

20 January 2025

Murga Diamond Drilling Update

Highlights

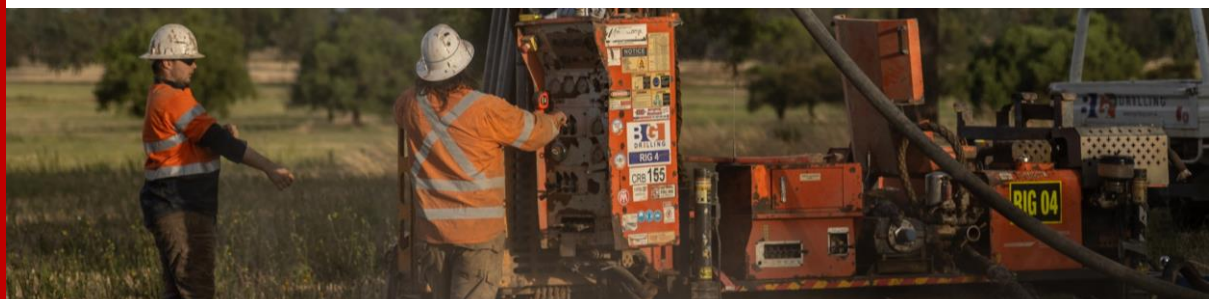
- **First ever diamond drilling program (2 holes / 298.7m metres) successfully intersects pyroxenite (scandium source rocks) associated with magnetic anomalies at Murga Exploration Target**
- **Bulk sample of laterite – hosted scandium mineralisation collected for future metallurgical test work**
- **Quarter core samples of laterite material and the fresh pyroxenite to be submitted for multi-element analysis with assay results expected by the end of February 2025.**

Rimfire Pacific Mining (**ASX: RIM**, “Rimfire” or “the Company”) is pleased to advise that recently completed diamond drilling has confirmed the presence of underlying pyroxenite rocks interpreted to be the source of scandium at the Murga Exploration Target, which is located approximately 70 km NW of Parkes at Fifield in central NSW (*Figure 1*).

Commenting on the announcement, Rimfire’s Managing Director Mr David Hutton said: *“This is the first diamond drilling undertaken at Murga and were pleased to report that as well as generating samples for multi-element analysis and metallurgical test work, the drilling has confirmed the presence of pyroxenite – which is the key ultramafic rock type that has been widely documented as the source of anomalous scandium throughout the Fifield district.*

We have also demonstrated that magnetic data is successfully “mapping” the location of the pyroxenite rocks which is significant given there remains numerous untested magnetic anomalies throughout the Murga area.

The information obtained from the diamond drilling and Rimfire’s previous air core drilling, will greatly assist in planning future drilling as we work towards converting the Murga Exploration Target into a Mineral Resource Estimate by the end of the 24/25 Financial Year”.



RIMFIRE PACIFIC MINING LTD

ASX: RIM

“Critical Minerals Explorer”

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Murga Exploration Target drilling details

Rimfire recently completed the **first ever** diamond drilling program at the Murga Exploration Target with two diamond holes (*FI2678 and FI2679: 298.7m metres – Figures 2 and 3*) drilled within the central and southern portions of Murga. Each hole was drilled into an area of known scandium mineralisation underlain by an untested magnetic anomaly interpreted to represent pyroxenite rocks within fresh basement.

The aim of the drilling was threefold; to collect samples of scandium – mineralised laterite material for geochemical analysis and future metallurgical test work, to confirm the presence of underlying pyroxenite (basement) rock types and collect core samples of the basement rocks for geochemical analysis (to determine their scandium prospectivity).

At Murga scandium occurs within a strongly weathered laterite horizon overlying magnetic ultramafic (pyroxenite) intrusive rocks of the Silurian-age **Murga Intrusive Complex** interpreted to be part of a large scale arcuate shaped mafic – ultramafic intrusive complex that has a surface area of approximately 20km² (*Figure 2*).

The pyroxenite rocks have been shown at other scandium occurrences within the Fifield district to be spatially associated with the scandium – bearing laterite mineralisation and are interpreted to be the primary source of scandium.

As detailed in *Table 2*, both holes successfully intersected thick zones of laterite rocks overlying altered magnetic pyroxenite thereby confirming that the magnetic anomalies are “mapping” pyroxenite rocks in the basement (*Figures 3 – 6*).

Once geological logging and sampling is completed this week, quarter core samples of laterite material and the fresh pyroxenite will be submitted to SGS Pty Ltd in Orange NSW for multi-element analysis. The laterite bulk sample will also be used for future metallurgical test work.

It is expected that assay results will be received by the end of February 2025.

Rimfire has previously announced a Mineral Resource estimate of 21Mt @ 125ppm Sc (4,050t Scandium Oxide) for Murga North* and an Exploration Target for the surrounding Murga area (excluding the Murga North Mineral Resource) of 100 to 200Mt at 100 to 200ppm Sc (15Kt – 46Kt Scandium Oxide)**. (*Rimfire ASX Announcement dated 5 September 2024*).

****Rimfire also confirms that it is not aware of any new information or data that materially affects the information included in the 9 September 2024 ASX announcement, and that all material assumptions and technical parameters underpinning the estimates in that ASX announcement continue to apply and have not materially changed.***

*****Cautionary Statement: The potential quantity and grade of the Exploration Target is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource, and it is uncertain if further exploration will result in the estimation of a Mineral Resource.***

The diamond drilling program was sole funded by Rimfire with the results to underpin the planning of further drilling and metallurgical test work programs as we work towards converting the Murga Exploration Target into a Mineral Resource Estimate by the end of the 24/25 Financial Year.

Table 1: Murga Diamond drilling specifications

Hole ID	Easting	Northing	EOH (m)	Datum	Azi°	Dip°
FI2678	539,936	6,369,669	148.2	GDA94_Zone 55	23	-55
FI2679	540,307	6,367,863	150.5	GDA94_Zone 55	15	-55

Table 2: Murga Diamond drilling downhole geological summary

Hole ID	Interval	Geology Summary
FI2678	0-3m	dk rich red soil, with high % of clay
	3-8m	finer grn, clay red/brown
	8-17m	dk red brown / green laterite
	17-30m	sap clay, dk red with mottled orange/brn
	30-32m	Base of Oxidized Zone transition zone from sap clay to sap rock
	32-41m	pyroxenitic sap rock, core a lot fresher
	41-148.2m	dk grey cg grained pyroxenite with occasional fg disseminated pyrite
FI2679	0-1m	soil rock, rounded suspect transported cover
	1-29m	laterite clay rich mottled purple/red/white/brn.
	29-31m	transitioning from crumbly to more cohesive core harder green/blk/gry
	31-34m	Base of Oxidized Zone - core is much fresher
	34-59m	Fresher dk grey pyroxenite crystals heavily altered, fractured along veins & serpentinised
	59-150.5m	dk grey pyroxenite, moderately serpentinised, common hydrothermal hematite,

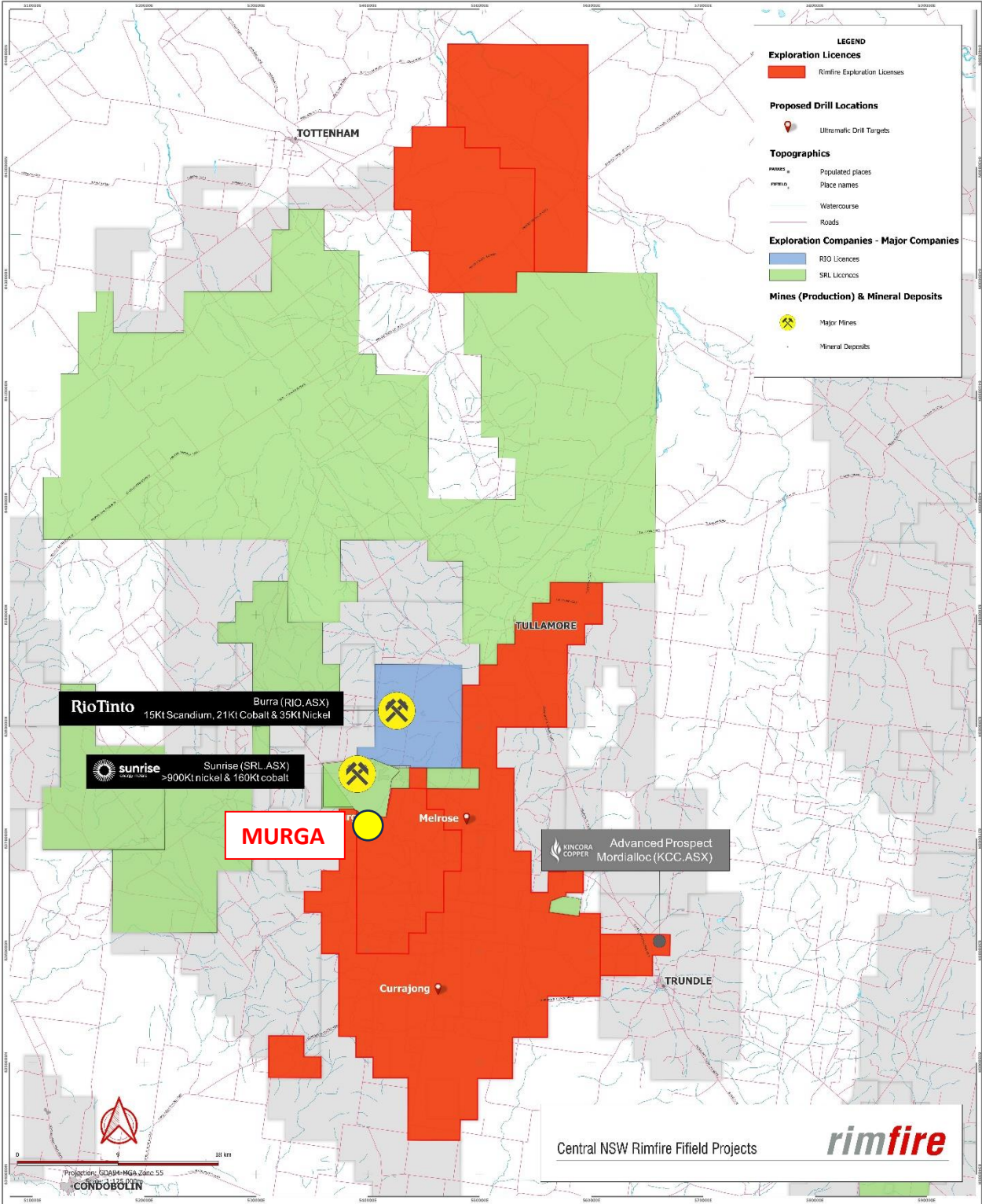


Figure 1: Fiefeld project locations showing Rimfire (red) and competitors (Rio Tinto – blue and Sunrise Energy Metals – green).

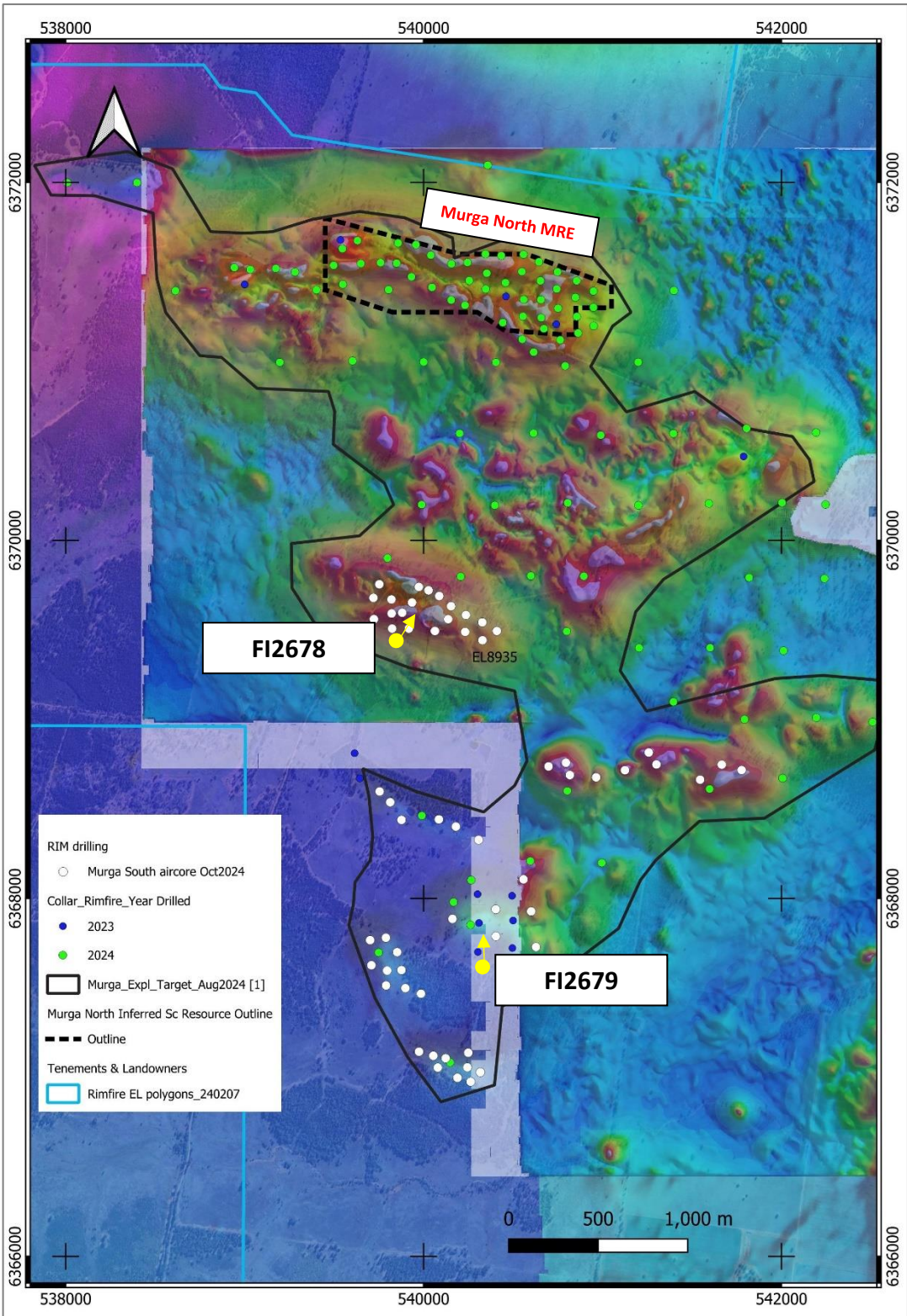


Figure 2: Marga Exploration Target – October / November 2024 infill air core drilling locations (white circles) and diamond drill holes (yellow circles) – background TMI image and with Marga North MRE boundaries shown.



Figure 3: Photo of FI2678 PQ core – 0 to 5.2 metres (clay / laterite)



Figure 4: Photo of F12678 HQ core – 50.6 to 57.3 metres (coarse grained pyroxenite)



Figure 5: Photo of FI2679 PQ core – 15.7 to 20.5 metres (clay rich laterite)



Figure 6: Photo of FI2679 HQ core – 135.9 to 142.2 metres (serpentinised pyroxenite)

ENDS

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
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.	<p>This ASX Announcement details the initial geological results of diamond drilling undertaken by Rimfire at the Murga Exploration Target in December 2024 / January 2025. No assay data has been reported for the drilling as the holes are still being sampled ahead of assaying.</p> <p>Each diamond drillhole was geologically logged and half or quarter core samples will be submitted to SGS Pty Ltd Orange for analysis.</p>
	Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used.	To ensure sample representivity, the entire drillhole will be cut and sampled for analysis. Blank samples and reference standards will be inserted into the sample sequence for QA/QC.
	<p>Aspects of the determination of mineralisation that are Material to the Public Report.</p> <p>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.</p>	To ensure sample representivity, and because the geology of each drilling location is largely unknown (due to no previous drilling beneath the base of weathering), the entire drillhole will be cut and sampled for analysis.
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 drillholes reported in this ASX Announcement are diamond drill holes, the specifications of which are included in Table 1.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	For the diamond drilling reported in this ASX Announcement, rock quality and core recovery details were included in the geological logging procedure. All diamond drill core was photographed as well.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	To ensure sample representivity, and because the geology of each drilling location is largely unknown (due to no previous drilling beneath the base of weathering), the entire drillhole will be cut and sampled for analysis.
	Whether a relationship exists between sample	It is not known whether a relationship exists

Criteria	JORC Code explanation	Commentary
	recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	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.	Core samples were geologically and geochemically logged to a level of detail sufficient to support appropriate Mineral Resource estimation, although that was not the objective of the diamond drilling outlined in this ASX Announcement. All diamond drill core was photographed.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Geological logging of is largely qualitative by nature.
	The total length and percentage of the relevant intersections logged.	N/A as no assay has been reported.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Each diamond drillhole was geologically logged and photographed. Each diamond hole will be cut, and half core samples submitted to SGS Pty Ltd Orange for analysis.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Not Applicable as only core samples were obtained from the diamond drilling.
	For all sample types, the nature, quality, and appropriateness of the sample preparation technique.	N/A as no assay has been reported.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	N/A as no assay has been reported.
	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.	N/A as no assay has been reported.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	N/A as no assay has been reported.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	N/A as no assay has been reported.
	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 Announcement.
	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.	N/A as no assay has been reported.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	N/A as no assay has been reported.

Criteria	JORC Code explanation	Commentary
	The use of twinned holes.	Not applicable as no twinned holes drilled.
	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 once received are typically reported in a digital format suitable for direct loading into a Datashed database with a 3 rd party expert consulting group.
	Discuss any adjustment to assay data.	N/A as no assay has been reported.
Location of data points	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.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The location and spacing of drillholes discussed in this Report 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 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.	N/A as no assay has been reported.
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.	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.	The relationship between the drilling orientation and the orientation of key mineralised structures is considered not to have introduced a sampling bias
Sample security	The measures taken to ensure sample security.	N/A as no assay has been reported.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	The geological data discussed in this Announcement has been reviewed by senior company personnel including the Exploration Manager and Managing Director 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.	Reported results all from Exploration Licence EL EL8935 at Fifield NSW which is wholly - owned by Rimfire Pacific Mining Limited. The tenement forms part of the Company's Fifield Project which is subject to a dispute with the company's former Earn In and Joint Venture partner - Golden Plains Resources Pty Ltd (GPR). <i>Refer to Rimfire's ASX Release dated 17 October 2024.</i> 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.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Murga Intrusive Complex where the air core drilling was conducted has been largely explored historically for gold and platinum with most focus on the Sorpresa Gold Deposit which lies to the east of Murga.
Geology	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 a flat lying weathered zone developed on top of ultramafic [pyroxenite] rocks hosting anomalous Scandium.
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: <ul style="list-style-type: none"> 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. 	All diamond drillhole specifications are included within this ASX Announcement. All collar locations are shown on the figures included with this ASX Announcement.
	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.
Data aggregation methods	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.	<ul style="list-style-type: none"> N/A as no assay has been reported

Criteria	JORC Code explanation	Commentary
	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.	N/A as no assay has been reported
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	N/A as no assay has been reported
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the Reporting of Exploration Results.	The drill results included in this Report occur either within a flat (horizontal) lying zone or dipping zone. Given all the diamond drill holes are vertical, the significant intercepts are considered to represent downhole widths.
	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').	
Diagrams	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 ASX Announcement
Balanced reporting	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 in this Announcement.
Other substantive exploration data	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.
Further work	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 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

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.

The data in this report that relates to Mineral Resource estimates and Exploration Target is based on information evaluated by Mr Simon Tear who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM) and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 (the "JORC Code"). Mr Tear is a Director of H&S Consultants Pty Ltd, and he consents to the inclusion in the report of the Mineral Resources and Exploration Target in the form and context in which they appear.

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".