RIMFIRE PACIFIC MINING LTD

ASX: RIM

"Critical Minerals Explorer"

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Melrose emerging as significant nickel cobalt scandium opportunity

Highlights

- **Drilling at Melrose confirms laterite – hosted nickel-cobalt-scandium mineralisation present over 900 metres strike length with widths up to 400 metres over central magnetic anomaly**
- **Mineralisation and ultramafic host rocks remain open to the west**
- **Assaying of 260kg bulk composite sample returns 0.33% nickel, 0.12% cobalt and 380ppm scandium**
- **Metallurgical scrubbing tests underway ahead of atmospheric leaching and magnetic separation trials**
- **Drilling planned to underpin maiden 2012 JORC Code compliant Mineral Resource Estimate**

Rimfire Pacific Mining (**ASX: RIM**, "**Rimfire**" or "**the Company**") is pleased to advise that recent aircore drilling has extended the area of nickel cobalt scandium mineralisation and confirmed the geological setting of the Melrose prospect. Separately head assaying of a 260kg composite bulk sample has confirmed the high-grade nature of the Melrose mineralisation.

Commenting on the announcement, Rimfire's Managing Director Mr David Hutton said: *"Our understanding of the Melrose nickel cobalt scandium prospect continues to grow with recent drilling and ongoing metallurgical work reinforcing its status as a potentially significant critical minerals' opportunity for Rimfire's shareholders.*

Our exploration work has entered a new phase and with metallurgical test work well underway, we look forward to providing further updates to the market as new information comes to hand".

Melrose lies within the Company's Avondale Project which is located 70 kilometres northwest of Parkes within the highly prospective Lachlan Orogen of central New South Wales (*Figure 1*).

Drilling program details

Rimfire recently completed a 20-hole aircore drilling program (FI2408 to FI2442 – 904 metres) at Melrose. Vertical holes were drilled along fence lines and access tracks north and south of a prominent magnetic anomaly that lies centrally within the prospect area to determine the extent of nickel cobalt scandium mineralisation at Melrose and confirm the prospect's geological setting (*Figure 2*).

Geologically Melrose is underlain by an east-dipping sequence of ultramafic and mafic intrusive rocks (microdiorite, gabbro, pyroxenite, wehrlite, dunite) that are bounded to the east against a granite and volcaniclastic sediments to the west. The ultramafic rocks are heavily altered with serpentinite and magnetite commonly present throughout. The presence of abundant magnetite explains the Melrose magnetic anomaly.

The basement rocks are strongly weathered with an overlying flat – lying manganese and iron rich (laterite) horizon present, assaying of which has shown to be strongly anomalous in nickel – cobalt – scandium (Ni Co Sc) mineralisation.

Drilling previously undertaken by Rimfire has returned multiple strongly anomalous drill intercepts from the laterite horizon, e.g.;

- 21m @ 0.11% Ni, 0.07% Co, and 529ppm Sc, from 3 metres in FI2397 including 9m @ 0.17% Ni, 0.15% Co and 688ppm Sc from 14 metres,
- 2.3m @ 0.15% Ni, 0.08% Co and 461ppm Sc from 3 metres and 5.0m @ 0.68% Ni, 0.07% Co and 302ppm Sc from 16 metres in FI2398,
- 4.9m @ 0.36% Ni, 0.11% Co and 349ppm Sc from 5 metres, and 4.3m @ 0.42% Ni, 0.09% Co and 296ppm Sc from 10.1 metres in FI2399, and
- 10.0m @ 0.14% Ni, 0.10% Co and 456ppm Sc from 1 metre in FI2400 including 5m @ 0.17% Ni, 0.17% Co and 568ppm Sc from 5 metres.

While the latest drilling was focussed on testing outlying geology, rather than specifically testing the main zone of mineralisation, further anomalous drill intercepts were returned;

- 9m @ 0.23% Ni, 0.04% Co, and 14ppm Sc from 18 metres in FI2409,
- 13m @ 0.23% Ni, 0.06% Co, and 43ppm Sc from 36 metres in FI2414, and
- 19m @ 0.35% Ni, 0.06% Co, and 37ppm Sc from 17 metres in FI2424.

The geological and geochemical results obtained from the drilling, have significantly enhanced our understanding of the Melrose geological setting and distribution of mineralisation; and the following observations can be made.

- The nickel cobalt scandium mineralised laterite zone trends in a north northeast - south southwest direction over ~ 900 metres strike length with width ranging from a maximum of ~ 400 metres in the core of the magnetic complex to a width of ~ 50 metres in the northeast.
- The nickel and cobalt mineralisation remain open to the southwest into areas of no drilling.
- The scandium mineralisation remains open to the west.
- Mineralisation thickness ranges from ~ 16 metres in the core of the magnetic complex to < 3 metres to the northeast.
- The thickest laterite zones and higher-grade nickel cobalt and scandium mineralisation overlies the ultramafic rock types, with the highest scandium grades spatially associated with the pyroxenite in particular. The thinner laterite zones and lower grade mineralisation in the northeast overlies microdiorite rimming the pyroxenite.

A drill collar plan, interpreted geology, geochemical contour plans and representative cross sections are shown in *Figures 2 to 7*.

Drill hole specifications are given in *Table 1*.

Table 1: Aircore drilling specifications

Hole ID	Easting	Northing	EOH (m)	Azi°	Dip°	From	Width	Ni_%	Co_%	Sc_ppm
FI2408	548,901	6,371,375	24	0	-90	*No Significant Intercepts*				
FI2409	548,903	6,371,271	27	0	-90	18	9	0.23	0.04	14
FI2410	548,906	6,371,174	57	0	-90	*No Significant Intercepts*				
FI2411	548,906	6,371,077	45	0	-90					
FI2412	548,699	6,371,178	67	0	-90					
FI2413	548,700	6,371,379	42	0	-90					
FI2414	548,700	6,371,278	49	0	-90	36	13	0.23	0.06	43
FI2415	548,806	6,371,875	60	0	-90	*No Significant Intercepts*				
Fi2416	548,796	6,371,976	45	0	-90					
Fi2417	549,069	6,371,953	57	0	-90					
Fi2418	548,890	6,371,737	25	0	-90					
FI2419	548,800	6,371,772	36	0	-90					
Fi2420	548,802	6,372,175	55	0	-90					
FI2421	548,719	6,371,682	45	0	-90					
Fi2422	549,001	6,371,391	39	0	-90					
Fi2423	549,039	6,371,311	40	0	-90					
Fi2424	548,650	6,371,412	36	0	-90	17	19	0.35	0.06	37
Fi2440	548,974	6,371,965	45	0	-90	*No Significant Intercepts*				
Fi2441	549,052	6,371,773	58	0	-90					
Fi2442	549,082	6,371,624	52	0	-90					

Metallurgical Test work

As previously announced, Perth specialist metallurgical services group - Independent Metallurgical Operations Pty Ltd (IMO) is currently developing a conceptual processing flowsheet with the aim of optimising recoveries and production of a nickel – cobalt – scandium product from high-grade mineralised material from Melrose.

To underpin the studies, a bulk composite sample (260 kg) of high-grade nickel cobalt scandium mineralisation from Melrose (PQ quarter diamond drill core) was previously dispatched to IMO in Perth.

A representative sub-sample of the bulk composite sample was pulverised and analysed with the summarised head size by assay results presented in *Table 2*.

Assaying of various size fractions returned grades ranging from 0.218% to 0.437% nickel (head assay grade of 0.33% nickel), 0.08% to 0.15% cobalt (head assay grade of 0.12% cobalt), and 290ppm to 470ppm scandium (head assay grade of 380ppm scandium).

Rimfire is greatly encouraged by these results which support previously obtained drill assay intercepts and reinforces Rimfire's belief that Melrose represents a potentially significant high grade nickel cobalt scandium mineral opportunity.

Table 2: Melrose 260kg composite bulk sample - Head Size by Assay Analysis Summary

Size Fraction	Mass		Assays											
			Al_2O_3	CaO	Co	Cu	Fe_2O_3	LOI	MgO	MnO	Ni	Sc	SiO_2	TiO_2
(mm)	(g)	%	%	%	%	%	%	%	%	%	%	%	%	%
50.0														
25.0	1,890	13.3	11.4	2.38	0.10	0.019	51.5	8.60	2.60	1.23	0.218	0.047	20.0	0.98
12.5	1,210	8.5	9.83	1.78	0.09	0.016	52.1	7.78	2.03	1.28	0.232	0.038	22.1	0.84
6.3	740	5.2	9.54	1.25	0.11	0.014	54.2	7.19	1.28	1.47	0.254	0.038	22.5	0.79
3.35	610	4.3	9.92	1.42	0.15	0.020	52.1	7.34	1.40	1.80	0.287	0.037	23.8	0.78
2.00	430	3.0	9.93	1.55	0.15	0.018	51.8	7.42	1.57	1.87	0.287	0.037	23.5	0.74
1.18	720	5.1	10.6	1.29	0.15	0.019	54.3	7.57	1.64	1.84	0.287	0.039	20.7	0.79
0.850	460	3.2	10.1	1.27	0.14	0.018	54.7	7.23	1.87	1.75	0.282	0.038	20.2	0.78
0.500	650	4.6	9.05	1.23	0.13	0.018	55.9	6.93	2.13	1.64	0.286	0.036	20.1	0.73
0.212	1,700	11.9	6.95	0.98	0.12	0.018	57.2	6.16	2.74	1.51	0.336	0.030	20.6	0.65
0.150	890	6.3	5.92	0.87	0.12	0.015	62.7	5.58	2.33	1.66	0.380	0.030	17.4	0.68
0.106	690	4.8	5.94	0.83	0.12	0.015	64.4	5.63	2.11	1.74	0.401	0.031	16.0	0.72
0.075	350	2.5	5.47	0.81	0.11	0.015	67.7	5.16	1.85	1.66	0.382	0.029	14.2	0.69
0.053	390	2.7	6.09	0.79	0.12	0.015	64.4	5.86	2.04	1.80	0.437	0.032	15.8	0.76
0.038	160	1.1	6.05	0.75	0.11	0.015	65.2	5.77	1.96	1.75	0.420	0.031	15.5	0.77
-0.038	3,350	23.5	10.4	0.57	0.08	0.016	54.3	7.52	1.79	1.45	0.367	0.042	21.0	0.96
Total	**14,240**	**100.0**	**9.14**	**1.20**	**0.11**	**0.017**	**55.7**	**7.13**	**2.05**	**1.53**	**0.315**	**0.038**	**20.3**	**0.82**
Head	Assay		8.98	1.05	0.12	0.019	57.3	7.06	1.96	1.61	0.333	0.038	19.7	0.85

At the time of writing, IMO were conducting scrubbing tests ahead of commencing atmospheric leaching on scrubbed materials. IMO are also planning to conduct magnetic separation trials to determine the potential to separate the dominant gangue mineral maghemite as well as other potential paramagnetic iron bearing species.

Next Steps

It is anticipated that IMO will complete their leaching trials during the September 2023 Quarter and subject to a favourable outcome from the metallurgical test work, Rimfire will undertake a detailed drill out of the Melrose prospect with a view to estimating a maiden 2012 JORC Code compliant Mineral Resource Estimate (MRE) for the location.

Rimfire looks forward to providing the market with further updates as new information comes to hand.

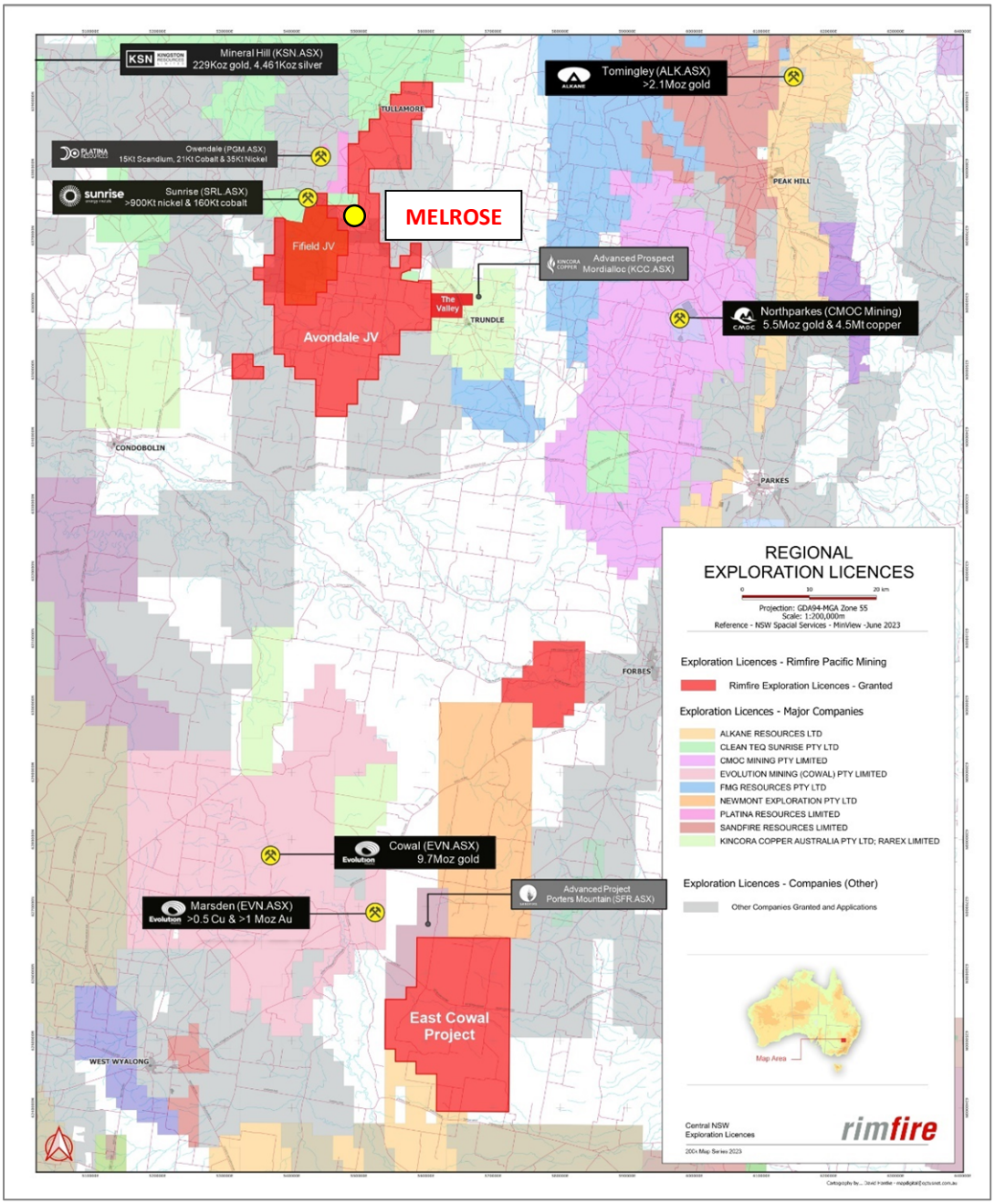


Figure 1: Rimfire Project Locations and key prospects.

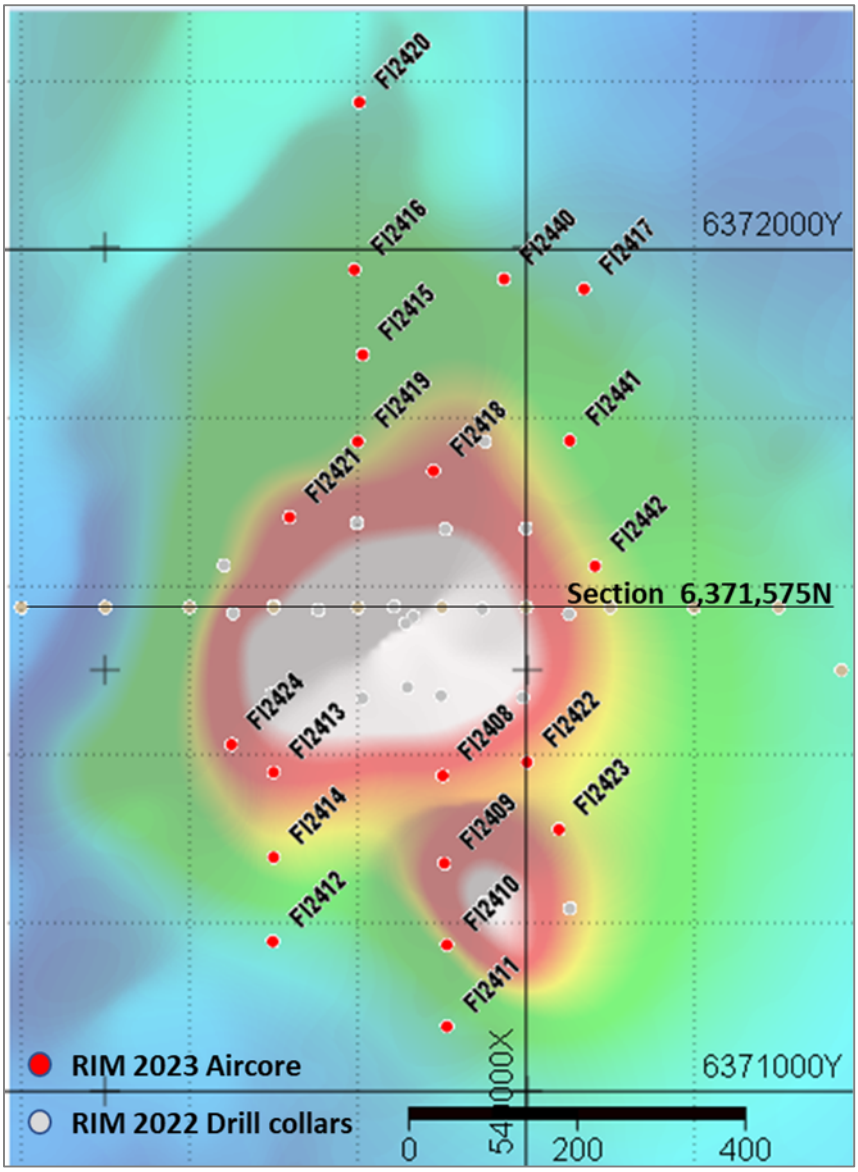


Figure 2: Melrose drill collar plan (TMI image) showing Rimfire's 2023 aircore drill collars (red) and previous Rimfire drill collars.

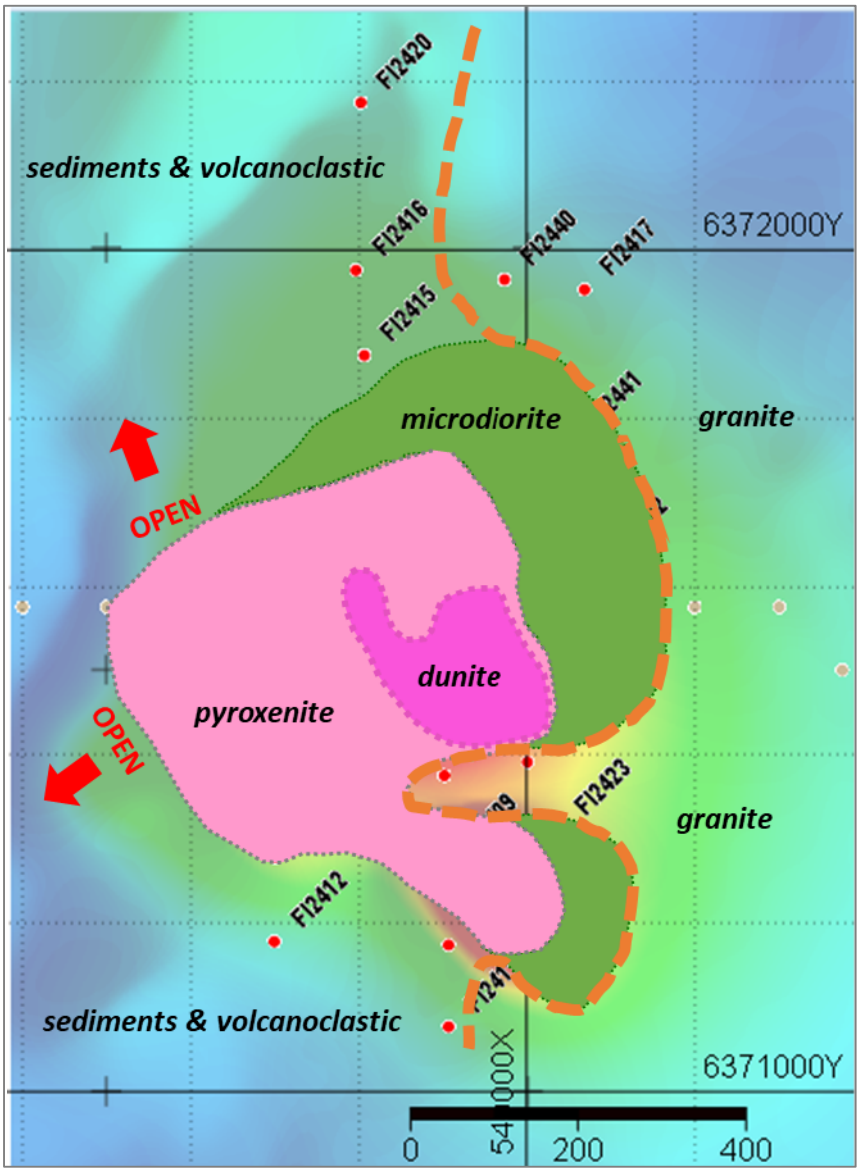


Figure 3: Melrose prospect – interpreted (bottom of hole) geology.

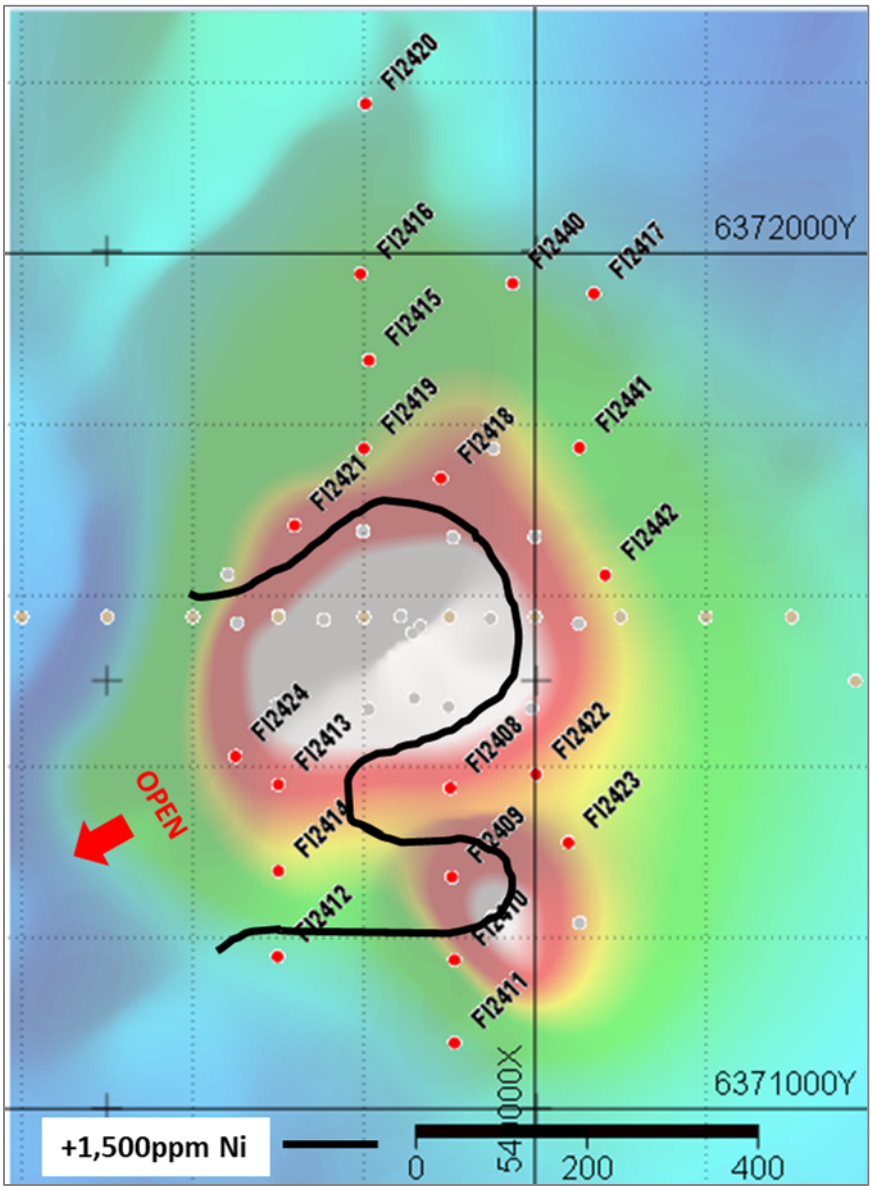


Figure 4: Melrose prospect – nickel in laterite zone (as shown by +1,500ppm Ni contour) which remains open to the southwest.

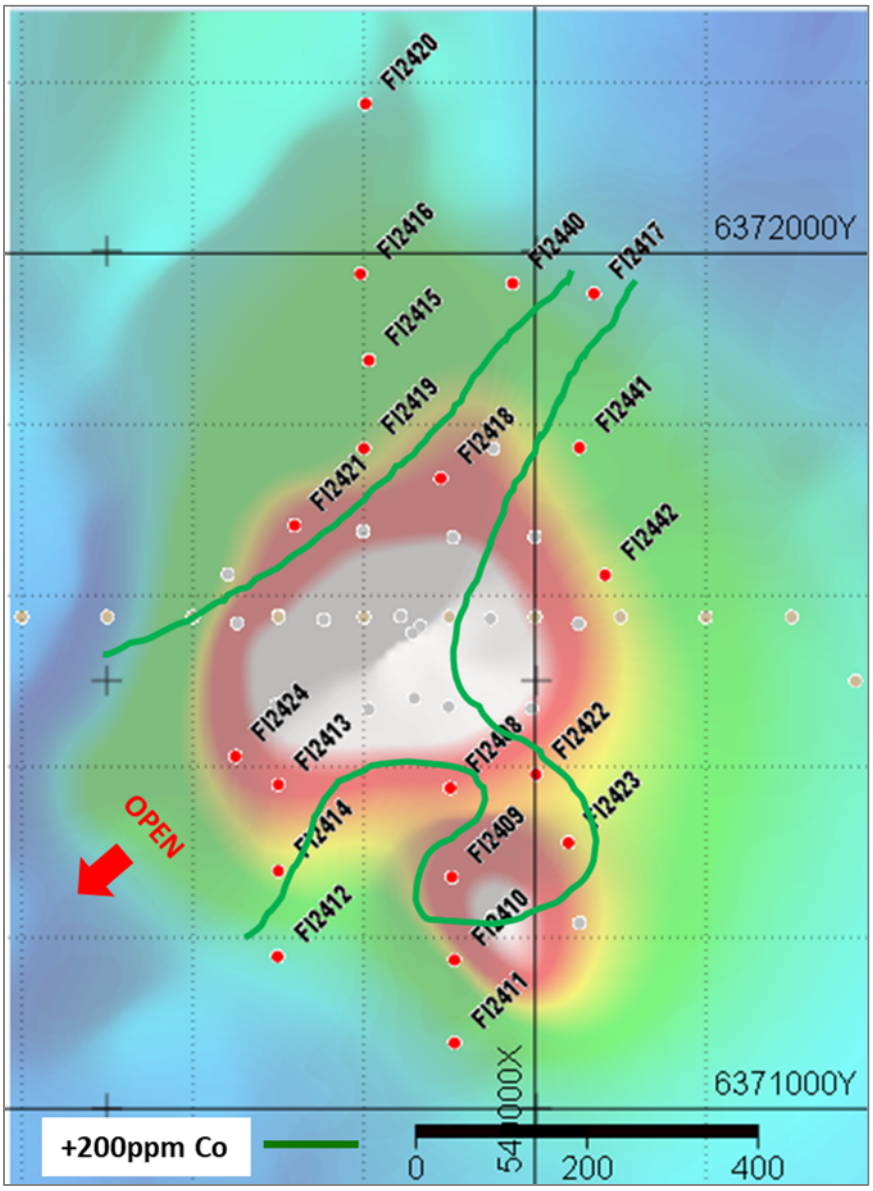


Figure 5: Melrose prospect – cobalt in laterite zone (as shown by +200ppm Co contour) which remains open to the southwest.

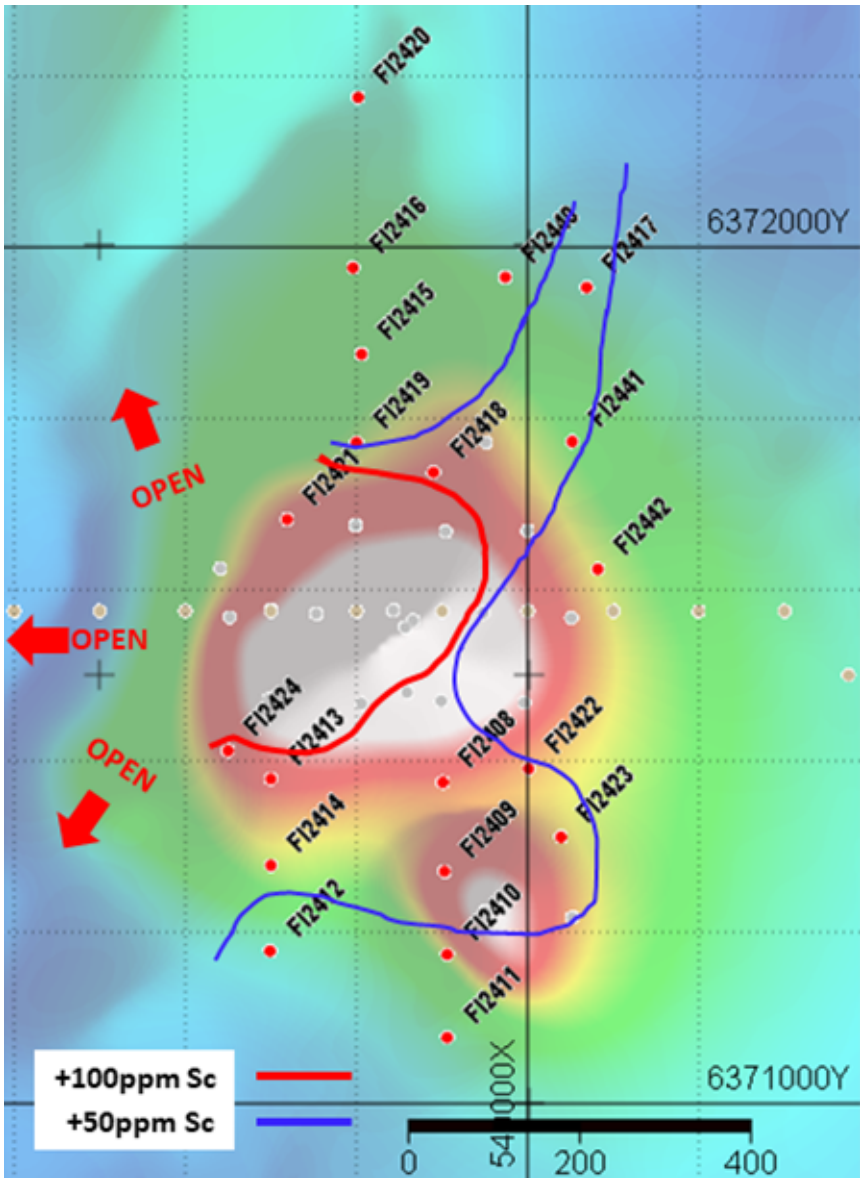
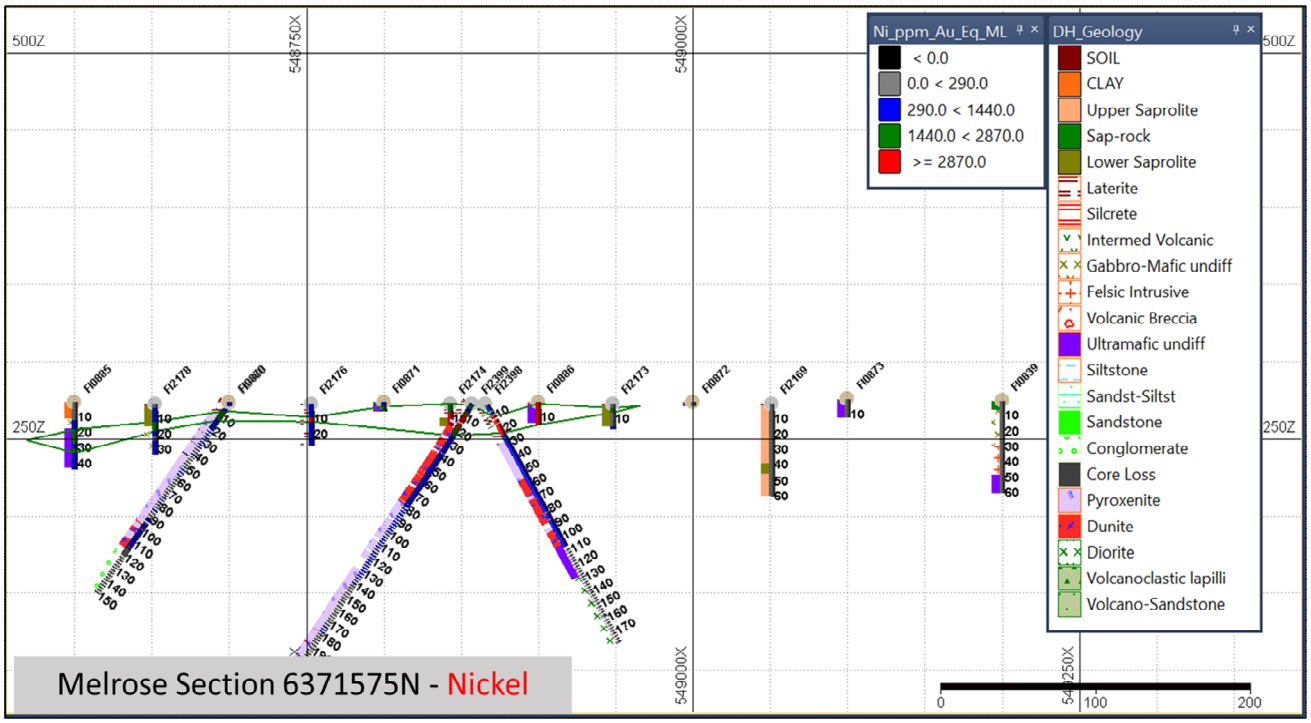
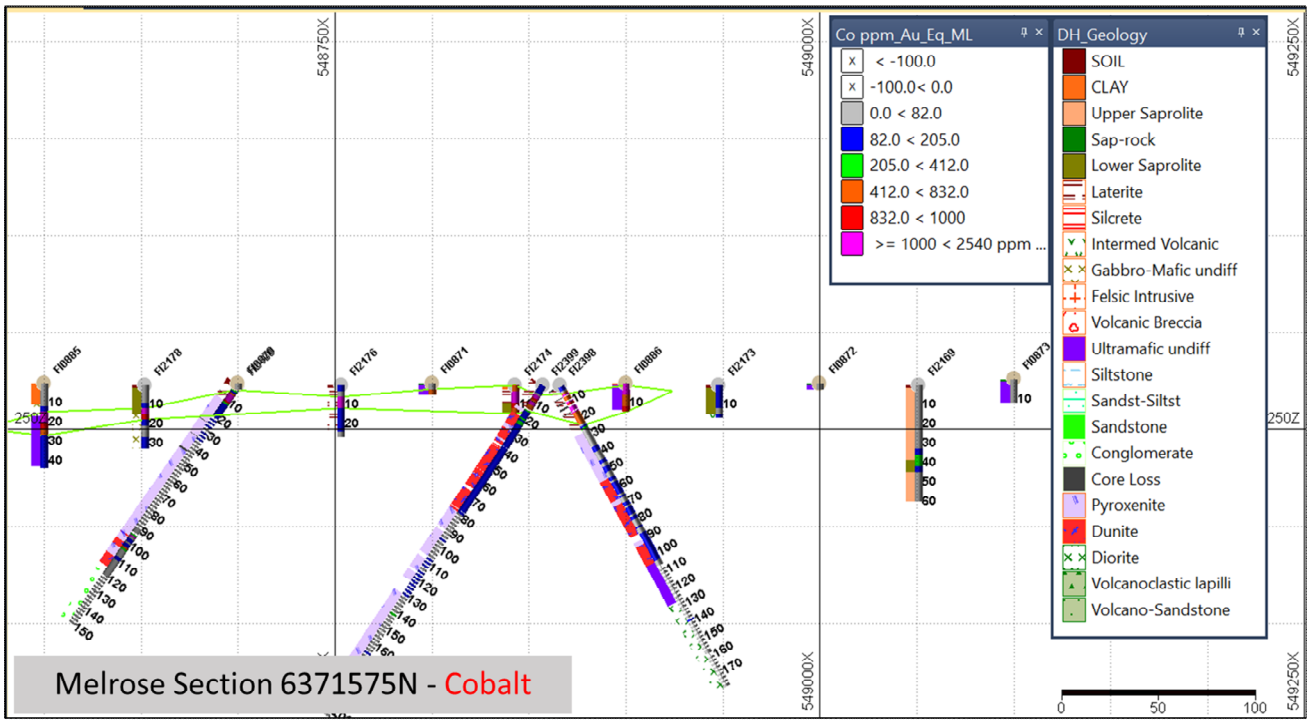


Figure 6: Melrose prospect – scandium in laterite zone (as defined by +50ppm and +100ppm Sc contours) which remains open to the west.


500Z
548750X
549000X
250Z
549250X
Ni_ppm_Au_Eq_ML
< 0.0
0.0 < 290.0
290.0 < 1440.0
1440.0 < 2870.0
>= 2870.0
DH_Geology
SOIL
CLAY
Upper Saprolite
Sap-rock
Lower Saprolite
Laterite
Silcrete
Intermed Volcanic
Gabbro-Mafic undiff
Felsic Intrusive
Volcanic Breccia
Ultramafic undiff
Siltstone
Sandst-Siltst
Sandstone
Conglomerate
Core Loss
Pyroxenite
Dunite
Diorite
Volcanoclastic lapilli
Volcano-Sandstone
0
100
200
Melrose Section 6371575N - Nickel


548750X
549000X
549250X
250Z
Co ppm_Au_Eq_ML
< -100.0
-100.0< 0.0
0.0 < 82.0
82.0 < 205.0
205.0 < 412.0
412.0 < 832.0
832.0 < 1000
>= 1000 < 2540 ppm ...
DH_Geology
SOIL
CLAY
Upper Saprolite
Sap-rock
Lower Saprolite
Laterite
Silcrete
Intermed Volcanic
Gabbro-Mafic undiff
Felsic Intrusive
Volcanic Breccia
Ultramafic undiff
Siltstone
Sandst-Siltst
Sandstone
Conglomerate
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Dunite
Diorite
Volcanoclastic lapilli
Volcano-Sandstone
0
50
100
Melrose Section 6371575N - Cobalt

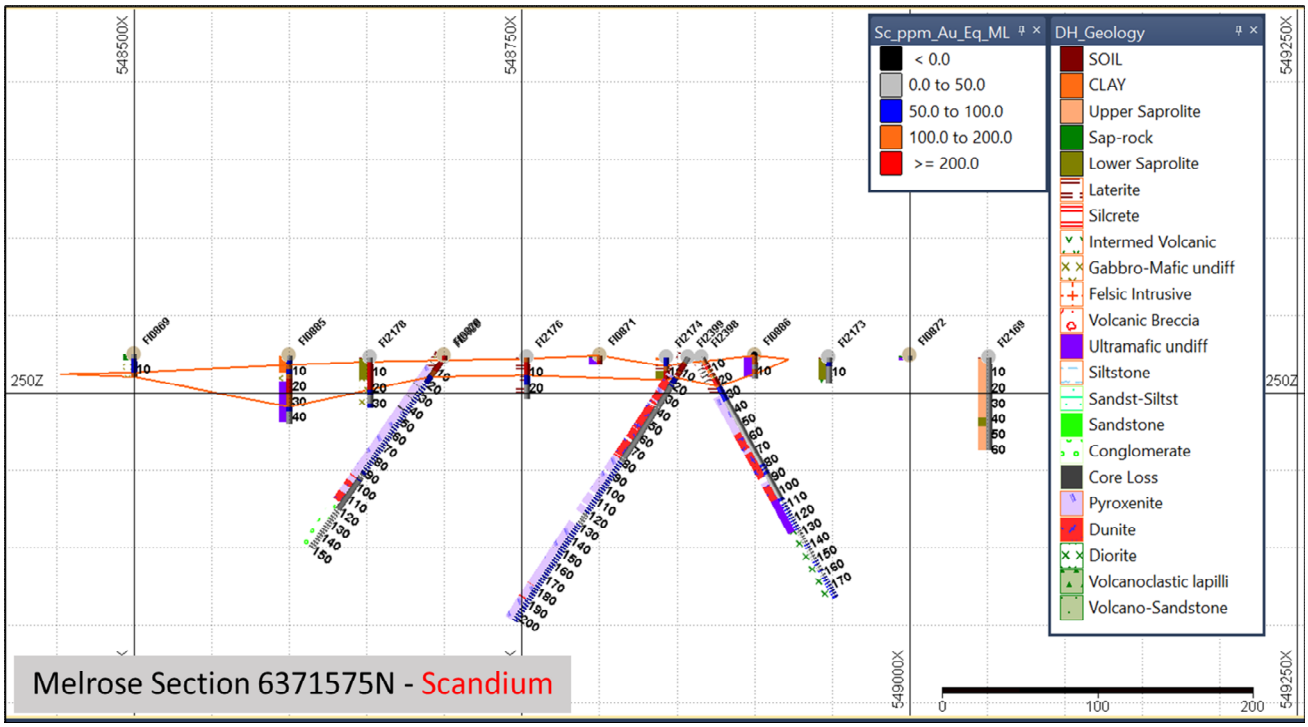

Figure 7: Melrose prospect – cross section 6371575N showing logged lithologies, and nickel, cobalt and scandium zones.

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 – Aircore Drilling and Head Assay

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,	This ASX Announcement details aircore drilling and head assaying of a composite bulk sample (by consulting firm - IMO Pty Ltd in Perth) by Rimfire Pacific Mining Limited during March –

Criteria	JORC Code explanation	Commentary
	such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	June 2023 at the Melrose Prospect. The results and details of Aircore drilling undertaken by Rimfire during January 2022 at Melrose were previously reported to the market in an ASX Announcement dated 4 April 2022. Aircore drillhole sampling. Each sample represents a scooped sample of cuttings generated via aircore drilling. Each sample is representative of either 1 metre or 3m composite samples. 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. Each aircore drillhole was geologically logged and submitted to ALS Orange for analysis for base metals (Ni, Co, Sc) using ALS methods ME-XRF12n and ME-ICP61. The nickel, cobalt and scandium intercept quoted in this Report has been calculated using data obtained from the ME-XRF12n method. The 260-kilo composite sample was submitted to Independent Metallurgical Operations Pty Ltd (IMO) in Perth, who following crushing, pulverisation and homogenisation, submitted a representative sample of different size fractions (as detailed in Table 2 of this ASX Announcement) to Intertek Pty Ltd in Perth for base metal analysis by XRF. The original IMO sample was a composite of mineralised material from 4 diamond holes previously drilled by Rimfire at Melrose (i.e., ASX Announcement dated 20 October 2022. As shown in Table 2 of this ASX Announcement, a final head assay was calculated from the individual size fraction assay values.
	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 indictive rather than precise measure, aimed at defining areas of anomalism. 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. In cases where 'industry standard' work has	The field collected samples were typically 1.0 to 2.0kg composite samples from a 3m interval from aircore drilling. Industry standard preparation and assay conducted at ALS Pty Ltd

Criteria	JORC Code explanation	Commentary
	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.	in Orange, NSW, including sample crushing and pulverising prior to subsampling for an assay sample. 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, 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.	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 cannot 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.
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 is largely qualitative by nature.
	The total length and percentage of the relevant intersections logged.	Relevant intersections have been geologically logged in full.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	N/A as no ore samples were collected.
	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	All sampling equipment was cleaned between samples.

Criteria	JORC Code explanation	Commentary
	representivity of 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.	The sample sizes (typically ~ 2kg) of half core are considered appropriate to the grainsize of material being sampled.
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.	The methods used by ALS to analyse the half core samples for precious and base metals are industry standard. The ME-ICP61 method is a partial technique while the XRF12n method (used for the diamond drill results in this Report is considered to be total technique.
	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 Report.
	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.	Certified standards were submitted along half core samples to the laboratory. In addition, the nickel cobalt scandium results included in this Report were reported based on the ME-XRF12n analytical method and confirmed by results obtained using the ME-ICP61 method.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	The significant intersections including in this Report have been verified by both Rimfire's Exploration Manager and Managing Director.
	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 are typically reported in a digital format suitable for direct loading into a Datashed database with a 3rd party expert consulting group.
	Discuss any adjustment to assay data.	There has been no adjustment to assay data.
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 Report

Criteria	JORC Code explanation	Commentary
	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 Report 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.	Sample compositing has not been applied. All samples were an equal 1 metre length.
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.	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
Sample security	The measures taken to ensure sample security.	Samples double bagged and delivered directly to the laboratory by company personnel.
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 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 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. 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 Melrose Prospect where the air core drilling was conducted has not been previously explored by third parties. Rimfire undertook air core drilling at Melrose during the first half of 2022.

Criteria	JORC Code explanation	Commentary
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 ferruginous and laterised zone developed on top of ultramafic hosting anomalous Ni-Co-Sc. Historic drilling has shown that the host ultramafic is platiniferous.
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.	All 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.	No data aggregation or weighting has been applied to the reported significant intercepts. The following low cut off grades have been used in determining the reported intercepts. • Nickel (1,000 ppm – 0.1%) • Cobalt (500 ppm – 0.05%) • Scandium (150 ppm – 0.015%)
	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., 1 metre
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents have 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 within a flat (horizontal) lying zone and given all the diamond drill holes are angled, 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').	

Criteria	JORC Code explanation	Commentary
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 Report.
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

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 60%)
- ✓ 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 into $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 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, 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".