

29 January 2024

December 2023 Quarter - Activities Report

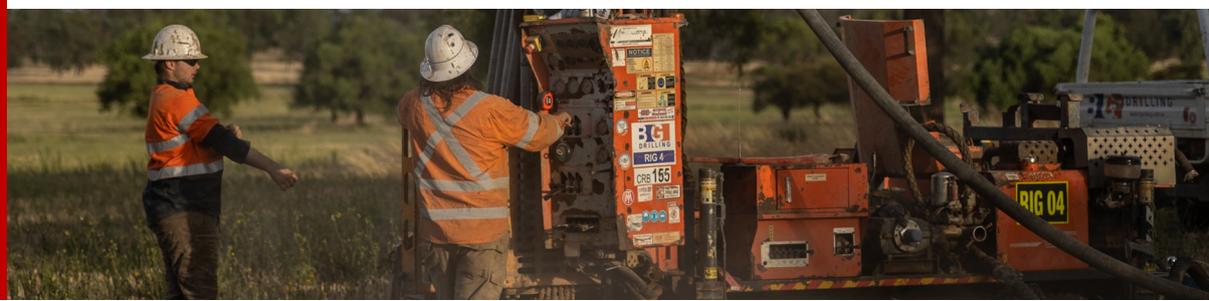
Highlights

- Multiple work programs focused on high-value critical minerals – cobalt, scandium, and copper across Rimfire’s NSW exploration projects
- Broken Hill Cobalt Project footprint increased with the purchase of two cobalt, copper and REE – prospective tenements from Castillo Copper (ASX: CCZ)
- New scandium search space identified at Melrose within underlying un-weathered pyroxenite host rocks
- Melrose metallurgical test work nearing completion with 7 out of 8 tests now completed.
- Placement supported by 3 family offices raises \$1.15M to advance exploration activities on Rimfire’s 100% - owned cobalt and copper projects
- Additional \$2.1M of exploration funding committed by JV partner to advance scandium exploration assets during the first six months of 2024 at the Fifield and Avondale Projects
- 4,000 metre aircore drill program planned for the Murga scandium prospect during March 2024 Qtr. with RC and diamond drilling at Melrose to follow

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.*

With the expansion of the Broken Hill Project, a successful capital raising, and funding commitments from GPR – our project partner at Avondale and Fifield, 2024 is shaping up to be a very busy and rewarding year for Rimfire and its shareholders.

We look forward to commencing the scandium – focussed drilling programs at Murga and Melrose as well as commencing fieldwork on the newly acquired tenements at Broken Hill”.



RIMFIRE PACIFIC MINING LTD

ASX: RIM

“Critical Minerals Explorer”

MANAGEMENT

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 Ian McCubbing

BOARD

Ian McCubbing
CHAIRMAN

Andrew Knox
NON-EXECUTIVE DIRECTOR

Stefan Ross
COMPANY SECRETARY

OFFICE

Suite 142, Level 1
1 Queens Road
MELBOURNE VIC 3004

CONTACT DETAILS

David Hutton
+ 61 417 974 843

Greg Keane
+ 61 497 805 918

rimfire@rimfire.com.au
www.rimfire.com.au

ABN: 59 006 911 744

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 (*Figure 1*).

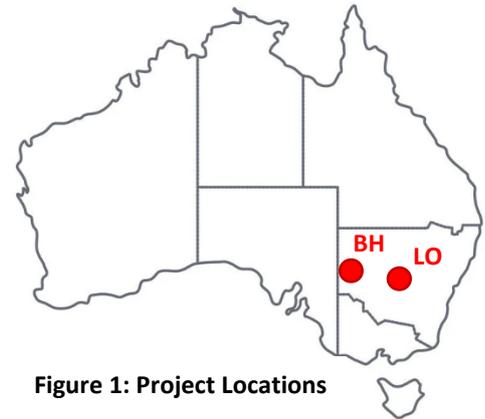


Figure 1: Project Locations

During the December 2023 Quarter (the “Quarter”), Rimfire’s exploration activities were focused on its 100% - owned Broken Hill Cobalt Project where a ground magnetic survey and a heritage assessment were undertaken to assist in planning for the next phase of exploration at the project.

Subsequent to the Quarter, Rimfire substantially increased the size of the Broken Hill Cobalt Project with the acquisition of two Exploration Licences that lie adjacent to Rimfire’s Bald Hill Cobalt Prospect from Castillo Copper Ltd (**ASX: CCZ**).

The Castillo tenements are considered prospective for Bald Hill - style cobalt (+/- copper) sulphide mineralisation and bedrock - hosted Rare Earth Element (REE) mineralisation associated with shear – hosted pegmatite occurrences.

The acquisition means that follow-up drilling at Bald Hill originally planned for the December 2023 Quarter has been deferred until the Company has completed a thorough review of the Castillo tenements and prioritised exploration targets across the expanded project area.

At the time of writing, Rimfire was reviewing the results of the ground magnetic surveying and heritage assessment as well as negotiating land access agreements at Broken Hill to enable field reconnaissance and prospecting of the Castillo tenements.

Additionally, a geochemical review of the Melrose Nickel Cobalt Scandium prospect (Avondale Earn In Project) during the December 2023 Quarter identified a new scandium search space (target) within unweathered serpentinised pyroxenite host rocks which lie beneath existing laterite - hosted mineralisation

All exploration activities at the Fifield and Avondale Earn In Projects are funded by Rimfire’s exploration partner - Golden Plains Resources (GPR) and during the March 2024 Quarter, Rimfire will ramp up exploration activities with aircore drilling (4,000 metres) planned for the Murga Scandium Prospect to be followed by a combined program of Reverse Circulation and Diamond drilling at the Melrose Cobalt Scandium Prospect. The Melrose drill program is still being designed but will be of sufficient detail to underpin the estimate of a maiden Mineral Resource Estimate (MRE) in accordance with the 2012 JORC Code for the prospect.

Also, during the March 2024 Quarter Rimfire expects to receive the final results of the Melrose metallurgical test work with 7 leaching tests (out of 8 planned tests) completed.

The test work results will underpin the development of a conceptual processing flowsheet for optimising recoveries of a combined nickel – cobalt – scandium product from high-grade mineralised material at Melrose.

Given that there have been no previous metallurgical studies of Melrose nickel – cobalt – scandium mineralisation, these results will build a strong foundation for further studies (if required) into commercialising the extraction of mineralised material from Melrose and other surrounding prospects.

Operational Review – 100% owned projects

Rimfire doubles Broken Hill Cobalt Project footprint

Immediately following the Quarter, Rimfire executed a Tenement Purchase Agreement with BHA No.1 Pty Ltd, a wholly owned subsidiary of Castillo Copper Ltd (**ASX: CCZ**), to acquire an unencumbered 100% of their Exploration Licences 8572 and 8599 (“Castillo tenements”) which lie adjacent to Rimfire’s Bald Hill Cobalt Prospect, 30 kilometres west of Broken Hill, NSW (see *Rimfire’s ASX Announcement dated 11 January 2024 and Figure 2*).

Diamond drilling undertaken by Rimfire at Bald Hill last year 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*), including;

- 125m @ 0.13% Co from 198 metres in FI2470 including 97m @ 0.15% Co,
- 58m @ 0.13% Co from 62 metres in FI2471 including 2m @ 0.24% Co and 17m @ 0.15% Co,
- 33m @ 0.11% Co from 58 metres in FI2469 including 4m @ 0.23% Co and 2m @ 0.21% Co, and
- 100m @ 0.08% Co from 71 metres in FI2470 including 68m @ 0.10% Co.

The Castillo tenements cover the same sequence of Proterozoic age deformed and metamorphosed gneiss, psammite, and amphibolite units that host the Bald Hill cobalt sulphide mineralisation.

An examination of the NSW Government Minview online GIS portal reveals several historic mineral occurrences that require follow up to better determine their geological significance and exploration potential.

Of initial interest are a cluster of gossanous, quartz veined and copper-stained occurrences within the northwestern portion of EL8572 (NSW Mineral Occurrences 181678, 181681, 181683 –

181684, 181686, and 181688) and multiple shear – hosted davidite – bearing pegmatite occurrences within the southern portion of EL8572 and EL8599 (NSW Mineral Occurrences 181344 – 181348). Davidite is a rare earth oxide mineral with chemical end members of either Lanthanum or Cerium (*Figure 3*).

- Bald Hill style cobalt (+/- copper) sulphide mineralisation hosted within quartz – albite – magnetite gneiss and psammopelitic composite gneiss, and
- Bedrock Rare Earth Element (REE) mineralisation associated with shear – hosted pegmatite occurrences.

The acquisition means that follow-up drilling at Bald Hill originally planned for the December 2023 Quarter has been deferred until the Company has completed a thorough review of the Castillo tenements and prioritised all exploration targets across the expanded project area.

At the time of writing, Rimfire was reviewing the results of the Bald Hill ground magnetic surveying and heritage assessment work as well as negotiating land access negotiations at Broken Hill to facilitate field reconnaissance of the Castillo tenements.

Castillo tenements – acquisition terms

Rimfire will acquire the Castillo tenements on the following terms;

- Rimfire to issue Castillo Copper with 8,064,516 Rimfire Ordinary Shares (**Consideration Shares**) being \$150,000 worth of shares at an issue price of \$0.0186 [1.86 cents] (**Consideration Shares Issue Price**). The issue price is the 5-day Volume Weighted Average Price (VWAP) up to and including the last day of trading immediately before the date of execution of the Tenement Purchase Agreement, and
- Rimfire to issue Castillo Copper a further \$150,000 worth of Rimfire Ordinary Shares (**Subsequent Shares**) to Castillo Copper if at any time after Completion (i.e., satisfactory completion of Conditions Precedent) Rimfire's share price 5-day VWAP is greater than \$0.0279 [2.79 cents], which is 50% above the Consideration Shares Issue Price (**Subsequent Shares Issue Price**). The Subsequent Shares to be issued would be at the Subsequent Shares Issue Price, resulting in the issue of 5,376,345 Rimfire Ordinary Shares if the Subsequent Shares Issue Price is met.

All Consideration Shares and Subsequent Shares are subject to a 6-month escrow period.

The Castillo tenements are subject to historic royalties of a 3% Net Smelter Return (EL8599) and a 1% Net Smelter Return (EL8572).

In return for the waiving of all Royalties, Rimfire has agreed to issue the individual Royalty holders with 5,376,337 Rimfire Ordinary Shares being \$100,000 worth of shares at the Consideration Shares Issue Price of \$0.0186 [1.86 cents] (**Royalty Holder Shares**).

All Royalty Holder Shares are subject to a 6-month escrow period.

At the time of writing, Rimfire, Castillo Copper and the Royalty Holders are completing all necessary ancillary legal documentation, and the transaction is still subject to standard regulatory conditions (Conditions Precedent) such as Ministerial consent for the transfer of the tenements.

The Consideration Shares, Subsequent Shares and Royalty Holder Shares will be issued under Rimfire's ASX Listing Rule 7.1 capacity.

Other 100% - owned projects

Following the September 2023 Quarter acquisition of the Porters Mount Project, which adjoins Rimfire's 100% - owned Cowal Copper Gold Project (Lachlan Orogen), the Company has carried out a detailed technical review of the expanded project area during the December 2023 Quarter and is currently prioritising targets for follow up.

Other than ongoing desktop review, no field work was undertaken during the December 2023 Quarter on the 100% - owned Valley Copper Project which also lies within the Lachlan Orogen of New South Wales.

Drilling undertaken by Rimfire at the Valley demonstrated that the project contains similar rock types to the host rocks of the Northparkes Copper Gold Mine which is located 34 kilometres east of the Valley.

Northparkes has total Measured and Indicated Resources (as at 31 December 2019) of 356Mt @ 0.55% copper, 0.20g.t gold (*1.96Mt copper and 2.33Moz gold – refer to Northparkes website*).

Evolution Mining (**ASX: EVN**) recently purchased an 80% interest in the mine for up to US\$475M (*see Evolution Mining's ASX Announcement dated 5 December 2023*).

Next Steps – 100% owned projects

Work planned for the Company's 100% - owned projects during the March 2024 Quarter include field reconnaissance and prospecting of the newly acquired Castillo tenements at Broken Hill, followed by the prioritisation of exploration targets across the entire project area.

At Cowal and the Valley Rimfire will continue to develop and prioritise copper – gold targets for exploration follow up.

Given the size of the Company's project portfolio and current priorities Rimfire is considering various strategic options to generate value from the Cowal and Valley projects which may include the introduction of an exploration partner and / or outright divestment.

Operational Review – Earn In projects

New scandium search space at Melrose

During the Quarter, Rimfire identified a new scandium search space (target) at Melrose Nickel Cobalt Scandium prospect beneath existing laterite - hosted mineralisation within serpentinised pyroxenite host rocks.

Melrose lies within the Avondale Earn In Project with all activities funded by Rimfire's exploration partner - Golden Plains Resources (GPR) and is located 70 kilometres northwest of Parkes within the highly prospective Lachlan Orogen of central New South Wales (*Figure 4*).

Nickel, cobalt, and scandium (Ni Co Sc) mineralisation at Melrose is present within a near surface flat – lying manganese and iron rich laterite horizon that overlies an east-dipping sequence of ultramafic and mafic intrusive rocks (microdiorite, gabbro, pyroxenite, wehrlite, dunite) bounded to the east against a granite and volcanoclastic sediments to the west.

The ultramafic rocks are heavily altered with serpentinite and magnetite is commonly present throughout.

Previous drilling by Rimfire has returned multiple strongly anomalous drill intercepts from the laterite horizon, e.g.;

- 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, and
- 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.*

The laterite – hosted mineralisation is present within a north northeast - south southwest trending zone that has been drilled over 900 metres strike length with widths ranging from 400 metres in the core of the magnetic complex to 50 metres in the northeast (as defined by a 100ppm Sc lower cut-off grade). Thickness ranges up to 16 metres in the core of the magnetic complex with mineralisation remaining open to the west.

Significantly, the thickest zones and highest-grade mineralisation are present over the serpentinised ultramafic intrusive rock types, with the highest scandium grades spatially associated over the pyroxenite.

To date Rimfire has been focussed on evaluating the laterite – hosted mineralisation, however a review of bedrock geochemistry has demonstrated that anomalous scandium (50 – 92ppm Sc)

appears to be concentrated in pyroxenite rocks beneath the laterite. The prospectivity of the underlying basement rocks is poorly understood with only 4 wide spaced diamond holes having been drilled on one section into the fresh basement rocks at Melrose (See *Rimfire ASX Announcement dated 20 October 2022*).

While the significance of the pyroxenite – associated scandium is unknown at this time, given the size of the Melrose prospect, the broad widths of scandium intersected to date coupled with the lack of drilling beneath the laterite, Rimfire believes that the underlying pyroxenite represents a new scandium search space or target in addition to the high-grade laterite-hosted mineralisation at Melrose, and potentially throughout the surrounding project area.

Metallurgical test work

Perth specialist metallurgical services group - Independent Metallurgical Operations Pty Ltd (IMO) is currently developing a conceptual processing flowsheet to optimise recoveries (at atmospheric pressures) of a combined nickel – cobalt – scandium product from high-grade mineralised laterite – hosted material from Melrose.

To underpin the studies, a bulk composite sample (260 kg) of high-grade nickel cobalt scandium mineralisation from Melrose (PQ quarter diamond drill core) was previously dispatched to IMO.

As previously announced, a representative sub-sample of the bulk composite sample was pulverised and analysed with assaying of various size fractions returning head assay grades of 0.33% nickel, 0.12% cobalt, and 380ppm scandium (see *Rimfire ASX Announcement dated 26 June 2023*).

IMO has now completed 7 leaching tests with an 8th (and final) test currently underway. All the tests are being conducted at atmospheric pressures and are investigating the effects of temperature, grind size, pH, reagent mix and residence time on the recovery of nickel, cobalt, and scandium.

The 8th test will be completed in the coming weeks with a final report expected by the end of February 2024.

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

During the March 2024 Quarter, Rimfire will ramp up exploration activities aircore drilling (4,000 metres) planned for the Murga Scandium Prospect to be followed by a combined program of Reverse Circulation and Diamond drilling at the Melrose Cobalt Scandium Prospect.

The Melrose drill program is still being designed but will be of sufficient detail to underpin the estimate of a maiden Mineral Resource Estimate (MRE) in accordance with the 2012 JORC Code for the prospect.

Also, during the March 2024 Quarter Rimfire expects to receive the final results of the Melrose metallurgical test work with 7 leaching tests (out of 8 planned tests) completed.

Given that there have been no previous metallurgical studies of Melrose nickel – cobalt – scandium mineralisation, these results will build a strong foundation for further studies (if required) into commercialising the extraction of mineralised material from Melrose and other surrounding prospects.

Corporate Activities

Successful Placement and funding commitments

During the Quarter, Rimfire raised \$1.15 million through a share placement pursuant to Section 708 of the Corporations Act (Cth).

The proceeds of the share placement will advance exploration of the Company's 100% - owned cobalt and copper projects in New South Wales and provide general working capital.

The placement comprised the issue of a total of 115,000,000 fully paid ordinary shares at an issue price of \$0.01 (1.0 cent) per share, raising \$1.15M, to sophisticated investors eligible under section 708 of the Corporations Act (Cth).

The issue price represented a 20% premium to the issue price of the Company's last placement in August 2023 (*see Rimfire's ASX Announcement dated 2 August 2023*).

In addition, 38,333,330 free attaching unlisted options were issued on a one (1) for three (3) basis for every new share subscribed for and issued under the placement with an exercise price of \$0.02 (2 cents) each, and an expiry date of 28 February 2025.

The 115,000,000 placement shares were issued under Rimfire's existing ASX Listing Rule 7.1A placement capacity and the 38,333,330 unlisted options were 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.

As previously announced, the Company has also been awarded exploration credits of \$500,000 under the Federal Government's Junior Minerals Exploration Incentive (JMEI) program for

distribution during the 2023 / 2024 Financial Year to eligible shareholders including participants in this Placement.

In addition, Rimfire's exploration partner at the Fifield and Avondale Earn In Projects - Golden Plains Resources (GPR) has committed to \$2.1M of funding to advance scandium exploration assets during the first six months of 2024 at both projects (see *Rimfire's ASX Announcement dated 14 December 2023*).

New project evaluation

The Company continues to evaluate new project opportunities primarily in the critical minerals space to complement and strengthen its existing project portfolio.

Cash, Capital Structure, and Funding

At 31st December 2023, Rimfire had access to \$1.2M of funding (plus an additional \$66K held in the Fifield and Avondale Earn In Project accounts for exploration activity on those Projects).

Subsequent to the Quarter Rimfire received a \$250K Cash Call payment from GPR for exploration programs to be conducted on the Fifield and Avondale Earn In Projects during the March 2024 Quarter.

Related party transactions of \$71K (section 6.1 and 6.2 of the December 2023 Quarter Appendix 5B) are payments for salary (including statutory superannuation) to David Hutton (MD and CEO) and Non-Executive Director fees paid during the December 2023 Quarter. Note, this amount is lower than normal due to the temporary suspension on payment of Director Fees whilst the company implemented cost saving measures during the December 2023 Quarter ahead of the December 2023 Placement.

During the Quarter 5,000,000 unquoted Options lapsed due to vesting conditions not being met.

With the lapsing of these Options and the Placement undertaken during the Quarter, the capital structure of the Company as at 31st December 2023 is:

- Ordinary Fully Paid Shares - 2,220,244,731
- Unquoted Options expiring various dates and prices – 110,300,000
- Unquoted Options expiring 28 February 2025 @ \$0.02 (2 cents) – 143,333,330

As detailed within this Report, upon satisfactory completion of the Castillo transaction, Rimfire will issue 8,064,516 Ordinary Shares at 1.86 cents per share ("Consideration Shares") to Castillo Copper for the acquisition of the Castillo tenements at Broken Hill and a further 5,376,337 Ordinary Shares at 1.86 cents per share ("Royalty Holder Shares") to the Royalty Holders for waiving all historic Royalties applicable to the Castillo tenements.

An additional 5,376,345 Ordinary Shares at 2.79 cents per share (“Subsequent Shares”) will also be issued to Castillo Copper if Rimfire’s share price 5-day VWAP is greater than 2.79 cents, which is 50% above the Consideration Shares Issue Price (**Subsequent Shares Issue Price**).

The Consideration Shares, Subsequent Shares and Royalty Holder Shares are subject to a 6-month escrow period and will be issued under Rimfire’s ASX Listing Rule 7.1 capacity.

Annual General Meeting

During the Quarter, the Company held its Annual General Meeting on 20 November 2023, with a summary of the results for each Resolutions put to the shareholders is shown below.

Resolution Details			Show of Hands or Poll	Number of votes cast on the poll (where applicable)			Res. Results	
Resolution	Res. Type	If s250U applies	S or P	For	Against	Abstain*	Carried/ Not Carried	
1.	Adoption of Remuneration Report	Ordinary	N/A	P	908,041,127 96.78%	30,232,094 3.22%	526,605 -	Carried
2A.	Re-election of Mr. Ian McCubbing as a Director of the Company	Ordinary	N/A	P	1,002,039,621 99.80%	2,057,570 0.20%	1,053,929 -	Carried
2B.	Election of Mr. Oliver Douglas as a Director of the Company	Ordinary	N/A	P	146,769,206 14.96%	834,271,224 85.04%	24,110,690 -	Not Carried
2C.	Election of Mr. Roland Berzins as a Director of the Company	Ordinary	N/A	P	146,429,671 14.93%	834,610,759 85.07%	24,110,690 -	Not Carried
2D.	Removal of Mr. David Hutton as a Director of the Company	Ordinary	N/A	P	161,775,082 16.16%	839,513,227 83.84%	3,862,811 -	Not Carried
2E.	Removal of Mr. Andrew Knox as a Director of the Company	Ordinary	N/A	P	147,076,994 14.91%	839,313,209 85.09%	18,760,917 -	Not Carried
3.	Ratification of prior issue of shares under Placement	Ordinary	N/A	P	503,715,404 97.46%	13,147,242 2.54%	170,577,655 -	Carried
4.	Ratification of prior issue of free attaching unlisted options under Placement	Ordinary	N/A	P	496,137,345 93.05%	37,050,852 6.95%	154,252,104 -	Carried
5.	Renewal of approval under Equity Incentive Plan	Ordinary	N/A	P	727,818,364 95.87%	31,369,585 4.13%	242,807,505 -	Carried
6.	Approval of 10% additional placement capacity	Special	N/A	P	967,542,626 96.37%	36,412,353 3.63%	1,196,141 -	Carried

Rimfire Tenement Schedule

Below is a listing of the exploration licences held by Rimfire at the 31st of December 2023. Whilst the Porters Mount tenement has been transferred to Rimfire, it is currently going through the renewal process which will complete the transaction.

Project	Location	Licence	Interest	Interest Acquired / Farmed in during Qtr.	Interest Reduced / Farmed out during Qtr.
Broken Hill	Broken Hill	EL5958	100%	-	-
		EL8572 ¹			
		EL8599 ¹			
The Valley	Fifield	EL8542	100%	-	-
		EL8401	100%	-	-
Cowal	Cowal	EL8804	100%	-	-
		EL8805	100%	-	-
		EL9397	100%	-	-
	Porters Mount	EL8329	100%	100%	-
Fifield ²	Fifield	EL8935	100%	-	-
		M(C)L305	100%	-	-
		EL6241	100%	-	-
Avondale ³	Fifield	EL5565	100%	-	-
		EL7058	100%	-	-
		EL7959	100%	-	-
		EL8401	100%	-	-
		EL8542	100%	-	-
		EL8543	100%	-	-
		EL8935	100%	-	-
¹ Subject to the Tenement Purchase Agreement between Rimfire and BHA No.1 Pty Ltd (Castillo Copper Ltd).					
² 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.					
³ 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					

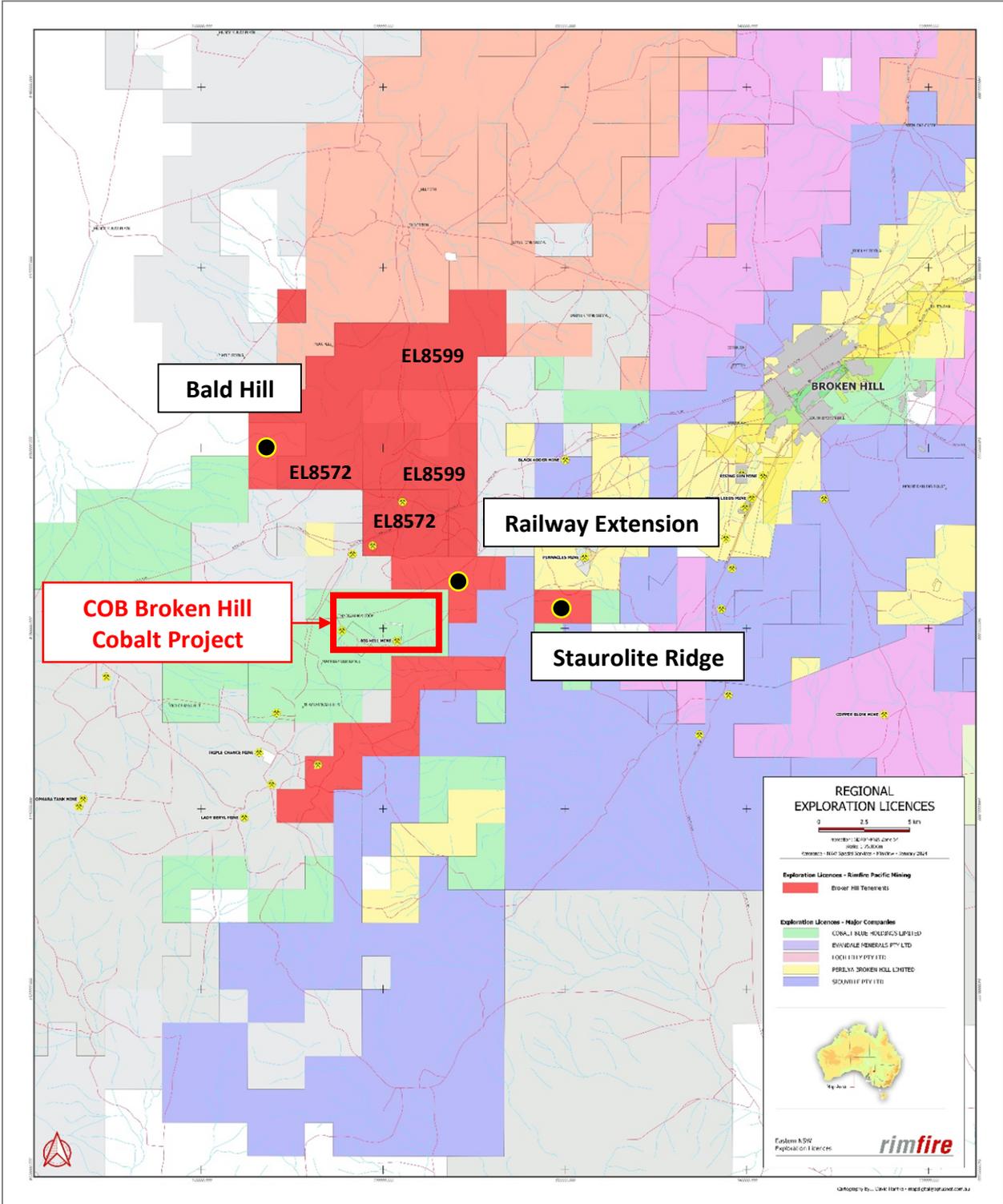


Figure 2: Rimfire Broken Hill Cobalt Project (red blocks), regional tenement holders and target locations

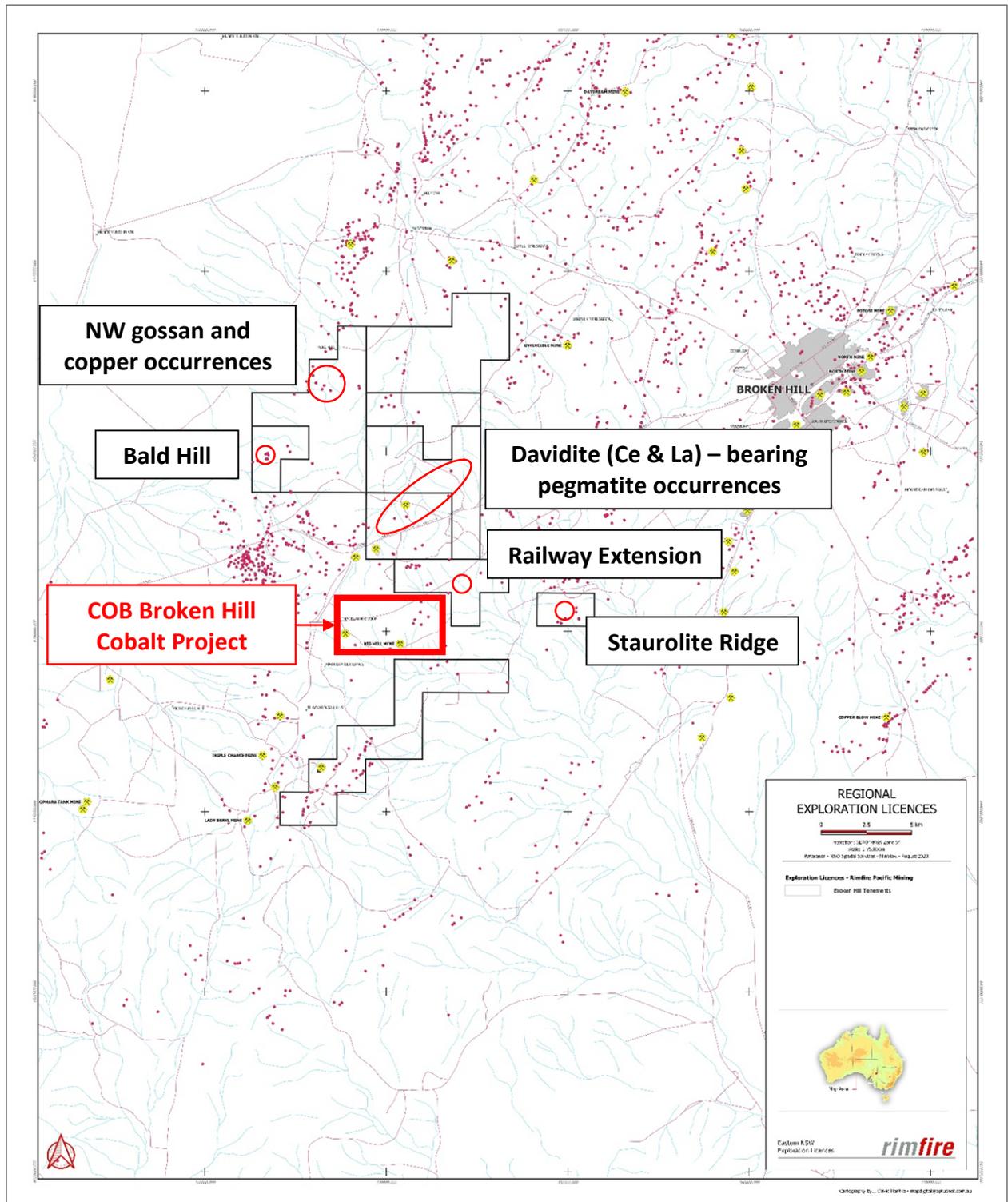


Figure 3: Rimfire Broken Hill Cobalt Project – priority Rimfire targets and Minview mineral occurrences on newly acquired tenements referred to in this Announcement

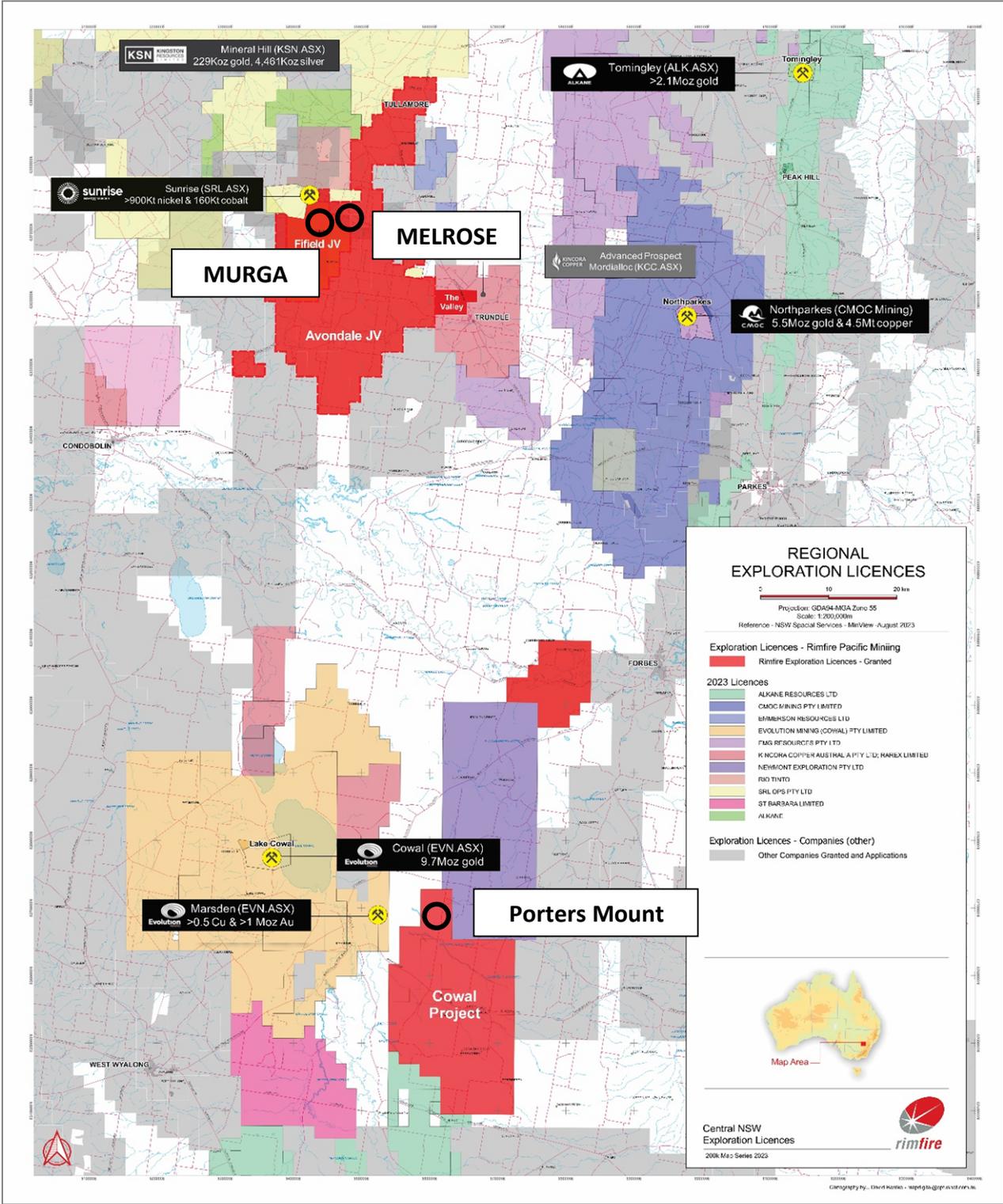


Figure 4: Rimfire Project Locations (in red) showing major competitors' active mines and key prospects.

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 high-grade 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), and
 - 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

59 006 911 744

Quarter ended ("current quarter")

31 December 2023

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 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	(79)	(189)
(e) administration and corporate costs	(249)	(503)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	1	3
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)	(11)	30
Other (Earn-In Administration Fee, transfer of funds from Earn-in Account for payment of Earn-in area expenditure)	175	363
1.9 Net cash from / (used in) operating activities	(163)	(296)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	-
(d) exploration & evaluation	(296)	(797)
(e) investments	-	-

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

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 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	(296)	(797)

3. Cash flows from financing activities	-	-
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)	1,150	1,950
3.2 Proceeds from issue of convertible debt securities	-	-
3.3 Proceeds from exercise of options	-	-
3.4 Transaction costs related to issues of equity securities or convertible debt securities	(30)	(30)
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	1,120	1,920

4. Net increase / (decrease) in cash and cash equivalents for the period		
4.1 Cash and cash equivalents at beginning of period	543	377
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(163)	(296)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	(296)	(797)
4.4 Net cash from / (used in) financing activities (item 3.10 above)	1,120	1,920

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

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period*	1,204	1,204

*Note in addition to the cash balance above, at the end of December 2023 the Earn-in Project accounts had a total balance of \$66k, of which the Fifield Project Earn-in account had a balance of \$26k and the Avondale Project Earn-in account had a balance of \$40k 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. Subsequent to the Quarter Rimfire received a \$250K Cash Call payment from GPR for exploration programs to be conducted on the Fifield and Avondale Earn In Projects during the March 2024 Quarter.

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	1,204	543
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)*	1,204	543

*Note in addition to the cash balance above, at the end of December 2023 the Earn-in Project accounts had a total balance of \$66k, of which the Fifield Project Earn-in account had a balance of \$26k and the Avondale Project Earn-in account had a balance of \$40k 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. Subsequent to the Quarter Rimfire received a \$250K Cash Call payment from GPR for exploration programs to be conducted on the Fifield and Avondale Earn In Projects during the March 2024 Quarter.

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	57
6.2	Aggregate amount of payments to related parties and their associates included in item 2	14

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

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

7. Financing facilities	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
<i>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.</i>		
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 quarter 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.	<div style="border: 1px solid black; padding: 5px; min-height: 100px;"> <p>Not Applicable</p> </div>	

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(163)
8.2 (Payments for exploration & evaluation (classified as investing activities) (item 2.1(d))	(296)
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(459)
8.4 Cash and cash equivalents at quarter end (item 4.6)	1,204
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	1,204
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	2.62
<i>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.</i>	

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?

N/A

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?

N/A

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?

N/A

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

- 1 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: 29 January 2024.....

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.