RIMFIRE PACIFIC MINING LTD

ASX: RIM

"Critical Minerals Explorer"

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Platinum – palladium diamond drilling update

Highlights

- 3,000m, 15 hole diamond drill program targeting primary platinum + palladium (Pt + Pd - "PGE") mineralisation within unweathered ultramafic bedrock well underway
- Drilling currently testing beneath a shallow zone of strong nickel cobalt – scandium – platinum anomalism at the Melrose target
- Results from first drillhole expected in coming weeks

Rimfire Pacific Mining (**ASX: RIM**, "Rimfire" or the "Company") advises that a 3,000 – metre diamond drilling program is well underway at its Avondale and Fifield Projects, which are located 70 kilometres northwest of Parkes within the highly prospective Lachlan Orogen of central New South Wales (*Figure 1*).

15 diamond holes are planned to test for primary platinum + palladium (PGE's) mineralisation hosted within ultramafic intrusive units at 6 targets (Melrose, Jack's Lookout, Gillenbine, Platina Lead, Kara Kara and Currajong) and at the time of writing, two holes (FI2397 and FI2398) had been completed and a third hole (FI2399) was underway **at Melrose** (see *Figure 2 and Table 1*).

Commenting on the announcement, Rimfire's Managing Director Mr David Hutton said: "After experiencing some delays due to strong rains and localised flooding, drilling is now well underway in our search for primary platinum and palladium mineralisation on the Fifield and Avondale projects. The diamond drilling at Melrose is intersecting ultramafic rock types beneath a shallow zone of strong nickel – cobalt – scandium – platinum anomalism and we look forward to providing further market updates as new information comes to hand".

As shown in *Figures 3 - 6*, the three drillholes at Melrose have intersected a pervasively serpentinised and iron altered (haematite – magnetite) sequence of ultramafic rock types (dunite – wehrlite – pyroxenite) that are fault bounded against a diorite to east and volcaniclastic sediments to the west.





Drilling has also intersected a shallow flat lying ferruginous zone (overlying the ultramafic) that contains strongly anomalous nickel (Ni) – cobalt (Co) – scandium (Sc) as confirmed by Rimfire's aircore drilling undertaken earlier on this year (see Rimfire's ASX Announcement dated 4 April 2022);

- o 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,
- $\circ~$ FI2175 3m @ 0.24% Ni, 0.07% Co, and 220ppm Sc from surface, and
- $\circ~$ FI2176 9m @ 0.17% Ni, 0.10% Co, and 362ppm Sc from 3 metres.

Significantly the nickel – cobalt - scandium zone also contains anomalous levels of platinum (Pt) + palladium (Pd) up to 0.31 g/t Pt + Pd (see *Rimfire's ASX Announcement dated 27 June 2022*).

The PGE mineralisation is thought to be derived from the underlying ultramafic rock types which are currently being tested by the drilling.

Core samples from the first hole has been submitted to ALS Pty Ltd for multi element and PGE analysis with results expected in the coming weeks.

Drill Type	Hole ID	Easting	Northing	EOH (m)	Azi°	Dip°
DDH	FI2397	548,690	6,371,575	107	270	-55
DDH	Mel_DDH2 (proposed)	548,645	6,371,605	200 (planned)	270	-55
DDH	FI2398	548,850	6,371,575	177.6	90	-55
DDH	FI2399	548,850	6,371,575	150m (still drilling)	270	-55

Table 1 – Melrose Diamond Drillhole Specifications.

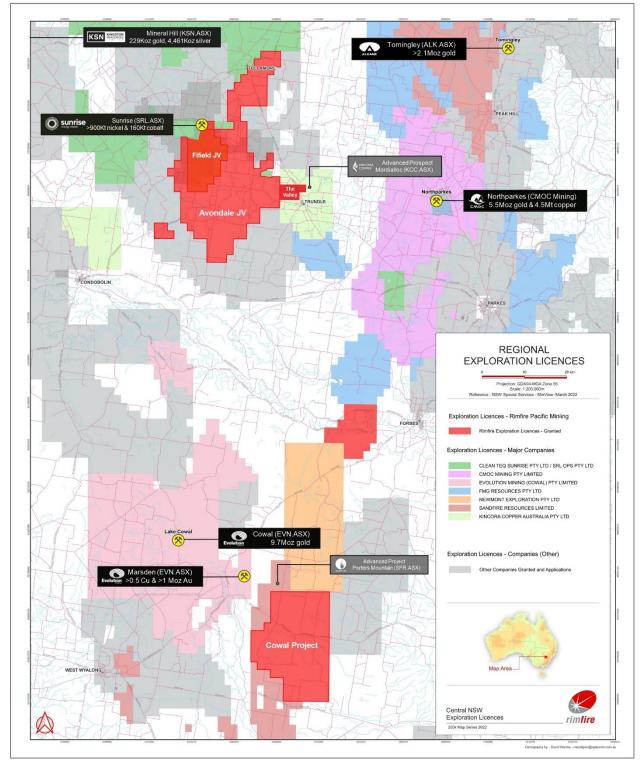


Figure 1: Rimfire Project Locations (in red) showing major competitors' active mines and key prospects.

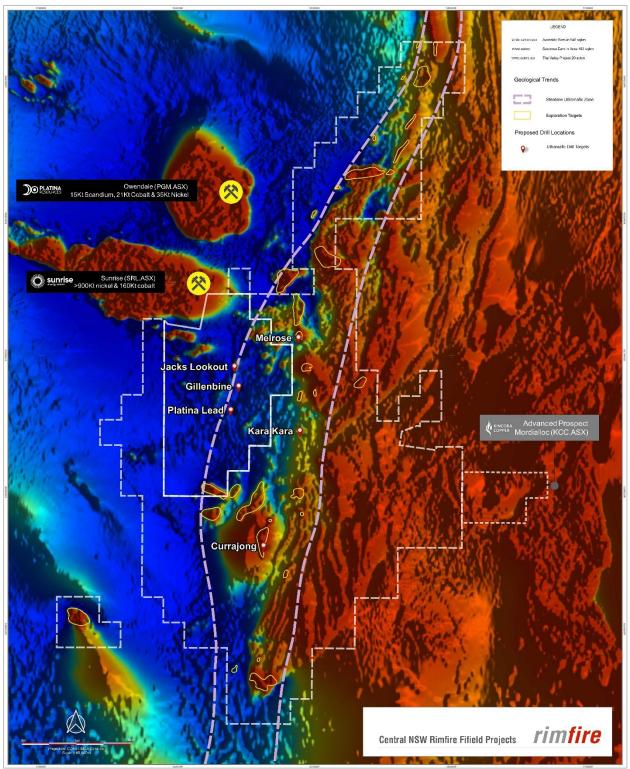
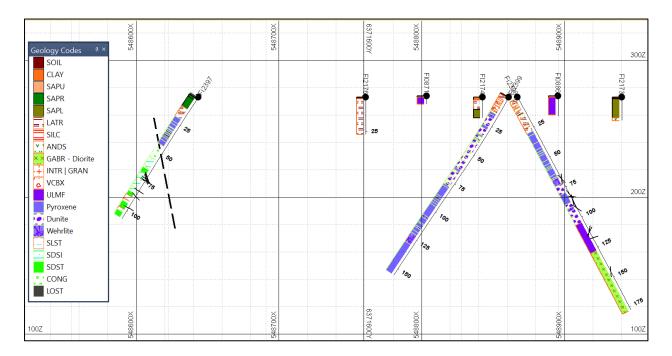


Figure 2: Rimfire's Avondale and Fifield Projects on RTP TMI background image showing Steeton Ultramafic Suture Zone, critical minerals targets (yellow polygons) and drill locations



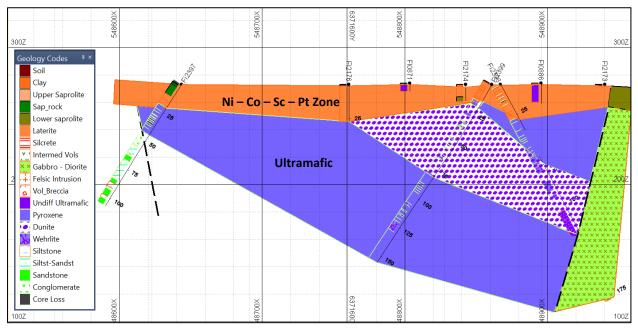


Figure 3: Melrose schematic cross section (6,371,575mN) showing drillhole traces and geology (above) and geological interpretation (below)



Figure 4: Photo of drill core from Melrose oxide nickel – cobalt – scandium – platinum zone (FI2398 5.7 to 12.6 metres downhole).



Figure 5: Photo of drill core from Melrose drill hole FI2399 - 70 to 80.5 metres downhole). Ultramafic rock types – dunite (black) and pyroxenite (grey).



Figure 6: Photo of drill core from Melrose drill hole FI2399 – 44.4 metres downhole. Strong hematite alteration in ultramafic rock.



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

For further information please contact:

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About Rimfire

Rimfire Pacific Mining Ltd (ASX: RIM) is an ASX-listed exploration company focused on exploring for critical minerals within the Lachlan Orogen and Broken Hill districts of NSW.

Rimfire currently has two 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 Critical Materials (PGEs, Nickel, Copper & Cobalt) which are essential for renewable energy, electrification, and green technologies.
 - ✓ The development ready Sunrise Energy Metals Ni-Co-Sc 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 JV's see:

ASX Announcement: 4 May 2020 - Rimfire enters into \$4.5m Earn-in Agreement ASX Announcement: 30 June 2022- Rimfire to receive \$1.5M cash to vary Fifield Project Earn In ASX Announcement: 25 June 2021 - RIM Secures \$7.5m Avondale Farm Out

Also located in the Lachlan Orogen are two copper – gold prospective Projects that are 100% owned by Rimfire:

- The Valley Project located 5km west of Kincora Copper / RareX's Mordialloc porphyry copper-gold discovery (KCC.ASX and REE.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 Project which is located immediately west of Broken Hill and covers the interpreted along strike extension to Cobalt Blue Holdings' Railway Cobalt Deposit (COB: ASX).



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 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".