
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (GST Received)	16	60
	Other (Earn-In Administration Fee, transfer of funds from Earn-in Account for payment of Earn-in area expenditure)	443	1,116
1.9	Net cash from / (used in) operating activities	168	(89)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	(25)	(25)
	(c) property, plant and equipment	-	(8)
	(d) exploration & evaluation	(660)	(1,996)
	(e) investments	-	-

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Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
	(f) other non-current assets	-	-
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(685)	(2,029)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	<u>-</u>	1,950
3.2	Proceeds from issue of convertible debt securities	<u>-</u>	<del>-</del>
3.3	Proceeds from exercise of options	15	15
3.4	Transaction costs related to issues of equity securities or convertible debt securities	<u>-</u>	(36)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (Lease Liabilities)	-	-
3.10	Net cash from / (used in) financing activities	15	1,929

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	690	377
4.2	Net cash from / (used in) operating activities (item 1.9 above)	168	(89)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(685)	(2,029)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	15	1,929

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period*	188	188

\*Note in addition to the cash balance above, the Company had a further \$1.15M raised in a Share Placement immediately following the end of the June 2024 Quarter, as well as a further \$102K held in the Earn-in Project accounts. Of the Earn - In Project accounts, the Fifield Project Earn-in account had a balance of \$2k and the Avondale Project Earn-in account had a balance of \$100k which is held in trust separately to Rimfire's operating bank accounts and used to pay expenditure for activity conducted within the respective project areas as it occurs.

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	188	690
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)*	188	690

\*Note in addition to the cash balance above, the Company had a further \$1.15M raised in a Share Placement immediately following the end of the June 2024 Quarter, as well as a further \$102K held in the Earn-in Project accounts. Of the Earn - In Project accounts, the Fifield Project Earn-in account had a balance of \$2k and the Avondale Project Earn-in account had a balance of \$100k which is held in trust separately to Rimfire's operating bank accounts and used to pay expenditure for activity conducted within the respective project areas as it occurs.

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	107
6.2	Aggregate amount of payments to related parties and their associates included in item 2	2

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments

7.	Financing facilities  Note: the term "facility' includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000	
7.1	Loan facilities	-	-	
7.2	Credit standby arrangements	-	-	
7.3	Other (please specify)	-	-	
7.4	Total financing facilities	-	-	
7.5	Unused financing facilities available at qu	arter end	-	
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.			
Not Ap	oplicable			

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	168
8.2	(Payments for exploration & evaluation (classified as investing activities) (item 2.1(d))	(660)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(492)
8.4	Cash and cash equivalents at quarter end (item 4.6)	188
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	188
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	(0.38)
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.	

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Yes

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

As announced to the ASX on July 3, 2024 the entity had taken steps to raise \$1.15M via a placement, of which subsequently the funds have been received and the shares allotted on July 9, 2024 – if included in above formula would provide 2.71 Quarters estimate

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Yes – see above answer to question 8.8.2

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

#### **Compliance statement**

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date:	24 July 2024
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Authorised by:	The Board
	(Name of body or officer authorising release – see note 4)

#### **Notes**

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.