

RIMFIRE PACIFIC MINING LTD

ASX: RIM

"Critical Minerals Explorer"

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New acquisition strengthens Cowal Copper Gold Project

Highlights

- Acquisition of the Porters Mount Project which adjoins Rimfire's
 100% owned Cowal Copper Gold Project
- Multiple targets including Porters Mount Prospect where historic drilling intersected strong gold anomalism within near surface breccias interpreted to overlie a copper gold porphyry at depth:
 - o 12m @ 0.5 g/t gold from 22m including 2m @ 2.5 g/t gold
 - o 10m @ 0.5g/t gold from 8m including 2m @ 1.5g/t gold
 - o 6m @ 1.0g/t gold from 36m including 2m @ 1.5g/t gold
- Cowal lies 25 kilometres southeast of Evolution's (ASX: EVN)
 9.7Moz Cowal Gold Deposit

Rimfire Pacific Mining (**ASX: RIM**, "**Rimfire**" or "**the Company**") is pleased to advise that it has executed a Tenement Purchase Agreement with Plutonic Limited to acquire 100% of the Porters Mount Project (EL8329) which directly adjoins Rimfire's Cowal Copper Gold Project (located 60 kilometres southwest of Parkes within the highly prospective Lachlan Orogen of New South Wales - *Figure 1*).

Commenting on the announcement, Rimfire's Managing Director Mr David Hutton said: "The acquisition of Porters Mount compliments and strengthens the Company's 100% - owned Cowal Copper Gold Project which lies near the 9.7Moz gold Cowal Gold Deposit in the richly endowed Lachlan Orogen of New South Wales.

Covering 27 strike kilometres of prospective Ordovician volcanic rocks, the Cowal Project now hosts multiple historic drill intercepts and geophysical targets that require follow up.

The acquisition reinforces Rimfire as a critical minerals and gold explorer with strong exposure to copper, nickel, cobalt, scandium, and PGEs.

We look forward to to commencing exploration at Porters Mount and providing updates as information comes to hand."





Rimfire's Cowal Copper Gold Project

Rimfire's 100% - owned Cowal Copper Gold Project covers a portion of the Ordovician - age Currumburra Volcanic Complex which is interpreted to represent the eastern margin of the Lake Cowal Volcanic Complex, hosting the Cowal Gold Deposit and adjacent Marsden Copper Gold Deposit.

The addition of the Porters Mount Project (EL8329 - 72km²) increases the total area of Cowal Copper Gold Project to 450km².

The Cowal Copper Gold Project lies 25 kilometres southeast of the Cowal Gold Deposit (Figure 2). Both Cowal and Marsden are owned by Evolution Mining (EVN.ASX) and host Total Mineral Resources of 305.3Mt @ 0.98g/t gold (9.7Moz gold), and 123Mt @ 0.27g/t gold, 0.46% copper (1.05Moz gold and 560Kt copper) respectively. (Evolution Mining Resource and Reserve Statement as at December 2021).

The Currumburra Volcanic Complex comprises a north-south trending zone of andesitic volcanics, sediments, diorite to monzonite plugs and dykes which can be readily mapped (for over 27 kilometres within the Cowal Project) using magnetic and gravity geophysical data as well as drillhole geological information.

The Currumburra Volcanics host several gold and copper occurrences that lie both within, and along strike from the project (Figures 3 and 4).

At the Porters Mount prospect (which lies inside the northern end of the Cowal Project), a mineralised complex of hydrothermal breccias and subvolcanic intrusions is present in outcrop.

The breccias which are rich in tourmaline and arsenic, and to a lesser extent antimony, silver, and gold are interpreted to have formed in the upper parts of a copper – gold porphyry system.

Drilling by Capital Mining in 2008 at Porters Mount intersected multiple gold intercepts at shallow depths (Table 1);

- 12.0m @ 0.5 g/t gold from 22 metres in PMRC002 including 2m @ 2.5 g/t gold from 22
- 8.0m @ 0.5 g/t gold from 60 metres in PMRC002 including 4m @ 0.8 g/t gold from 62 metres
- 10.0m @ 0.5g/t gold from 8 metres in PMRC004 including 2m @ 1.5g/t gold from 12 metres
- 6.0m @ 1.0g/t gold from 36 metres in PMRC005 including 2m @ 1.5g/t gold from 38 metres

Porters Mount remains largely unexplored at depth (below the oxide zone) with only one deep hole (PMD001) drilled to a depth of 801 metres.



The hole successfully intersected gold mineralisation within a vein breccia system;

28m @ 0.52 g/t gold and 10.50m @ 0.81 g/t gold in PMD001 from 740 metres and 779.5 metres respectively

South of the Porters Mount prospect within the central portion of the Cowal Project lies the LFB022 copper target which also requires drill testing,

At the LFB022 target, reconnaissance aircore drilling by Clancy Exploration Limited in late 2008, defined a 3 x 1.5 km copper in saprolite anomaly (using a +400ppm copper contour) with a maximum individual (2 metre composite) aircore sample value of 0.14% copper in CBAC044.

The anomaly overlies the intersection of the north south Currumburra Volcanic Complex gravity ridge and the northwest trending Marsden Lineament, which is an important local structural control on mineralisation at the Cowal and Marsden Deposits.

While historic diamond drilling has failed to find the source of the copper anomaly, a large area to south remains untested due to thin veneer of post Ordovician cover (the early Silurian Jingerangle Formation). Significantly the untested southern area coincides with a magnetic low feature which is interpreted by Rimfire to be an intrusive unit and possible source of the copper in saprolite anomaly (Figures 2 - 4). (Information sourced from Clancy Exploration Limited's Annual Report for the period ending 21 May 2009 on EL6784 "Currumburrama" and Rimfire ASX Announcement dated 7 December 2022).

In addition to Porters Mount and LFB022, there are a further 7 discrete magnetic features that have been identified by Plutonic within the immediate vicinity of Porters Mount (and within the Cowal Project) that require further investigation.

Immediately south of the Cowal Project, on ground held by Alkane Resources Ltd (ALK.ASX), drilling by Goldminco Corporation in 2004 intersected broad zones of porphyry - style copper and gold mineralisation at the Imola and Silverstone prospects (Figures 2 - 4).

Diamond drilling at Imola returned 96m @ 0.7g/t gold in CBD01 and 74m @ 0.15% copper in CBD008 at Silverstone. Both prospects also lie within the north south Currumburra Volcanic Complex gravity ridge and are associated with small monzonite plugs that are reported to be Ordovician in age and K feldspar alteration.

The Silverstone intercept is described as associated specifically with hematite, biotite, magnetite, and K-feldspar altered intrusives and volcanics, chalcopyrite and bornite disseminations and veinlets. (Information sourced from the NSW Government Minview website - Imola mineral occurrence 185390 and Silverstone mineral occurrence 185391).



Next Steps

Upon completion of the transaction, Rimfire will compile and integrate all historic data for the Porters Mount Project into the Cowal Project database ahead of prioritising drill targets, undertaking stakeholder liaison and planning a drill program.

Acquisition Details

Rimfire has executed a Tenement Purchase Agreement with Plutonic Limited whereby Rimfire will acquire 100% of Plutonic's Porters Mount Project (EL8329) for \$25,000 (\$25K) cash consideration. A 2% Net Smelter Royalty (NSR) remains payable to Sandfire Resources Limited in the event of any mineral production from the tenement.

At the time of writing, Rimfire, Plutonic and Sandfire were completing all necessary legal documentation and the transaction is still subject to standard regulatory conditions such as Ministerial consent for the transfer of the tenement.

Table 1 – Porters Mount historic drill hole specifications and intercepts.

Hole ID	Easting	Northing	Type	EOH (m)	Azi°	Dip°	From	Width	Gold_g/t
PMRC002	560,767	6,266,614	OHP	69	270	-60	22	12	0.5
	including				22	2	2.5		
PMRC002	560,767	6,266,614	OHP	69	270	-60	60	8	0.5
		inclu	ıding				62	4	0.8
PMRC004	560,706	6,266,699	OHP	53	270	-60	8	10	0.5
	including				12	2	1.5		
PMRC005	560,738	6,266,698	OHP	62	270	-60	36	6	1.0
including				38	2	1.5			
PMD001	561,462	6,266,700	Diamond	890.5	259	-75	740.0	28	0.52
"	íí.	í.	u	u	"	"	779.5	10.5	0.81



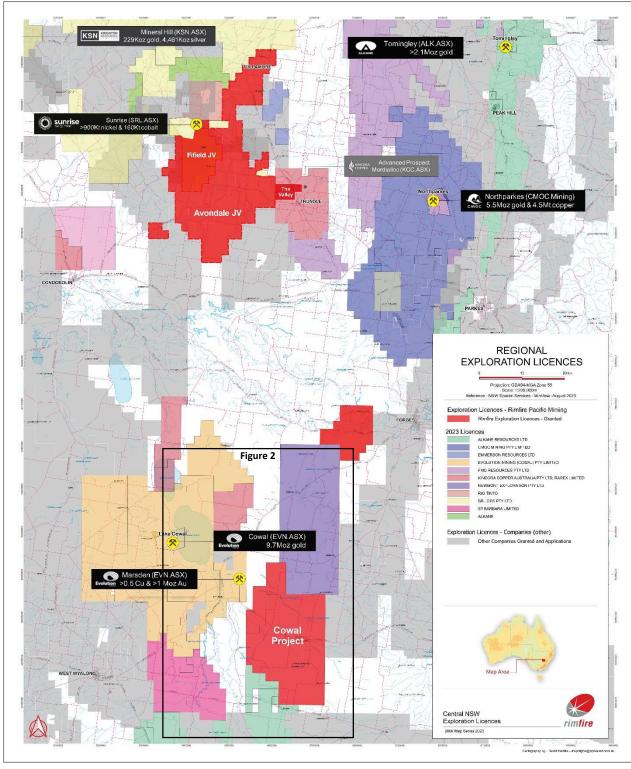


Figure 1: Location of Rimfire's Cowal Copper Gold Project, regional tenement holders and major deposits. Area covered by Figure 2 indicated by black rectangle.



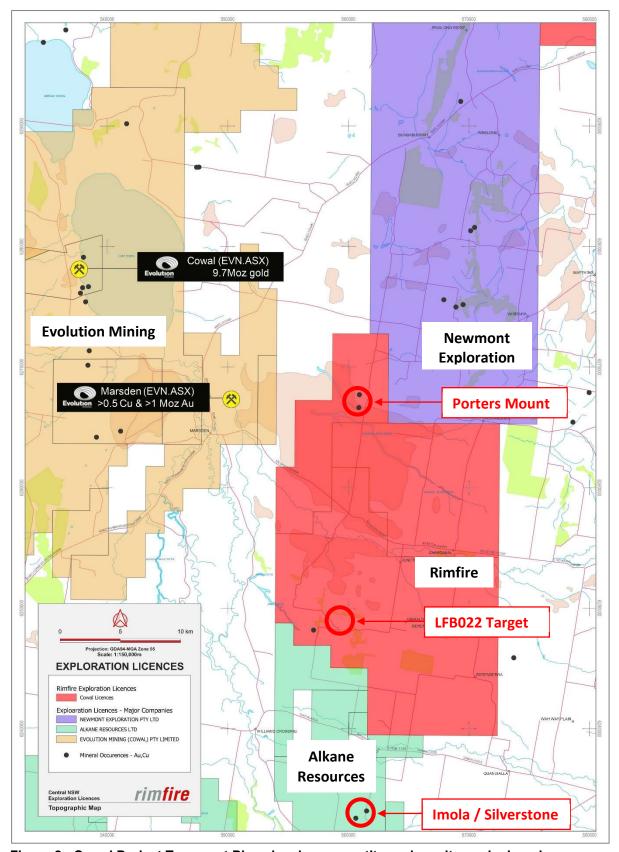


Figure 2: Cowal Project Tenement Plan showing competitors, deposits, and mineral occurrences



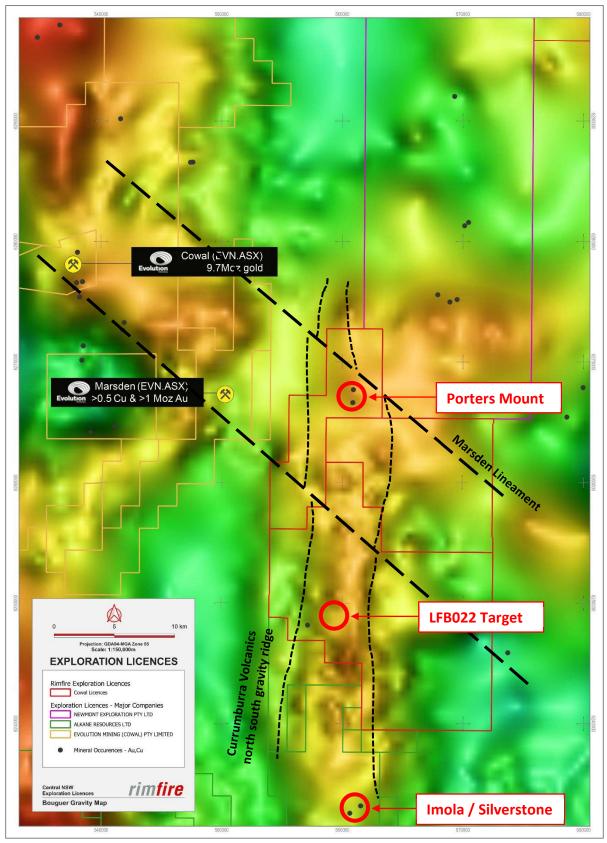


Figure 3: Cowal Project gravity (bouguer) image. Key prospects and targets shown.



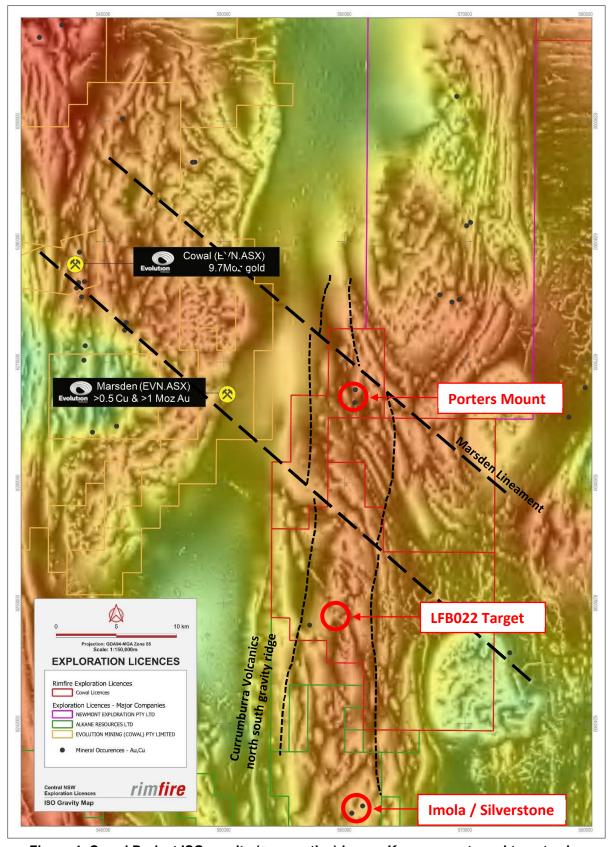


Figure 4: Cowal Project ISO gravity (+magnetics) image. Key prospects and targets shown.



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

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JORC Reporting

Table 2: JORC Code Reporting Criteria

Section 1 Sampling Techniques and Data - Diamond Drilling

Criteria	JORC Code explanation	Commentary
	Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation,	This ASX Announcement details historic RC and diamond drilling undertaken by Capital Mining in 2008 at the Porters Mount Prospect.
	such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	All information regarding historic drilling at the LFB022 target has been previously released in Rimfire's ASX Announcement dated - dated 7 December 2022
		All information regarding historic drilling at the Imola and Silverstone prospects target has been sourced from the NSW Government Minview website – Imola mineral occurrence 185390 and Silverstone mineral occurrence 185391.
Sampling	Include reference to measures taken to ensure sample representativity and the appropriate	Due to the historic nature of the Porters Mount Prospect drilling these details are largely
techniques	calibration of any measurement tools or systems used.	unknown. It is not known what / of any QA/QC techniques were applied.
	Aspects of the determination of mineralisation that are Material to the Public Report. 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.	Due to the historic nature of the Porters Mount Prospect drilling these details are largely unknown.
Drilling techniques	Drill type (e.g., core, reverse circulation, open-	Historic drillholes at Porters Mount are Reverse



Criteria	JORC Code explanation	Commentary		
	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).	Circulation and diamond drill holes, the specifications of which are included in Table 1.		
	Method of recording and assessing core and chip sample recoveries and results assessed.	Due to the historic nature of this work, these details are unknown.		
Drill sample recovery	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Due to the historic nature of this work, these details are unknown.		
	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.	It is not known whether a relationship exists between sample recovery and grade.		
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.	It is assumed that drill holes were geologically logged but not to a level of detail sufficient to support a Mineral Resource estimation.		
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Geological logging of drill samples is largely qualitative by nature.		
	The total length and percentage of the relevant intersections logged.	Due to the historic nature of this work, these details are unknown.		
	If core, whether cut or sawn and whether quarter, half or all core taken.	Due to the historic nature of this work, these details are unknown.		
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Due to the historic nature of this work, these details are unknown.		
Sub-sampling techniques and	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Due to the historic nature of this work, these details are unknown.		
sample preparation	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Due to the historic nature of this work, these details are unknown.		
	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.	Due to the historic nature of this work, these details are unknown.		
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Due to the historic nature of this work, these details are unknown.		
Quality of assay	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Due to the historic nature of this work, these details are unknown.		
data and laboratory tests	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 were included in this ASX Announcement.		



Criteria	JORC Code explanation	Commentary
	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.	Due to the historic nature of this work, these details are unknown.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	The significant intersections including in this Report have been verified by Rimfire's Exploration Manager. Not applicable as no twinned holes drilled. Due to the historic nature of this work, these details are unknown. There has been no adjustment to assay data.
Location of data	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.	Due to the historic nature of this work, these details are unknown.
	Specification of the grid system used. Quality and adequacy of topographic control.	AGD84 Zone 55. Handheld GPS, which is suitable for the early stage and broad spacing of this exploration.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The location and spacing of diamond drillholes discussed in this ASX Announcement are given in Table 1 and various figures of this ASX Announcement.
	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.	The data spacing and distribution of drilling referred to in this ASX Announcement is not sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s).
	Whether sample compositing has been applied.	Due to the historic nature of this work, these details are unknown.
Orientation of data in relation to geological structure	·Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Due to the historic nature of this work, these details are unknown.
	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 historic nature of this work, these details are unknown.
Sample security	The measures taken to ensure sample security.	Due to the historic nature of this work, these details are unknown.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	The sampling techniques and data has been reviewed by senior company personnel including the Exploration Manager with no issues identified.



Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	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. 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.	Reported results all from EL8329 which is owned by Plutonic Limited and subject to a Tenement Purchase Agreement with Rimfire Pacific mining Ltd, whereby Rimfire will purchase the tenement for \$25K (\$25,000). All samples were taken on Private Freehold Land. No Native Title exists. The land is used primarily for grazing and cropping. The tenement is in good standing, and all work is conducted under specific approvals from NSW Department of Planning and Energy, Resources and Geoscience.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historic exploration on the Porters Mount Prospect which began in 1981 has been sporadic and of limited scope, largely due to the extensive Quaternary cover and almost complete lack of outcrop. Due to the proximity of the prospect to the Cowal Gold Deposit, the broader area has been explored by a range of companies including Peko Wallsend, Seltrust, BHP, Newcrest, Dominion, Rio Tinto, Climax, and Sandfire Resources. Exploration has been largely restricted to desktop reviews, geophysical surveying and limited drilling. Drilling has been largely restricted to testing for shallow mineralisation within the immediate vicinity of the Porters Mount
Geology	Deposit type, geological setting and style of mineralisation.	The target area lacks geological exposure, and available information suggests the bedrock geology across the prospect area is dominated by Ordovician monzonite / andesite volcanic intrusive sequences. The style of mineralisation sought is porphyry copper – gold with overlying shallow vein / breccia – hosted gold mineralisation.
Drill hole Information	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: • 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.	All key historic drillhole specifications are included within Table 1 of this ASX Announcement. All collar locations are shown on the figures included with this ASX Announcement. Not applicable as no drill hole information has been excluded.



Criteria	JORC Code explanation	Commentary		
	In reporting Exploration Results, weighting	No cut off grades have been used.		
	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.			
	Where aggregate intercepts incorporate	Length weighting has not been applied because all		
Doto oggradation	short lengths of high-grade results and	samples were of equal length.		
Data aggregation methods	longer lengths of low-grade results, the			
memous	procedure used for such aggregation should			
	be stated and some typical examples of			
	such aggregations should be shown in			
	detail.			
	The assumptions used for any reporting of	No metal equivalents have been reported.		
	metal equivalent values should be clearly			
	stated.			
	These relationships are particularly important	The significant intercepts presented in this ASX		
Relationship	in the Reporting of Exploration Results.	Announcement are considered to represent		
between	If the geometry of the mineralisation with	downhole widths.		
mineralisation	respect to the drill hole angle is known, its			
widths and	nature should be reported. If it is not known			
intercept lengths	and only the down hole lengths are reported,			
intercept lengths	there should be a clear statement to this effect			
	(e.g., 'down hole length, true width not known').			
	Appropriate maps and sections (with scales)	Included within the ASX Announcement		
	and tabulations of intercepts should be			
Diagrams	included for any significant discovery being			
Diagrams	reported These should include, but not be			
	limited to a plan view of drill hole collar			
	locations and appropriate sectional views.			
	Where comprehensive reporting of all	All results are included in this ASX Announcement.		
	Exploration Results is not practicable,			
Balanced	representative reporting of both low and high			
reporting	grades and/or widths should be practiced			
	avoiding misleading reporting of Exploration			
	Results.			
	Other exploration data, if meaningful and	There is currently no other substantive exploration		
04	material, should be reported including (but not	data that is meaningful and material to report.		
Other	limited to): geological observations;			
substantive	geophysical survey results; geochemical			
exploration	survey results; bulk samples – size and			
data	method of treatment; metallurgical test results;			
	bulk density, groundwater, geotechnical and			
	rock characteristics; potential deleterious or			
	contaminating substances. The nature and scale of planned further work	Planned further is discussed in the document in		
	(e.g., tests for lateral extensions or depth	relation to the exploration results.		
	1, -	relation to the exploration results.		
	extensions or large-scale step-out drilling).	Not applicable at this stage		
Further work	Diagrams clearly highlighting the areas of	Not applicable at this stage		
	possible extensions, including the main			
	geological interpretations and future drilling			
	areas, provided this information is not			
	commercially sensitive.			



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 50.1%)
- ✓ 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 \$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 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, 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".