**RIMFIRE PACIFIC MINING LTD** 

ASX: RIM

"Critical Minerals Explorer"

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4 April 2023

## Access Agreement Received to Drill Bald Hill Cobalt Target

### Highlights

- Land Access Agreement executed with local landowner enables commencement of exploration at Bald Hill cobalt sulphide target
- Historic (early 1980's) drill program intersected high-grade mineralisation at Bald Hill with no follow up including:
  - 58m @ 0.10% Co from 48 metres including 7m @ 0.17% Co from 63 metres, 6m @ 0.15% Co from 81 metres, and 6m @ 0.15% Co from 95 metres
- Diamond drilling (up to 3 holes / 600 metres) of 100% owned cobalt target planned for the current June Quarter 2023
- Bald Hill is one of three highly prospective cobalt targets near Cobalt Blue's (ASX: COB) Broken Hill Cobalt Project

Rimfire Pacific Mining (**ASX: RIM**, "**Rimfire**" or "**the Company**") is pleased to advise that it has signed a Land Access Agreement with the local landowner to enable commencement of exploration at the high-grade Bald Hill cobalt sulphide target which lies within Rimfire's 100% - owned Green View Cobalt Project (located approximately 30 kilometres west of Broken Hill, NSW).

**Commenting on the announcement, Rimfire's Managing Director Mr David Hutton said:** *"Exploration for high-grade cobalt at Broken Hill is a key component of our strategy to focus on exploring for critical minerals within highly prospective areas of NSW.* 

The Bald Hill intercepts were drilled in the early 1980's and we believe our upcoming exploration is the first time these cobalt intercepts have been specifically followed up. The signing of a Land Access Agreement is a pivotal development for Rimfire, and we look forward to providing further updates as on-ground exploration gets underway".





### Bald Hill target and proposed work program

Bald Hill is one of three highly prospective cobalt targets identified by Rimfire on the Green View Cobalt Project, which are near Cobalt Blue's (ASX: COB) Broken Hill Cobalt Project, the other targets being Staurolite Ridge and Railway Extension.

Cobalt mineralisation at Bald Hill occurs within a folded and outcropping gossanous quartz - albite +/- pyrite psammopelitic composite gneiss unit. Induced Polarisation (IP) geophysical surveying undertaken by North Broken Hill Pty Ltd in 1980/1981 defined multiple chargeability anomalies associated with the quartz - albite +/- pyrite unit, drilling of which (BHR1 to BHR 5 – 651 metres) returned multiple high-grade drill intercepts (*refer to Rimfire ASX Announcement dated 3 November 2022 for technical details and JORC Information*);

- 58m @ 0.10% Co from 48 metres in BHR1/1A including;
  - 7m @ 0.17% Co from 63 metres, 6m @ 0.15% Co from 81 metres, and 6m
    @ 0.15% Co from 95 metres
- 15m @ 0.05% Co from 42 metres in BHR2
- 5m @ 0.05% Co from 12 metres and 7m @ 0.07% Co from 35 metres in BHR3
- 7m @ 0.03% Co from 27 metres in BHR4
- 8m @ 0.06% Co from 25 metres in BHR5

BHR1/1A was drilled into a north-plunging fold hinge which appears to have significantly "thickened" the quartz - albite +/- pyrite gneiss. BHR2 and 3 were drilled approximately 270 metres away on the western limb of the fold hinge. BHR4 and 5 were drilled 500 metres to the southeast of BHR1/1A on the eastern limb of the fold hinge and were reported as failing to reach target depth due to ground conditions (*Figures 2 and 3*).

At surface the prospective quartz - albite +/- pyrite unit has a surface area of approximately 500  $\times$  500 metres with multiple prospecting pits and shallow workings along the fold hinge.

The cobalt mineralisation is described in historic geological logs as being associated with increased sulphide (pyrite) content, with the highest grades occurring within zones of semi massive to massive pyrite. Minor copper anomalism (i.e., 3m @ 0.12% copper from 36 metres in BHR2) is also associated with the sulphide unit in a few holes. Bald Hill is a high priority target for further work as there appears to have been no follow up drilling of the area since the original holes were drilled.

Having executed a Land Access Agreement, Rimfire will shortly commence a program of ground reconnaissance, geological mapping and rock chip sampling (by late April 2023) followed by a diamond drilling (up to 3 holes – 600 metres) program in the current June 2023 Quarter to validate the historic drill intercepts.

### Green View Cobalt Project Background

The Green View Cobalt Project is prospective for the discovery of economic critical minerals such as cobalt and copper, and covers a sequence of metamorphosed sediments, gneisses, and amphibolite of the Proterozoic – age Willyama Supergroup.

Given the project's location (30 kilometres west of Broken Hill) and the similarities between the project's underlying geology and the Broken Hill silver lead zinc deposits (owned separately by CBH Resources Ltd and Perilya Limited), Green View has had a long history of mineral exploration **primarily for silver, lead and zinc**.

Modern cobalt exploration has been largely restricted to the area of Cobalt Blue's (ASX: COB) Broken Hill Cobalt Project which hosts the Pyrite Hill, Big Hill, and Railway Deposits (with a global Mineral Resource estimate comprising 118 Mt at 859 ppm (0.08%) cobalt equivalent (CoEq) [i.e., 687 ppm (0.07%) cobalt, 7.6% sulphur & 133 ppm nickel] for 81.1Kt contained cobalt using a 275 ppm CoEq cut-off (*Cobalt Blue website*).

Cobalt Blue's deposits are characterised by moderate to steep dipping stratabound zones of disseminated to semi-massive cobalt – bearing pyrite mineralisation. The deposits extend over some 5 km of strike and vary in thickness from 10 to 300m. The cobalt occurs exclusively as a substitute within the pyrite crystal lattice, and consequently, there is a strong correlation between pyrite content and cobalt grade.

Cobalt Blue has developed a patented minerals processing technology for treating pyrite feedstocks targeting 85-90% recovery of cobalt from ore to product (as Mixed Hydroxide Precipitate or Cobalt Sulphate). As recently announced, Cobalt Blue has completed trial mining of the Pyrite Hill deposit and is currently processing the ore through their Broken Hill demonstration processing plant (*Cobalt Blue ASX Announcement dated 22 March 2023*).

Cobalt Blue's development of new processing technology for pyrite – hosted cobalt mineralisation is a significant development for Broken Hill and will potentially enable the development of other cobalt opportunities (*potentially such as Bald Hill*) throughout the district that were previously viewed as being non-commercial due to their metallurgy.

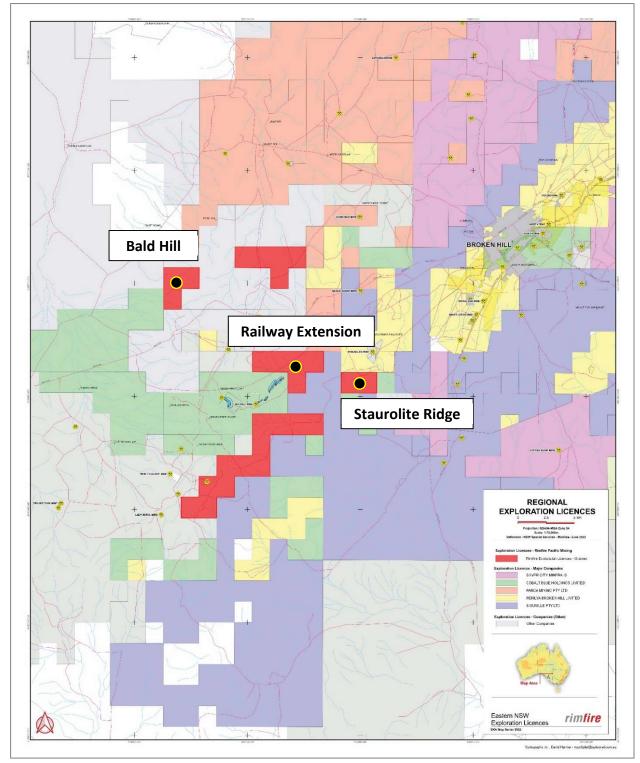


Figure 1: Broken Hill Cobalt Project (red blocks), regional tenement holders and target locations

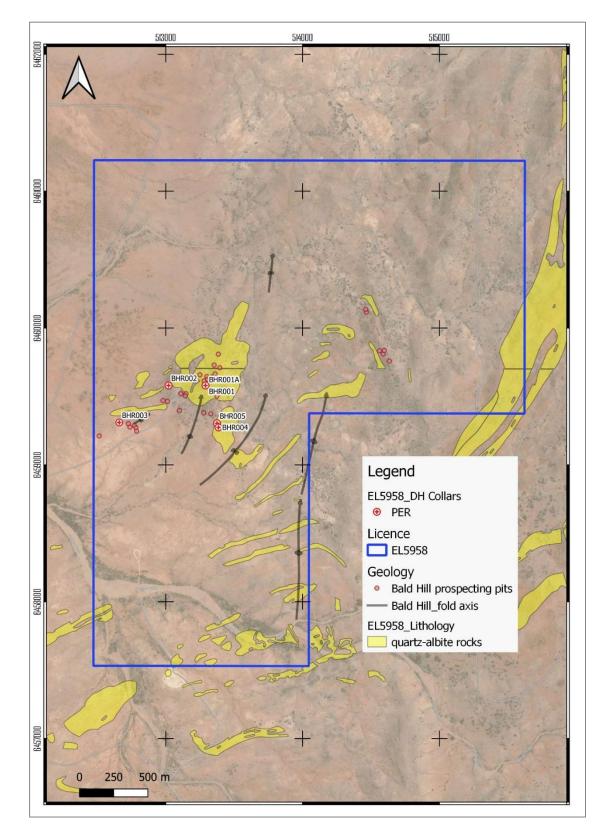


Figure 2: Bald Hill target area plan showing distribution of quartz – albite +/- pyrite unit, fold axes and drilling

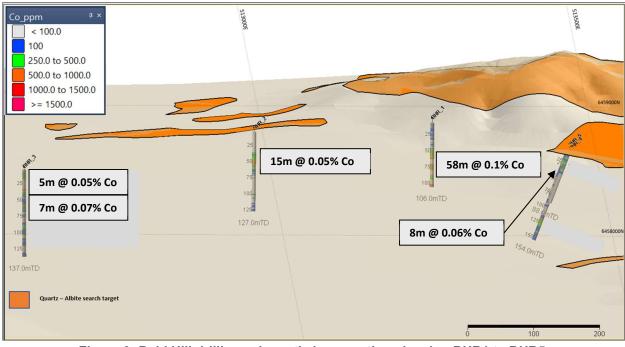


Figure 3: Bald Hill drilling schematic long section showing BHR1 to BHR5

### JORC Statement.

Rimfire confirms that all Exploration Results included in this ASX Announcement have been previously released to the market in the following ASX Announcement and that no new Exploration Results are included in this ASX Announcements.

• High-grade cobalt targets identified at Broken Hill – dated 3 November 2022.

For JORC information relating to the Exploration Results please refer to the ASX Announcements listed above.

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

### For further information please contact:

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### 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.

The Company has two 100% - owned copper – gold prospective projects that are located west of Parkes and Orange in central New South Wales:

- The Valley Project located 5km west of Kincora Copper's Mordialloc porphyry copper gold discovery (KCC.ASX), and
- The Cowal Project located to the east of Evolution's Lake Cowal Copper / Gold mine (EVN: ASX).

Rimfire also has the 100% - owned Broken Hill Cobalt (Green View) Project which is located immediately west and northwest of Broken Hill and covers several targets including the interpreted along strike extension to Cobalt Blue Holdings' Railway Cobalt Deposit (COB: ASX).

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 60%)
- ✓ Both projects are prospective for high-value critical minerals nickel, cobalt, scandium, gold, and PGEs which are essential for renewable energy, electrification, and green technologies.
- ✓ The development ready Sunrise Energy Metals Nickel Cobalt Scandium Project (ASX: SRL) is adjacent to both projects.
- The Fifield Project hosts the historical Platina Lead mine, the largest 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 into \$4.5m Earn-in Agreement ASX Announcement: 25 June 2021 - RIM Secures \$7.5m Avondale Farm Out ASX Announcement: 30 June 2022 - Rimfire to receive \$1.5M cash to vary Fifield Project Earn In ASX Announcement: 4 August 2022 – Exploration Partner funding update

ENDS



### **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 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 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 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".