

4<sup>th</sup> April 2022

# Strong nickel, cobalt and scandium drill results reinforce critical minerals exploration strategy

## HIGHLIGHTS

- Wide spaced aircore drilling at the Melrose prospect has returned strongly anomalous results which remain open along strike and to the west, including.
  - 9m @ 0.17% Ni, **0.10% Co**, and **362ppm Sc** from 3 metres,
  - 12m @ 0.23% Ni, **0.11% Co**, and **314ppm Sc** from 9 metres,
  - 18m @ 0.10% Ni, 0.04% Co, and **286ppm Sc** from 3 metres.
- Further deeper drilling to define lateral extents of the anomalous zone and to test for primary sulphide mineralisation planned as next step
- Drilling at Melrose undertaken as part of Rimfire's critical minerals exploration strategy with drilling also underway at Currajong and Kara Kara prospects
- All exploration work at the Avondale Project (which includes Melrose) is fully funded by Rimfire's exploration partner - Golden Plains Resources (GPR)

Rimfire Pacific Mining (**ASX: RIM**, "Rimfire" or the "Company") advises that shallow drilling at the Melrose prospect has returned strongly anomalous levels of nickel, cobalt, and scandium from multiple drill holes.

Melrose lies within the Avondale Project, which is located within the highly prospective Lachlan Orogen of central New South Wales (see *Figure 1*).

Sixteen vertical aircore holes (FI2163 to FI2178 - 484 metres) were drilled every 50 to 100 metres on three 100 metre – spaced traverses to further test a "bullseye" magnetic anomaly at Melrose that previous reconnaissance drilling by Rimfire (in 2018 – FI0835 to FI0886) had shown to be coincident with an ultramafic rock unit (see *Figures 2 and 3*).

The latest drilling successfully intersected the laterised / weathered ultramafic intrusive unit which is fault - bounded against a granite to east and volcanoclastic sediments to the west (see *Figure 4*). Geochemical analysis of 3 metre composite drill samples returned strongly anomalous nickel (Ni), cobalt (Co) and scandium (Sc) from a flat lying ferruginous zone that is developed over the ultramafic unit and remains open along strike and to the west (true widths and see *Table 1*).



- FI2163 – 12m @ 0.23% Ni, **0.11% Co**, and **314ppm Sc** from 9 metres,
- FI2164 – 9m @ 0.50% Ni, 0.02% Co, and **209ppm Sc** from 6 metres,
- FI2174 – 12m @ 0.32% Ni, **0.12% Co**, and **221ppm Sc** from 3 metres,
- FI2175 – 3m @ 0.24% Ni, 0.07% Co, and **220ppm Sc** from surface,
- FI2176 – 9m @ 0.17% Ni, **0.10% Co**, and **362ppm Sc** from 3 metres,
- FI2177 – 21m @ 0.38% Ni, 0.08% Co, and 45ppm Sc from surface, and
- FI2178 – 18m @ 0.10% Ni, 0.04% Co, and **286ppm Sc** from 3 metres.

The latest results build on aircore drilling results previously obtained by Rimfire in 2018.

- FI0871 - 6m @ 0.12% Ni, 0.04% Co, **219 ppm Sc** from surface,
- FI0885 - 12m @ 0.20% Ni, **0.13% Co**, **342 ppm Sc** from 15 metres. and
- FI0886 – 15m @ 0.45% Ni, **0.11% Co**, 106 ppm Sc from surface.

Anomalous copper (up to 1,670ppm in a single 3 – metre composite sample in Fi2173) was also observed on the both the eastern and western margins of the ultramafic.

The results from Rimfire’s drilling at Melrose compare favorably to (with scandium grades exceeding) recent drill results announced by Sunrise Energy Metals Limited (**ASX: SRL**) at their nearby Sunrise East prospect. (i.e., diamond drillhole SDD029 intersected 5.8m @ 0.31% Ni, 0.11% Co and 174 ppm Sc from 7 metres within a lateritised (weathered) ultramafic (see Figure 5). ([SRL ASX Announcement: 20 January 2022 - Exploration Update](#)).

Based on the strength of the results, Rimfire will be drilling further aircore holes at Melrose to define the lateral extents of the anomalous zone as well undertaking deeper drilling (i.e., Reverse Circulation and / or diamond drilling) to test for primary (sulphide) mineralisation within the underlying host rocks. Rimfire will also re-analyse a number of the aircore samples for Platinum Group Elements (PGE’s) given that anomalous levels of PGE’s were also noted in drillhole SDD029 at Sunrise East.

Regionally the Melrose prospect is one of 20+ priority exploration targets at Avondale that lie within a 40-kilometre-long belt of underexplored intermediate volcanoclastics, sediments and ultramafic intrusive units that occurs within a geologically significant regional – scale structure called the “Steeton Ultramafic Suture Zone” (SUSZ).

The exploration targets are prospective for the discovery of nickel, cobalt, scandium, and platinum group elements (PGE’s) associated with ultramafic host rocks, and range variously from untested magnetic anomalies (interpreted to represent previously unrecognised ultramafic occurrences) to confirmed ultramafic occurrences with historic drill intercepts (i.e., Melrose, Currajong, and Kara Kara).

As announced last week, Rimfire’s exploration strategy at Avondale aims to discover high-value critical minerals within the SUSZ and the Company has initiated a major exploration

program to assess the targets ([RIM ASX Announcement: 28 March 2022 - Critical Minerals Discovery Opportunity driving Exploration Strategy at the Avondale Project, NSW](#)).

In addition to Melrose, aircore drill programs are currently underway at the Currajong, and Kara Kara prospects ([RIM ASX Announcement: 7 February 2022 - Drilling Update - Platinum, Cobalt, Gold and Copper](#)).

At Currajong 62 aircore holes (1,689 metres) were drilled and 666 drill samples have been submitted to ALS Orange for multi element analysis with results expected in the coming weeks.

At Kara Kara 59 holes of a 100 – hole aircore program have been drilled to date. The remaining holes will be completed in April, following which all drill samples will be submitted for analysis.

In addition, the Company will be shortly commencing geological mapping and soil sampling over the remaining exploration targets.

All exploration work at the Avondale Project is fully funded by Rimfire's exploration partner - Golden Plains Resources (GPR) who recently confirmed their ongoing financial support with another \$1.5M committed to discovery work over the next 12 months ([RIM ASX Announcement: 14 March 2022 - Rimfire's Exploration Partner Commits to Year 2 of Avondale Earn-in](#)).

## Management Comment

Commenting on the announcement, Rimfire's Executive Director Mr David Hutton said he was excited by the strong nickel cobalt scandium drill results which highlight the prospectivity of the Steeton Ultramafic Suture Zone and reinforces the Company's new critical minerals exploration strategy.

"I am also intrigued by the copper at Melrose which could be indicative of primary sulphide mineralisation at depth. The lack of deep drilling throughout the area creates a significant exploration opportunity for Rimfire and with further assay results expected in the coming weeks, the Company and looks forward to providing the market with further updates as new information comes to hand".

## Critical Minerals

The Australian and United States Governments identify critical minerals as metals, non-metals and minerals that are considered vital for the economic well-being of the world's major and emerging economies, yet whose supply may be at risk due to geological scarcity, geopolitical issues, trade policy or other factors.

The critical minerals include Antimony, Beryllium, Bismuth, Chromium, Cobalt, Graphite, Lithium, Magnesium, Manganese, Nickel Niobium, Platinum Group Elements, Rare Earth Elements, Rhenium, Scandium, Titanium/Zirconium, Tungsten, Vanadium and Zirconium

The Platinum Group Elements (PGE's) comprise iridium, osmium, palladium, platinum, rhodium, and ruthenium.

Critical minerals are required for the manufacture of solar PV plants, wind farms, electric vehicles, and battery storage. Additionally advanced manufacturing, defence, renewable energy, and medical devices has increased demand for critical minerals as building blocks for new products. For further information, refer to the Australian Government's Australian Critical Minerals Prospectus 2021, ([December 2021: Australian Critical Minerals Prospectus](#)).

**Table One – Drill hole specifications (MGA94 Zone 55)**

| Hole_ID | Easting | Northing  | EOH (m) | From                             | Width | Ni_ppm | Ni_% | Co_ppm | Co_% | Cu_ppm | Sc_ppm     |  |  |
|---------|---------|-----------|---------|----------------------------------|-------|--------|------|--------|------|--------|------------|--|--|
| FI0869  | 548,500 | 6,371,575 | 15      | 12                               | 3     | 359    | 0.04 | 177    | 0.02 | -      | 183        |  |  |
| FI0870  | 548,700 | 6,371,575 | 3       | 0                                | 3     | 509    | 0.05 | 69     | 0.01 | -      | <b>265</b> |  |  |
| FI0871  | 548,800 | 6,371,575 | 6       | 0                                | 6     | 1229   | 0.12 | 389    | 0.04 | -      | <b>219</b> |  |  |
| FI0885  | 548,600 | 6,371,575 | 44      | 15                               | 12    | 2003   | 0.20 | 1268   | 0.13 | -      | <b>342</b> |  |  |
| FI0885  | "       | "         | "       | 30                               | 12    | -      | -    | -      | -    | 773    | -          |  |  |
| FI0886  | 548,900 | 6,371,575 | 15      | 0                                | 15    | 4520   | 0.45 | 1131   | 0.11 | -      | 106        |  |  |
| FI2163  | 548,697 | 6,371,472 | 33      | 9                                | 12    | 2317   | 0.23 | 1089   | 0.11 | -      | <b>314</b> |  |  |
| FI2164  | 548,806 | 6,371,467 | 27      | 9                                | 9     | 5073   | 0.51 | 213    | 0.02 | -      | <b>209</b> |  |  |
| FI2165  | 549,052 | 6,371,217 | 39      |                                  |       |        |      |        |      |        |            |  |  |
| FI2166  | 548,950 | 6,371,224 | 14      | 6                                | 6     | 3270   | 0.33 | 1237   | 0.12 | -      | 76         |  |  |
| FI2167  | 548,899 | 6,371,470 | 10      | 6                                | 3     | 3840   | 0.38 | 751    | 0.08 | -      | 20         |  |  |
| FI2168  | 548,996 | 6,371,468 | 31      | <i>No Significant Intercepts</i> |       |        |      |        |      |        |            |  |  |
| FI2169  | 549,051 | 6,371,567 | 60      | <i>No Significant Intercepts</i> |       |        |      |        |      |        |            |  |  |
| FI2170  | 549,000 | 6,371,669 | 51      | <i>No Significant Intercepts</i> |       |        |      |        |      |        |            |  |  |
| FI2171  | 548,951 | 6,371,772 | 41      | 3                                | 15    | 135    | 0.01 | 83     | 0.01 | -      | 120        |  |  |
| FI2172  | 548,904 | 6,371,668 | 27      | <i>No Significant Intercepts</i> |       |        |      |        |      |        |            |  |  |
| FI2173  | 548,948 | 6,371,573 | 17      | <i>No Significant Intercepts</i> |       |        |      |        |      |        |            |  |  |
| FI2173  | "       | "         | "       | 3                                | 6     | -      | -    | -      | -    | 1670   | -          |  |  |
| FI2174  | 548,843 | 6,371,576 | 15      | 3                                | 12    | 3155   | 0.32 | 1242   | 0.12 | -      | <b>221</b> |  |  |
| FI2175  | 548,799 | 6,371,675 | 24      | 0                                | 3     | 2440   | 0.24 | 665    | 0.07 | -      | 220        |  |  |
| FI2176  | 548,753 | 6,371,572 | 27      | 3                                | 9     | 1715   | 0.17 | 1004   | 0.10 | -      | <b>362</b> |  |  |
| FI2177  | 548,859 | 6,371,480 | 35      | 0                                | 21    | 3781   | 0.38 | 799    | 0.08 | -      | 45         |  |  |
| FI2178  | 548,652 | 6,371,568 | 33      | 3                                | 18    | 1023   | 0.10 | 440    | 0.04 | -      | <b>286</b> |  |  |

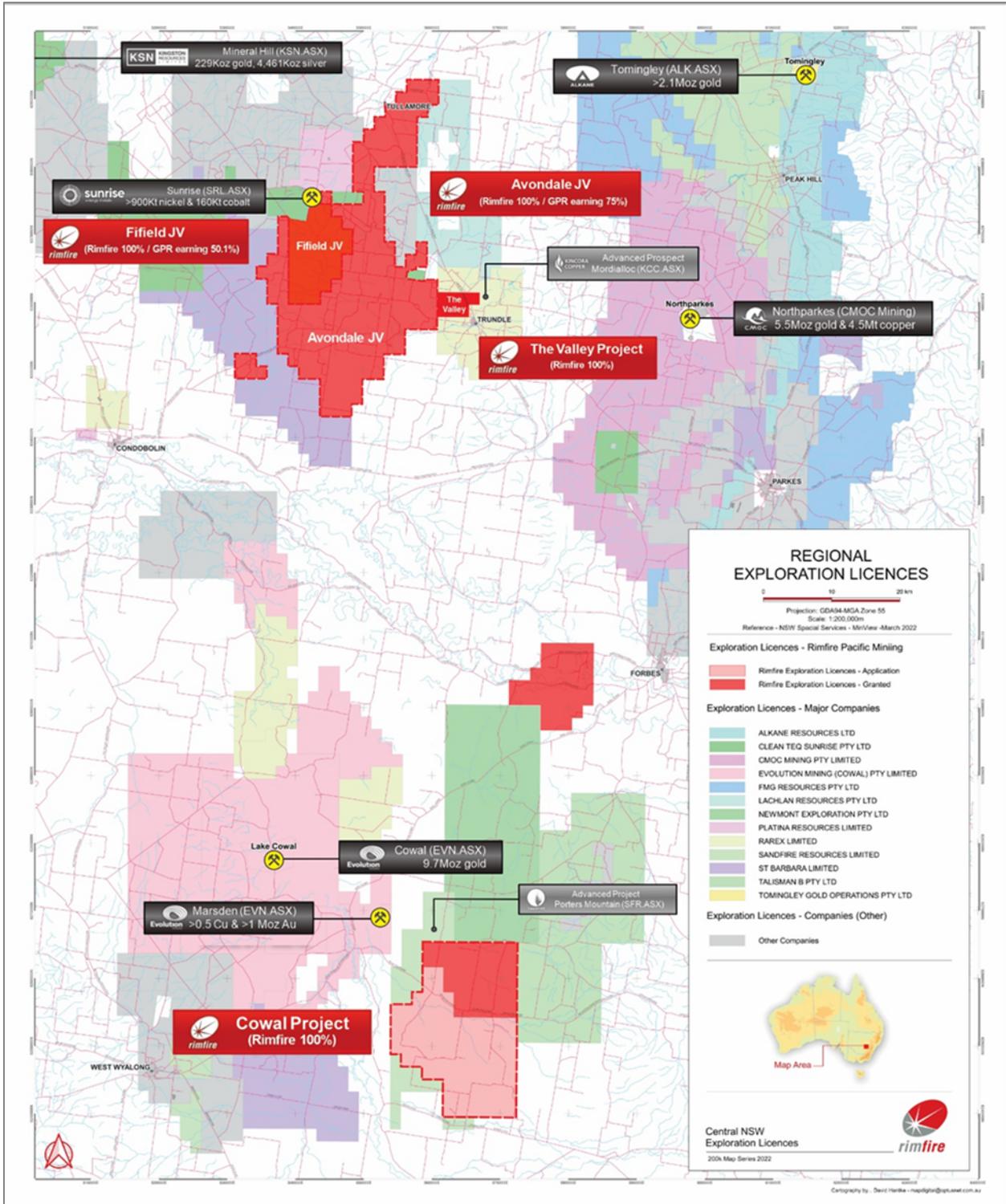


Figure 1: Rimfire Project Locations showing competitors' granted tenure, active mines, and key prospects

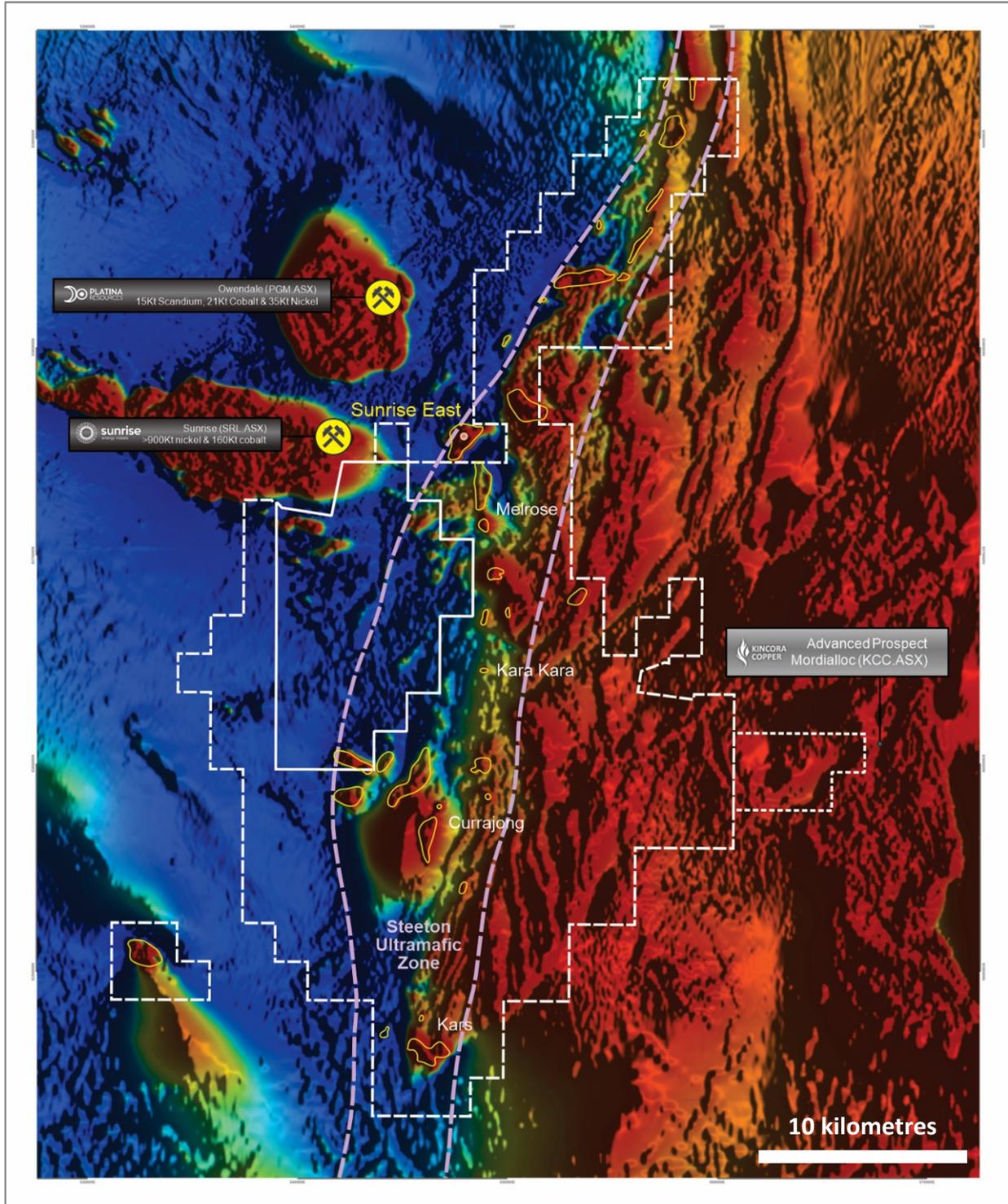


Figure 2: Rimfire’s Avondale and Fifield Projects on RTP TMI background image showing Steeton Ultramafic Suture Zone, and critical minerals targets (yellow polygons). Melrose and Sunrise East locations shown.



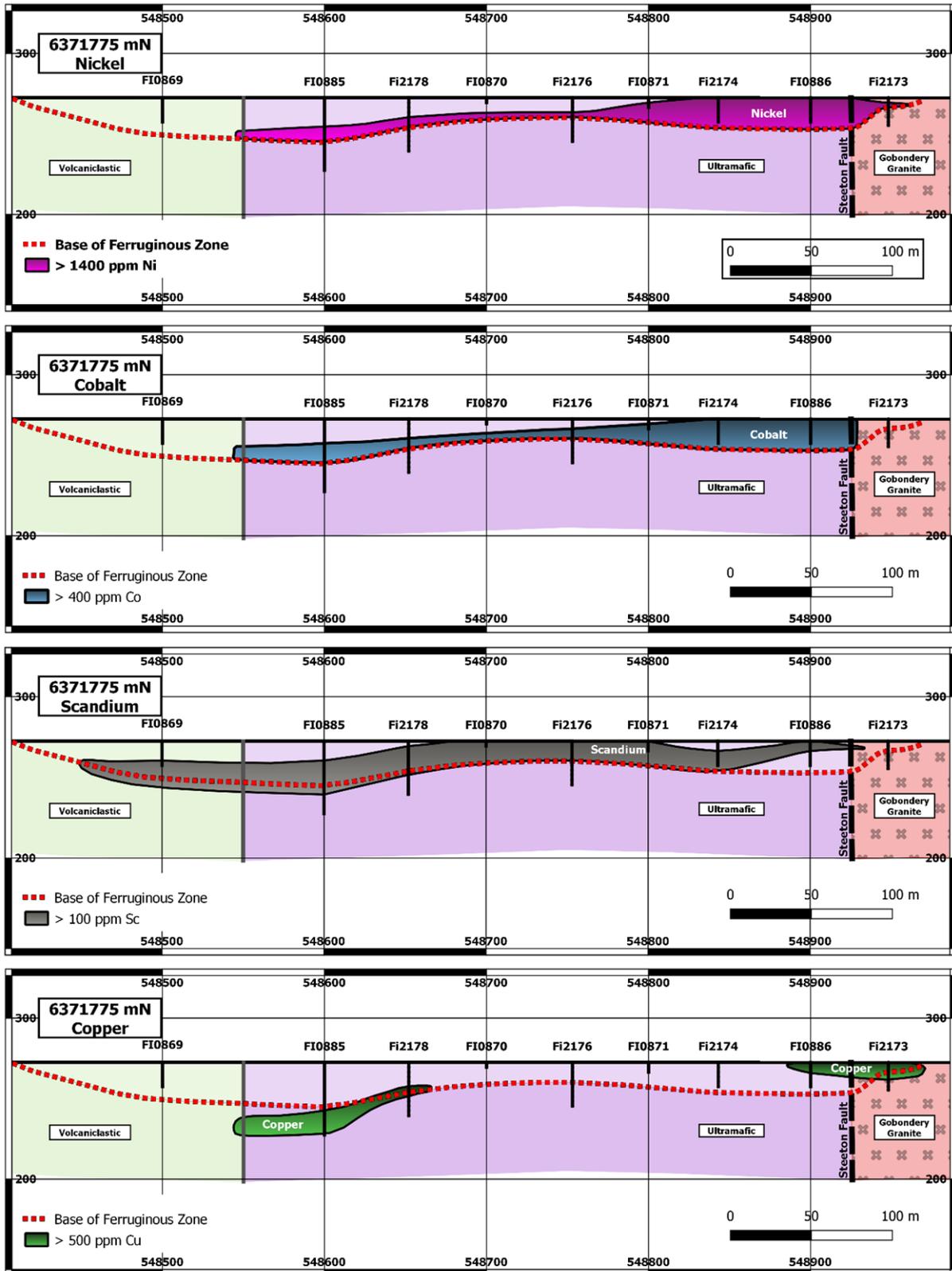
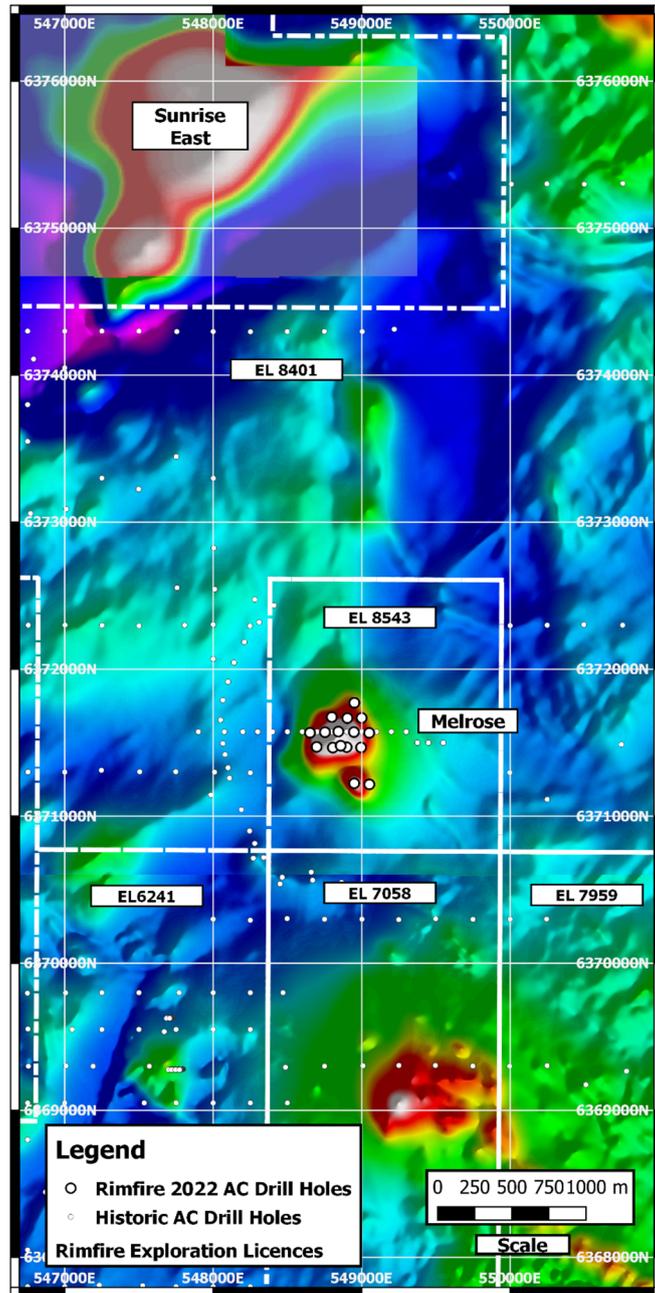


Figure 4: Stacked profile sections (looking north) of the 6,371,775N traverse showing geology, nickel, cobalt, scandium, copper anomalous zones, and base of ferruginous zone.



**Figure 5: Regional magnetic image showing location of Melrose and Sunrise Energy Metals' Sunrise East prospect.**

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

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**Table 2: JORC Code Reporting Criteria**  
Section 1 Sampling Techniques and Data – Aircore Drilling

| Criteria              | JORC Code explanation   | Commentary  |
|-----------------------|---|---|
| Sampling techniques   | Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.   | Aircore drillhole sampling.<br>Each sample represents a scooped sample of cuttings generated via aircore drilling. Each sample is representative of 3m composites.<br>The nature of the sample generation and collection process means the samples should be considered as indicative of grade rather than representative of a precise grade.   |
|                       | Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used.   | The nature of aircore sampling means samples should be considered as an inductive rather than precise measure, aimed at defining areas of anomalism.<br>Blank samples and reference standards were inserted into the sample sequence for QA/QC.   |
|                       | Aspects of the determination of mineralisation that are Material to the Public Report.<br><br>In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information. | The field collected samples were typically 1.0 to 2.0kg composite samples from a 3m interval from aircore drilling.<br><br>Industry standard preparation and assay conducted at ALS Pty Ltd in Orange, NSW, including sample crushing and pulverising prior to subsampling for an assay sample.<br><br>25 g of pulverized sample was utilized for multi-element assay via aqua regia and ICP technique. |
| Drilling techniques   | Drill type (e.g., core, reverse circulation, open-hole hammer rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).  | All holes were drilled using aircore drill rig. All holes were vertical.  |
| Drill sample recovery | Method of recording and assessing core and chip sample recoveries and results assessed.   | An approximate estimate of total sample quantity was recorded with each 1m interval by comparing volumes within each bucket of sample yielded from the cyclone. A visual estimate of 0, 25, 50, 75, 100, 125% was recorded for each metre.  |
|                       | Measures taken to maximise sample recovery and ensure representative nature of the samples.   | The drillers adjusted penetration and air pressure rates according to ground conditions to optimise recoveries. The cyclone was cleaned regularly, and holes were reamed in between rod changes to reduce contamination.  |
|                       | Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.  | Due to the reconnaissance nature of the aircore drilling it can not be determined whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.  |
| Criteria              | JORC Code explanation   | Commentary  |
| Logging               | Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.   | Sub-samples were collected for the purpose of geological logging, aimed primarily at assessing the lithological type and confirming sample represents insitu material.  |
|                       | Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.  | Geological logging of chips/rock samples is qualitative by nature.  |
|                       | The total length and percentage of the relevant   | Logging was completed for every 3m section of each hole   |

| Criteria   | JORC Code explanation   | Commentary   |
|--|---|--|
|  | intersections logged.   |  |
| <b>Sub-sampling techniques and sample preparation</b>            | If core, whether cut or sawn and whether quarter, half or all core taken.   | Not applicable as no core samples were collected.  |
| <b>Sub-sampling techniques and sample preparation continued.</b> | If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.   | Aircore drilling samples were scooped with PVC pipe from the total output of cuttings that passed through the cyclone on the rig.                              |
|  | For all sample types, the nature, quality and appropriateness of the sample preparation technique.  | Given the indicative nature of the sample medium (refer to sampling techniques section above) this process is considered appropriate.                          |
|  | Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.   | All sampling equipment was cleaned between samples.  |
|  | Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.  | Blanks and standards were inserted in the sample stream before being submitted to the commercial laboratory. No issues have been identified.                   |
|  | Whether sample sizes are appropriate to the grain size of the material being sampled.   | Sample sizes of between 1-2 kg are considered suitable for a qualitative assessment for indications of mineralisation.   |
| <b>Quality of assay data and laboratory tests</b>                | The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.  | Reported elements were assayed via Aqua Regia which is considered a partial method.  |
|  | For geophysical tools, spectrometers, handheld XRF instruments (pXRF), etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. | Not applicable as no geophysical tools were used or results of using geophysical tools reported.   |
|  | Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.                      | A blank and a recognized Standard were inserted in the sample stream at a spacing of every 20 samples. The Reported results for these samples are as expected. |

| Criteria                                     | JORC Code explanation   | Commentary   |
|--|---|--|
| <b>Verification of sampling and assaying</b> | The verification of significant intersections by either independent or alternative company personnel. | All reported significant intersections have been reviewed by the Company's Exploration Manager and Executive Director. |
|  | The use of twinned holes.   | Not applicable as no twinned holes drilled.  |

| Criteria   | JORC Code explanation   | Commentary  |
|--|---|---|
|  | Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.  | Sampling data was recorded on field sheets at the sample site. Field data was entered into an excel spreadsheet and saved on Cloud server. Geological logging was recorded directly in LogChief program during drilling and backed up on Cloud server. Assay results were reported in a digital format suitable for direct loading into a Dashed database with a 3 <sup>rd</sup> party expert consulting group. |
|  | Discuss any adjustment to assay data.   | No adjustments have been made.  |
| <b>Location of data points</b>                                 | Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.   | Sample locations are recorded using handheld Garmin GPS with a nominal accuracy +/- 3m.   |
|  | Specification of the grid system used.  | GDA94 Zone 55.  |
|  | Quality and adequacy of topographic control.  | Handheld GPS, which is suitable for the early stage and broad spacing of this exploration.  |
| <b>Data spacing and distribution</b>                           | Data spacing for reporting of Exploration Results.  | Data spacing is controlled by the interpretation of the prospect and potential orientation of mineralisation. For data discussed in this Report spacing varies from 40 to 100 metres.   |
|  | Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. | Sampling is considered appropriate to identify 'broad' anomalous areas of potential mineralisation. Samples are not to be used in resource/reserve estimation.  |
|  | Whether sample compositing has been applied.  | Samples were composited at 3m intervals for assay submission  |
| <b>Orientation of data in relation to geological structure</b> | Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.  | Given the early stage of exploration it is not yet known if sample spacing, and orientation achieves unbiased results.  |
|  | If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.                    | Due to the reconnaissance (early stage) nature of the aircore drilling it cannot be determined whether relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias   |
| <b>Sample security</b>   | The measures taken to ensure sample security.   | Samples double bagged and delivered directly to the laboratory by company personnel.  |
| <b>Audits or reviews</b>                                       | The results of any audits or reviews of sampling techniques and data.   | No audits or reviews completed.   |

## Section 2 Reporting of Exploration Results

| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
| <b>Mineral tenement and land tenure status</b>  | Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. | Reported results all from Exploration Licence EL8543 at Fifield NSW which is wholly - owned by Rimfire Pacific Mining Limited. The tenement forms part of the Company's Avondale Project which is subject to an Earn In and Joint Venture Agreement with Golden Plains Resources Pty Ltd (GPR) whereby GPR can earn up to a 75% interest by completing expenditure of \$7.5M over 4 years.<br><br>All samples were taken on Private Freehold Land. No Native Title exists. The land is used primarily for grazing and cropping. |
|   | The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.   | The tenement is in good standing, and all work is conducted under specific approvals from NSW Department of Planning and Energy, Resources and Geoscience.  |
| <b>Exploration done by other parties</b>  | Acknowledgment and appraisal of exploration by other parties.  | No results are relied on from other parties in this Report.   |
| <b>Geology</b>  | Deposit type, geological setting and style of mineralisation.  | The target area lacks geological exposure, available information indicates the bedrock geology across the project is a dominated by a central body of ultramafic intrusive and stepping out to more felsic units on the margins. The deposit type/style of mineralisation is generally considered to be a flat lying ferruginous and laterised zone developed on top of ultramafic hosting anomalous Ni-Co-Sc.  |
| <b>Drill hole information</b>   | A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  | All drillhole specifications including significant intercepts are included within Table 1 of this Report. All collar locations are also shown on the figures included with this Report.   |
|   | easting and northing of the drill hole collar  |   |
|   | elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar   |   |
|   | dip and azimuth of the hole  |   |
|   | down hole length and interception depth  |   |
| If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the Report, the Competent Person should clearly explain why this is the case. | Not applicable as no drill hole information has been excluded.   |   |
| <b>Data aggregation methods</b>   | In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.  | No data aggregation or weighting has been applied to the reported significant intercepts.<br>The following low cut off grades have been used in determining the reported intercepts. <ul style="list-style-type: none"> <li>Nickel (1,000 ppm – 0.1%)</li> </ul>  |

|   |  | <ul style="list-style-type: none"> <li>• Cobalt (500 ppm – 0.05%)</li> <li>• Scandium (150 ppm – 0.015%)</li> <li>• Copper (1,000 ppm – 0.1%)</li> </ul>  |
|---|--|---|
|   | Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.   | Not applicable as all sample intervals were the same, i.e., 3 metres.   |
|   | The assumptions used for any reporting of metal equivalent values should be clearly stated.  | Metal equivalents are not reported  |
| <i>Criteria</i>   | <i>JORC Code explanation</i>   | <i>Commentary</i>   |
| <b>Relationship between mineralisation widths and intercept lengths</b> | <p>These relationships are particularly important in the Reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').</p> | The drill results included in this Report occur within a flat (horizontal) lying zone and given all the aircore drill holes are vertical, the significant intercepts are considered to represent true widths. |
| <b>Diagrams</b>   | Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.   | Included within the Report (or as appendices)   |
| <b>Balanced reporting</b>   | Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.  | All results are included on the plans   |
| <b>Other substantive exploration data</b>                               | Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.        | There is currently no other substantive exploration data that is meaningful and material to report.   |
| <b>Further work</b>   | The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).  | Planned further work is discussed in the document in relation to the exploration results.   |
|   | Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.  | Not applicable at this stage  |

## **About Rimfire**

Rimfire Pacific Mining Ltd (ASX: RIM) is an ASX-listed exploration company focused on projects in the Lachlan Fold Belt in central NSW and Broken Hill NSW. The company has a track record of successful exploration and asset monetisation through partnership agreements.

Rimfire currently has four projects in the Lachlan Fold Belt:

1. The Valley – Porphyry Copper / Gold (RIM 100%)
  - ✓ Located 5km west of Kincora Copper / RareX's Mordialloc porphyry copper-gold target.
  - ✓ Reverse Circulation and Aircore drilling planned to test near surface IP targets and interpreted Ordovician basement rocks that are potentially similar to the host rocks at Northparkes, Cadia and Cowal deposits
2. Cowal Project - Copper / Gold (RIM 100%).
  - ✓ Located to the east of Evolution's Lake Cowal Copper / Gold mine
  - ✓ Little exploration has occurred on these tenements and prospective for Copper / Gold
3. Fifield Project - Gold / PGE's (GPR earning up to 50.1%, RIM free carried for development)
  - ✓ Maiden JORC 2012 resource of 125Koz gold + 7.9Moz silver.
  - ✓ Recent drilling at the Transit Prospect returned 55m @ 0.94g/t gold with the final 1m intersection increasing to 9.98g/t gold.
4. Avondale Project – Cobalt, PGE's and Gold (GPR earning up to 75%)
  - ✓ Currajong and KARS prospects located in the southern area of the project area and prospective for Cobalt and PGE's respectively.

Rimfire's exploration partner at Fifield - Golden Plains Resources (GPR) can earn a 50.1% interest in the Fifield Project Earn-in ([ASX Announcement: 4 May 2020 - Rimfire enters into \\$4.5m Earn-in Agreement](#)) and up to a 75% interest in the Avondale Project Earn-in ([ASX Announcement: 25 June 2021 - RIM Secures \\$7.5m Avondale Farm Out](#)). If these earn-ins are completed to maximum Joint Venture stage, Rimfire will still hold a significant equity position of 49.9% and 25.0% respectively in the Joint Ventures.

Rimfire also has a key project located at Broken Hill:

1. Green View – Cobalt, RIM 100%
  - ✓ Located 15km from Broken Hill
  - ✓ Covers the interpreted along strike extension to Cobalt Blue Holdings' Railway Cobalt Deposit.

## **Competent Persons Declaration**

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

*Mr Hutton has over 30 years' experience in the mineral and mining industry. Mr Hutton is employed by Rimfire Pacific Mining (RIM) and is an employee of the Company. David Hutton has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. David Hutton consents to the inclusion of the matters based on the information in the form and context in which it appears.*

## **Forward looking statements Disclaimer**

*This document contains "forward looking statements" as defined or implied in common law and within the meaning of the Corporations Law. Such forward looking statements may include, without limitation, (1) estimates of future capital expenditure; (2) estimates of future cash costs; (3) statements regarding future exploration results and goals.*

*Where the Company or any of its officers or Directors or representatives expresses an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and the Company or its officers or Directors or representatives as the case may be, believe to have a reasonable basis for implying such an expectation or belief.*

*However, forward looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward looking statements. Such risks include, but are not limited to, commodity price fluctuation, currency fluctuation, political and operational risks, governmental regulations and judicial outcomes, financial markets and availability of key personnel. The Company does not undertake any obligation to publicly release revisions to any "forward looking statement".*