

Planned Drilling Program Activities

Highlights

Rimfire is pleased to announce the imminent commencement of drilling at two priority targets on its 100% controlled exploration licences (EL's) near Fifield, NSW.

- ✓ “The Valley” Target where a proposed drilling program commencing at the end of November 2020 will test 5 discrete shallow Induced Polarisation (IP) features that are interpreted to be at less than 150m depth.
- ✓ “Greater Cowal” Target where a proposed 6 hole aircore drilling program totalling 600m depending on bedrock depths is planned to commence in the first quarter (Q1) of 2021.

Both “The Valley” and “Greater Cowal” are located outside the Golden Plains Resources (GPR) Earn-in area.

Drilling activities are also planned for Q1 2021 in the GPR Earn-in Area, and include:

- ✓ Local Prospects
 - Northern Gold – a proposed further program of 10 aircore holes totalling 300m depending on bedrock depth to aid evaluation of historical gold workings extending over a 400m x 80m area.
 - 114 Trend – a proposed 4 hole program of nominally 100m deep RC holes to better interpret the mineralisation geometry and shallower occurrences of mineralisation.
 - Transit – follow up of a 44m interval @ 0.63g/t Au from 36m, including 20m @ 1.11g/t Au that was intersected in previous drilling with a proposed 3 x 80m RC hole program.
 - Rabbers Lookout– a proposed 10 aircore hole program totalling 300m depending on bedrock depth to evaluate a gravity feature on a major structure that is also present at Sorpresa
- ✓ Sorpresa Development Project drilling to focus on obtaining additional information to support design studies for mining and processing.

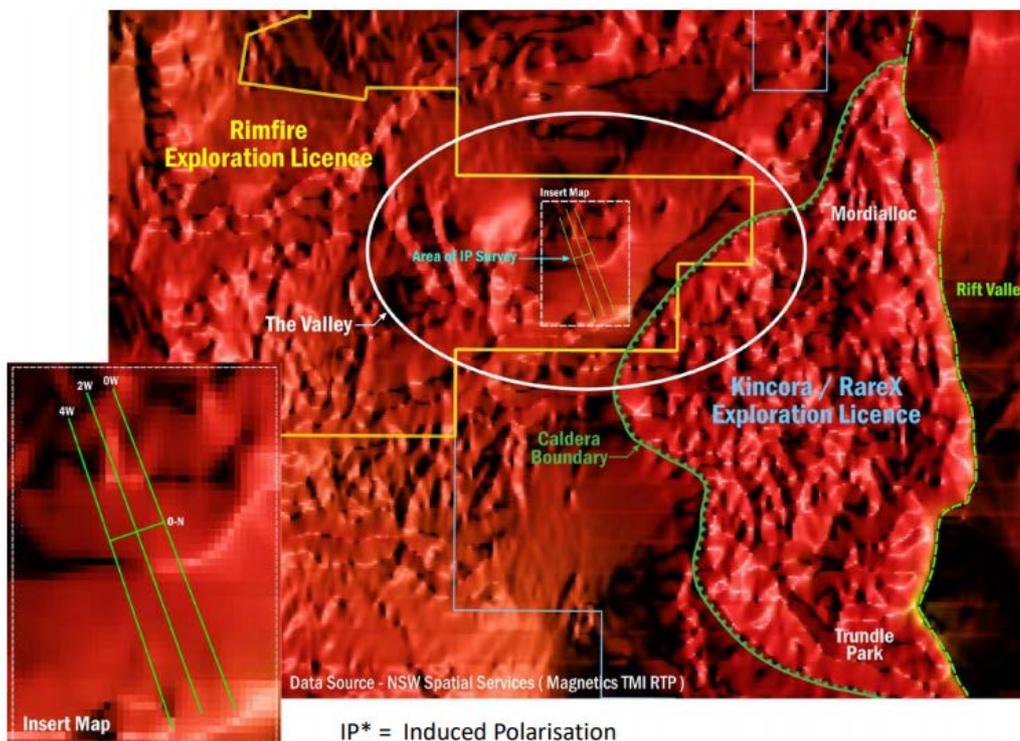
Rimfire Pacific Mining NL (“Rimfire”, “Company”; ASX Code “RIM”) advises that following a successful capital raising period in Q3 2020 and recent Rimfire Board approval, a range of drilling programs will commence from the end of November 2020. The signing of an Earn-in Agreement with GPR and the payment of ongoing quarterly cash calls (second quarter cash payment received) provides funding for work programs covering the 103km² area surrounding Sorpresa ([ASX Announcement: \\$4.5M Earn-in Agreement 4May2020](#)). The recent successful capital raising by Rimfire will support exploration activities on their remaining 100% controlled licence areas covering more than 800km² outside the Earn-in area.

Rimfire 100% Tenure Licence Area

“The Valley” Target is approximately 5km west of the Kincora Copper / RareX Mordialloc porphyry copper / gold target (Figure 1). The drilling program consists of a proposed 5 hole RC / diamond tail drill program to test 5 discrete shallow Induced Polarisation (IP) features (zones of anomalous chargeability and resistivity responses in the bedrock substrate). The only drilling ever done at this site were 3 holes by another company that failed to reach target depth due to high water flows so it represents a new opportunity compared to many other projects where drill hole planning can be guided by historical data sets of tens of thousands of metres. The drilling is expected to commence in November subject to any delays due to harvesting schedules or Covid pandemic restrictions.

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Figure 1: Location Plan of “The Valley” Target



Further details [Corporate Presentation 18 August 2020](#)

In Q1 2021 drilling planned at the “Greater Cowal” Target will obtain bedrock samples to assess if there are lithologies, alteration and geochemistry to support a Northparkes style porphyry copper gold system or a Cowal style gold system. A 6 hole aircore drilling program totalling 600m is planned, although uncertainty of bedrock depths will cause some variation in hole depths. The process of obtaining Landholder clearances and Complying Exploration Activity (CEA) clearances from NSW Government are in progress. The completion of these clearances and management of Covid pandemic restrictions could influence the commencement of drilling.

GPR Earn-in Area

The initial Q1 and Q2 work program payments by Golden Plains Resources (GPR) towards their Earn-in expenditure commitments will fund drilling programs through to CY Q1 2021 at the Sorpresa Development Project and other prospects in close (less than 2km) proximity to Sorpresa.

Drilling funded by the GPR Earn-in Agreement at local prospects for further discoveries includes

- Northern Gold – a proposed further program of 10 aircore holes totalling 300m depending on bedrock depth to aid evaluation of historical gold workings extending over a 400m x 80m area ([ASX Announcement: Northern Gold Prospect 4Apr2019](#))
- 114 Trend – follow up of a 1m interval of 114g/t gold from 159m depth ([ASX Announcement: Drilling Reveals Bonanza Grade 17July2013](#)) that was intersected in previous drilling and is interpreted to be controlled by a fault structure perpendicular to Sorpresa with a 4 hole program of nominally 100m RC holes totalling approximately 400m. This program will test the potential for shallower updip mineralisation and a better understanding of the geological structural setting.

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- Transit – follow up of a 44m @ 0.63g/t Au from 36m, incl. 20m @ 1.11g/t Au ([ASX Announcement: Drilling Intersects at Transit 19Sept2017](#)) that was intersected in previous drilling work by Rimfire with a nominally 3 x 80m RC hole program totalling 240m
- Rabbers Lookout– a proposed 10 aircore hole program totalling 300m depending on bedrock depth to evaluate a gravity feature on a major structure that is also present at Sorpresa.

The drilling activities for the Sorpresa Development Project will obtain additional information for

- Geotechnical studies to support design parameters for pit wall slopes
- Hydrological studies on possibility of any pit water inflows from aquifers
- Metallurgical samples for process plant design and optimisation
- Geological samples to assess potential along strike of additional shallow zones of mineralisation

Rimfire Managing Director Craig Riley states:

“Over the next 4 months Rimfire will enter an exciting phase of field activity with drilling to be undertaken at “The Valley” prospect to test a group of geophysical Induced Polarisation features that occur on the flanks of the interpreted western boundary of the caldera that also hosts the Northparkes porphyry copper gold system. This program is quite interesting as the only previous drilling by another company did not reach target depth so the area has never been properly tested by shallow or deep drilling. These holes represent the first step in obtaining a better geological understanding of “The Valley”.

The Company will also be undertaking drilling at a number of prospects within the GPR Earn-in Area including Northern Gold, 114 Trend, Transit and Rabbers Lookout that are all in close proximity to the Sorpresa Development Project.”

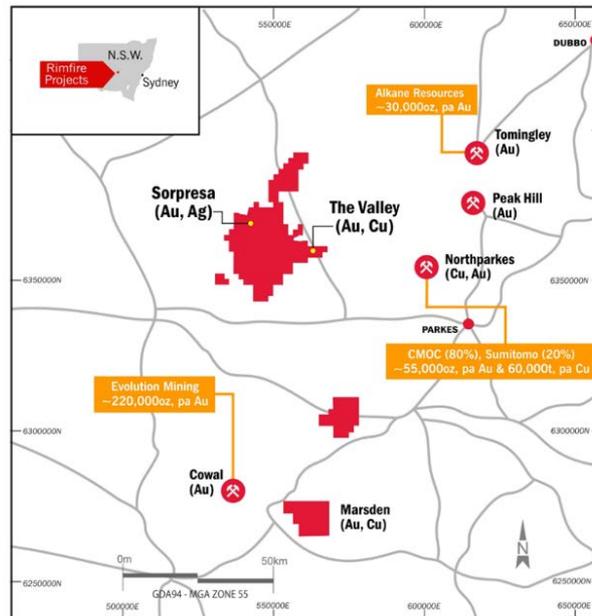
This announcement is authorised for release to the market by the Board of Directors of Rimfire Pacific Mining NL.

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ABOUT RIMFIRE

Rimfire Pacific Mining (RIM) is an ASX listed resources exploration company with its major focus at Fifield in central NSW, located within the Lachlan Transverse Zone (LTZ). In 2011 the Company made a greenfields discovery, named “Sorpresa”, announcing a JORC Inferred and Indicated maiden resource in 2014. The information provided in “About Rimfire” is available to view on the company’s website: [ASX Announcements](#). In May 2020, Rimfire signed an Earn-in Agreement with Golden Plains Resources (GPR) covering an area of 103km² covering Sorpresa and surrounding area.



Rimfire is exploring for a major copper / gold or gold mineralised system such as at Northparkes (Cu/Au) or Cowal (Au) on 915km² of Exploration Licences 100km west of Parkes in central NSW. It includes multiple prospects with potential for further gold discoveries in the 103km² area within the GPR Earn-in area around Sorpresa with all work in this area funded by GPR. Rimfire retains responsibility for funding exploration programs over the rest of its Exploration Licences that also includes two licences covering 234km² located about 50kms south of the Fifield Project in a prospective area that is now part of the MinEx Cooperative Research Centre program (minexcrc.com.au).

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 Craig Riley who is deemed to be a Competent Person and is a Member of The Australasian Institute of Mining and Metallurgy.

Mr Riley has over 25 years’ experience in the mineral and mining industry. Mr Riley is employed by Rimfire Pacific Mining (RIM) and is an employee of the Company. Craig Riley 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’. Craig Riley 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”, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

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