

7 December 2022

Priority copper drill target defined at East Cowal Copper Gold Project

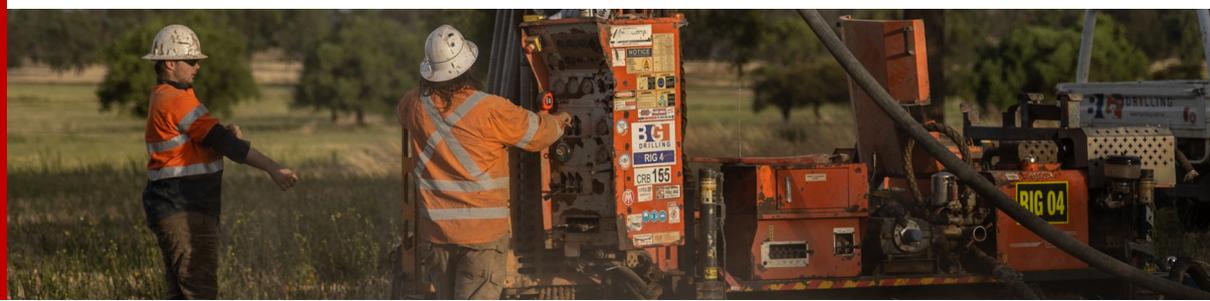
Highlights

- RC drilling planned during March 2023 Quarter to test the source of a 3 x 1.5 km copper anomaly at Rimfire's 100% - owned East Cowal Project
- East Cowal sits within similar geological setting to nearby 9.6Moz Cowal Gold Mine
- Active exploration programs ahead for Rimfire's 100% owned projects, with follow-up drilling planned for historic high-grade cobalt intercepts at Broken Hill and copper – gold anomalism at the Valley

Rimfire Pacific Mining (**ASX: RIM**, "Rimfire" or the "Company") is pleased to advise that it is pursuing regulatory approval to drill test a new priority copper drill target ("**LFB022**") that has been defined on its 100% - owned East Cowal Copper Gold Project which lies immediately 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: *"With a growing portfolio of 100% - owned copper and cobalt targets, as well as our critical minerals joint ventures within the highly prospective Lachlan Orogen and Broken Hill districts of NSW, Rimfire is uniquely positioned to explore for minerals that are in demand as global decarbonisation trends accelerate.*

Rimfire is planning to drill the new East Cowal copper target as part of a broader push to accelerate exploration on our 100% - owned projects and looks forward to providing further updates as new information comes to hand."



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ASX: RIM

"Critical Minerals Explorer"

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East Cowal is one of three 100% - owned projects in NSW on which Rimfire is planning to drill priority targets with the others being historic high-grade cobalt drill intercepts at Broken Hill (*Figure 2*), and a large copper-gold geochemical/geophysical target at the Valley. Drilling of the priority targets will be funded from the \$1.5M Rimfire Corporate Payment which Rimfire is receiving from Golden Plains Resources Pty Ltd – as part of the restructure of the Fifield Earn In Agreement (*see Rimfire ASX Announcement dated 4 August 2022*).

East Cowal Copper Gold Project

Rimfire's 100% - owned East Cowal Copper Gold Project (500km²) covers the northern end of the 35 km long x 20 km wide Ordovician Currumburra Volcanic Complex which is interpreted to be the eastern margin of a very large stratovolcano centred on Lake Cowal which hosts the Cowal Gold Deposit and adjacent Marsden Copper Gold Deposit. As shown in *Figure 3*, The Lake Cowal Volcanic complex occurs 7 km to the northwest of the Currumburra volcanics.

Both Cowal and Marsden are owned by Evolution Mining (EVN.ASX) and host Total Mineral Resources of 305.3Mt @ 0.98g/t gold (9.6Moz 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 Ordovician Currumburra volcanic complex comprises a north south trending zone of andesitic volcanics and associated sediments, intruded by plugs and dykes ranging in composition from diorite to monzonite. The Ordovician volcanics do not outcrop and are locally overlain by the thin flat lying late Ordovician to early Silurian Jingerangle Formation cherty siltstone.

While the prospective Ordovician units do not outcrop, they can be readily mapped using magnetic and gravity geophysical data as well as drillhole geological information. A prominent **north-south trending gravity ridge** within the East Cowal project clearly defines the location of the Currumburra volcanics as well as the northwest trending Marsden Lineament - a key structural control to localising copper gold mineralisation throughout the district (*Figures 4 to 6*).

Historic exploration throughout the project area has typically comprised reconnaissance air core drilling and diamond drilling from which multiple mineral occurrences have been defined along the north south trending gravity ridge.

Drilling by Goldminco Corporation in 2004 immediately south of Rimfire's tenure, intersected broad zones of porphyry – style copper and gold mineralisation at the Imola and Silverstone prospects. Diamond drilling returned 96m @ 0.7g/t gold in CBD01 at Imola, and 74m @ 0.15% copper from at Silverstone. Both prospects are reported to be Ordovician in age and are associated with small monzonite plugs and K feldspar alteration. The Silverstone intercept is described as associated specifically with haematite, 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*).

Immediately north of Rimfire's tenure, drilling by Capital Mining in 2008 intersected 28m @ 0.47 g/t gold from 740 metres at the Porters Mount prospect. Porters Mount is described as a gold bearing diatreme breccia and potential high sulphidation epithermal-style alteration system overlying a deeper porphyry copper-gold deposit. (*Information sourced from Capital Mining Limited's Annual Report for the period ending 28 June 2008 on EL6591*).

Within Rimfire's tenure at the **LFB022 target**, reconnaissance aircore drilling by Clancy Exploration Limited in late 2008, has 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 gravity ridge and the southern boundary of the northwest trending Marsden Lineament. (*Information sourced from Clancy Exploration Limited's Annual Report for the period ending 21 May 2009 on EL6784 "Currumburrama"*).

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 7 and 8*).

The magnetic low feature which has not been previously drill tested is a high priority for follow up by Rimfire and the Company has commenced the process of obtaining regulatory approval to drill as soon as possible.

Building a portfolio of critical minerals and decarbonisation projects

The LFB022 target adds to the Company's suite of **100% - owned priority copper and cobalt targets** at its East Cowal, Valley and Broken Hill projects that require drill testing.

Together with its critical minerals joint ventures in the Fifield District, Rimfire is uniquely positioned to explore for minerals that are in demand as the push to decarbonise the global economy continues.

Rimfire is planning to drill test the East Cowal, Valley and Broken Hill targets as part of a broader push to accelerate exploration on its 100% - owned projects

Rimfire's Valley Project is located 34 kilometres west of the North Parkes Copper Gold Mine which is operated by China Molybdenum Co., Ltd. and has total Measured and Indicated Resources (as at 31 December 2019) of 356Mt @ 0.55% copper, 0.20g.t gold (1.96Mt copper and 2.33Moz gold – *refer to Northparkes website*).

Drilling undertaken by Rimfire in 2021 has confirmed the presence of Ordovician – age host rocks interpreted to be analogous to those seen at Northparkes and subsequent processing of magnetic

data has identified a circular structure at the Valley which may be indicative of a buried porphyry copper gold system.

In January 2022, Rimfire was awarded \$185,675 by the Department of Regional NSW, Mining, Exploration and Geoscience group under the competitive, peer reviewed New Frontiers Cooperative Drilling Grant program. The funding will be used to offset the cost of drilling the geophysical target at the Valley (see *Rimfire ASX Announcements dated 27th July 2021 and 12th January 2022*).

Rimfire's Broken Hill "Green View" Cobalt Project adjoins (in part) the Broken Hill Cobalt Project of Cobalt Blue (COB.ASX), approximately 20 kilometres west of Broken Hill.

Modern cobalt exploration has been largely restricted to the area of Cobalt Blue's (COB.ASX) Broken Hill Cobalt Project which hosts the Pyrite Hill, Big Hill, and Railway Deposits (with a global Mineral Resource estimate comprising 118 Mt at 859 ppm (0.08%) cobalt equivalent (CoEq) [i.e., 687 ppm (0.07%) cobalt, 7.6% sulphur & 133 ppm nickel] for 81.1Kt contained cobalt using a 275 ppm CoEq cut-off (Cobalt Blue website).

Cobalt Blue's deposits are characterised by moderate to steep dipping stratabound zones of disseminated to semi-massive cobalt – bearing pyrite mineralisation. The deposits extend over some 5 km of strike and vary in thickness from 10 to 300m. The cobalt occurs exclusively as a substitute within the pyrite crystal lattice, and consequently, there is a strong correlation between pyrite content and cobalt grade.

Cobalt Blue has developed a patented minerals processing technology for treating pyrite feedstocks targeting 85-90% recovery of cobalt from ore to product (as Mixed Hydroxide Precipitate or Cobalt Sulphate).

As recently announced, Cobalt Blue has completed trial mining of the Pyrite Hill deposit and is currently processing the ore through their Broken Hill demonstration processing plant (see *Cobalt Blue ASX Announcement dated 6 October 2022*).

Cobalt Blue's development of new processing technology for pyrite – hosted cobalt mineralisation is a significant development for Broken Hill and will potentially enable the development of other cobalt deposits throughout the district that were previously viewed as being non-commercial due to their metallurgy.

A review of historic drilling undertaken on Rimfire's tenure has identified three target areas (Bald Hill, Staurolite Ridge and Railway Extension) for follow-up (see *Rimfire ASX Announcement dated 3 November 2022*).

Cobalt mineralisation at Bald Hill occurs within a folded and outcropping gossanous quartz - albite +/- pyrite psammopelitic composite gneiss unit which is equivalent to the host rocks at Cobalt Blue's deposits.

Drilling by North Broken Hill Pty Ltd in 1980/1981 intersected multiple high-grade drill intervals including,

- 58m @ 0.10% Co from 48 metres in BHR1/1A including 7m @ 0.17% Co from 63 metres, 6m @ 0.15% Co from 81 metres, and 6m @ 0.15% Co from 95 metres

At Staurolite Ridge drilling undertaken by Broken Hill South Limited in the early 1960's intersected,

- 61m @ 0.18% Co from 94.5 metres in SR1 including 15.25m @ 0.29% Co from 125.05 metres

The Railway Extension target directly lies north northeast and along strike from Cobalt Blue's Railway Cobalt Deposit which has a JORC Indicated and Inferred Resource of 68Mt @ 755 CoEq ppm for 40.9Kt of contained cobalt (*see Cobalt Blue website*).

Cobalt mineralisation at the Deposit is also associated with the quartz - albite +/- pyrite host unit seen elsewhere on Rimfire's project, and geophysical (aeromagnetic and airborne EM) data plus geological data suggests that the host unit continues across the tenement boundary onto Rimfire's ground. The quartz - albite +/- pyrite unit is interpreted to have approximately 800 metres of strike length at Railway Extension although drilling is needed to confirm if the extension contains the same grade and extent as the Railway Deposit to the west.

Next Steps for Rimfire's 100% - owned copper and cobalt drill targets

At East Cowal, Rimfire is currently pursuing regulatory approval for drill testing of the LFB022 target, with one to two Reverse Circulation (RC) holes (500 metres) planned as an initial test of the demagnetised zone immediately south of the copper in saprolite anomaly.

Additionally, a traverse of aircore / RC holes to test the north south trending gravity ridge immediately south of the Porters Mount prospect (*owned by Plutonic Limited*) is planned to see whether the Porters Mount mineralisation continues onto Rimfire's tenure.

At the Valley, up to 5 RC/ diamond drill holes (2,500 metres) are planned as an initial test of the porphyry copper gold target. Importantly funds (\$185,675) from the NSW New Frontiers Cooperative Drilling Grant will partially offset the drilling program costs.

Drilling at East Cowal and the Valley is planned for the March 2023 Quarter although this is largely dependent on the cessation of the current NSW flooding crisis which has severely impacted local communities and infrastructure throughout Rimfire's project area.

At Broken Hill "Green View", Rimfire is currently negotiating a Land Access agreement to enable ground truthing (geological mapping and geochemical sampling) of the Bald Hill and Staurolite Ridge cobalt targets with follow up drilling potentially to commence during the June 2023 Quarter.

Exploration activities at East Cowal, the Valley and Broken Hill is part of a broader company strategy to accelerate exploration on Rimfire's 100% - owned projects and looks forward to providing further updates as new information comes to hand.

Information Sources

The following historic exploration reports have been reviewed in compiling this ASX Announcement.

1. *Clancy Exploration Limited's Annual Report for the period ending 21 May 2009 on EL6784 "Currumburrama").*
2. *Capital Mining Limited's Annual Report for the period ending 28 June 2008 on EL6591*
3. *NSW Government Minview website – Imola mineral occurrence 185390 and Silverstone mineral occurrence 185391.*

Information (including JORC tables) for the Valley and Broken Hill (Green View) projects has been previously reported in the following Rimfire ASX Announcements.

1. *Rimfire ASX Announcement dated 27th July 2021 – Valley Results support potential for nearby porphyry system.*
2. *Rimfire ASX Announcement dated 12th January 2022 – Rimfire awarded \$185K drilling grant at Valley.*
3. *Rimfire ASX Announcement dated 3 November 2022 – High grade cobalt targets identified at Broken Hill.*

Table 1 – East Cowal LFB022 target historic drill hole specifications and intercepts (calculated using a +400ppm copper lower cut-off grade). GDA94 Zone 55.

Hole ID	Easting	Northing	EOH (m)	Azi°	Dip°	From	Width	Copper ppm	Copper_%
CBAC020	559,551	6,248,815	132	0	-90	95	37	539	0.054
CBAC022	559,994	6,249,343	125	0	-90	82	35	735	0.074
CBAC023	559,403	6,249,431	140	0	-90	105	15	452	0.045
CBAC024	558,897	6,249,069	119	0	-90	95	15	606	0.061
CBAC035	560,326	6,250,164	88	0	-90	70	18	540	0.054
CBAC044	559,288	6,248,425	128	0	-90	114	8	762	0.076
CBAC045	559,549	6,248,815	144	0	-90	96	28	645	0.065
CBAC046	559,744	6,249,032	140	0	-90	102	38	631	0.063

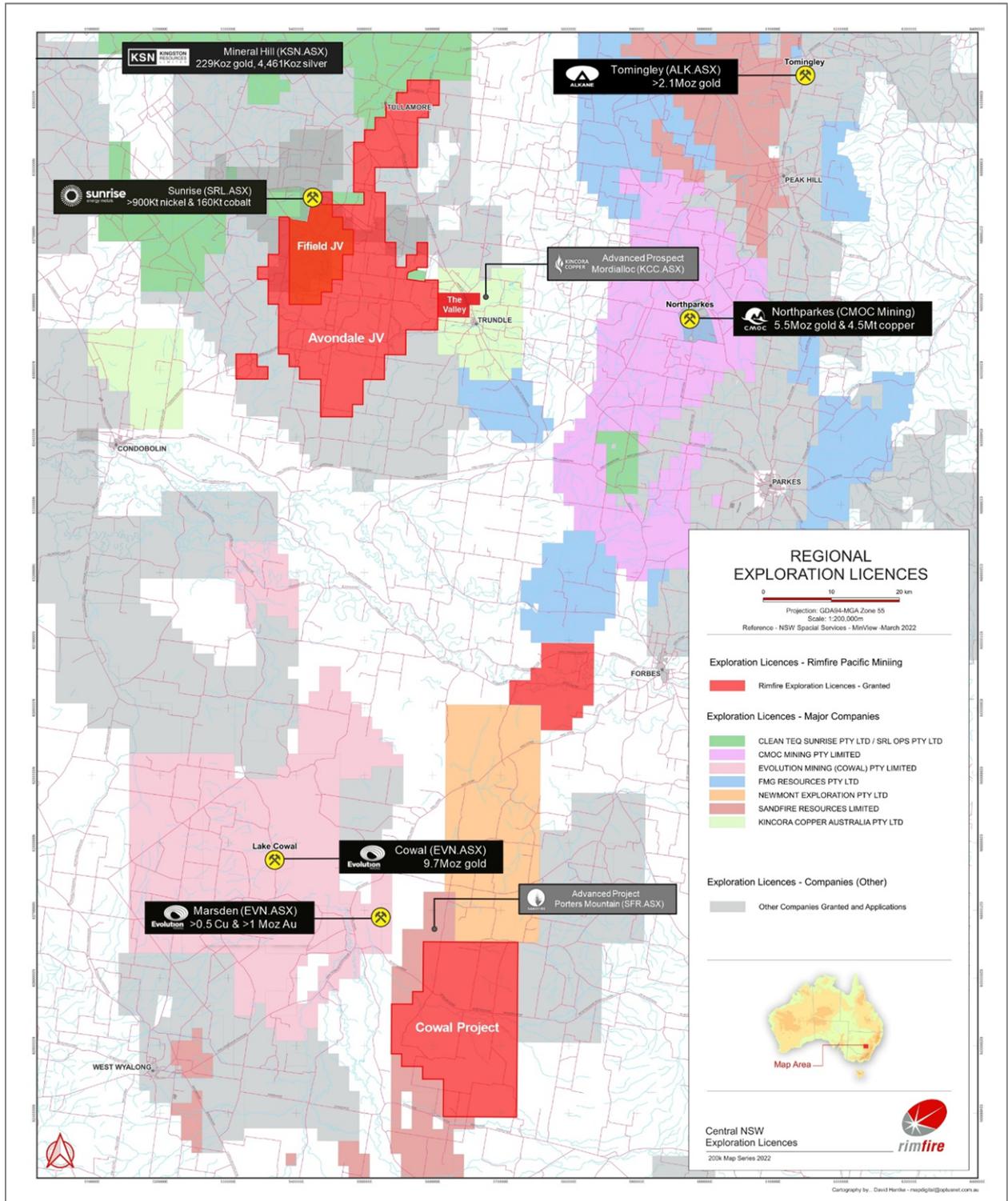


Figure 1: Location plan showing the Valley and East Cowlal Projects in relation to major competitors' active mines and key prospects.

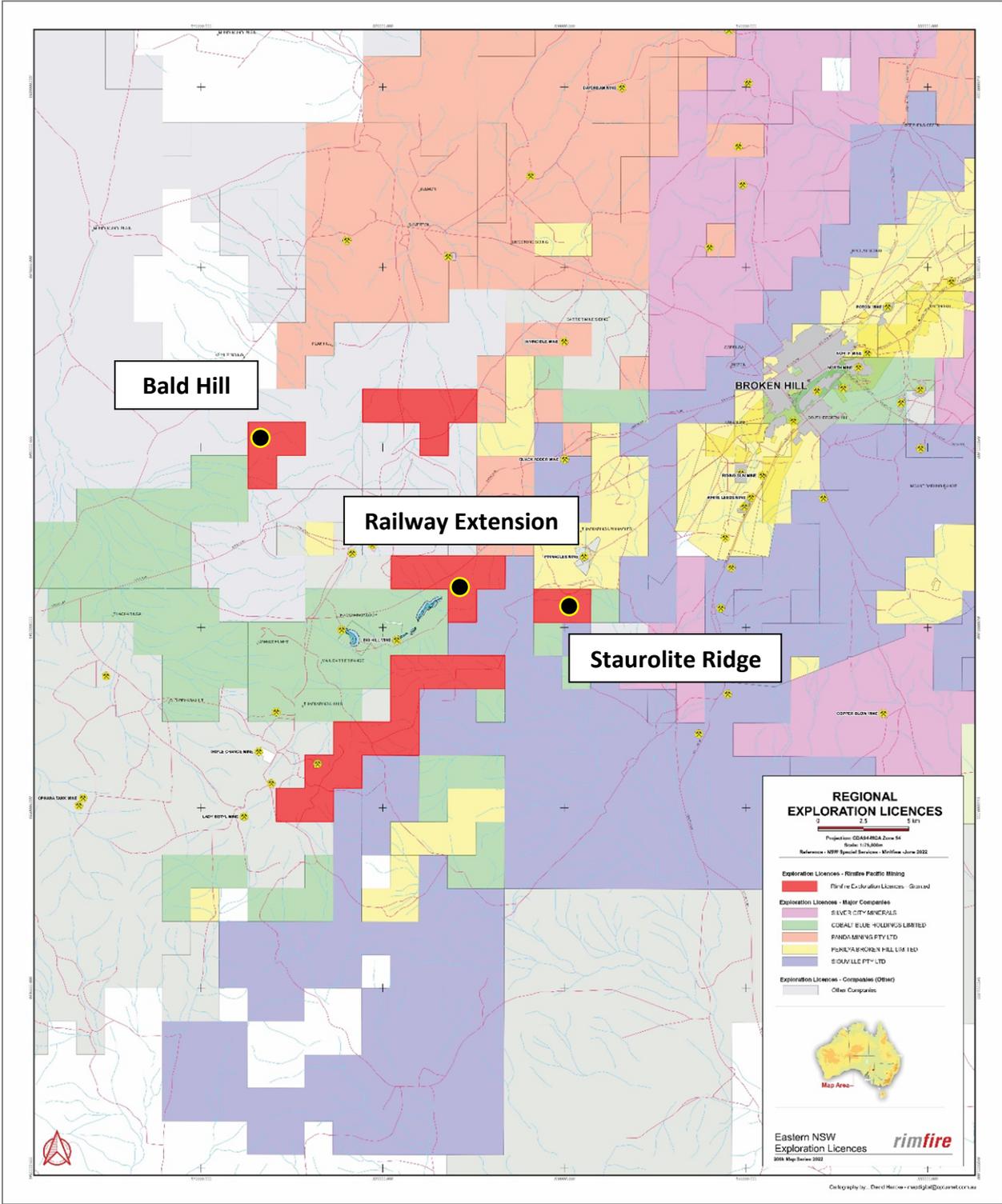


Figure 2: Broken Hill Cobalt Project (red blocks), regional tenement holders and location of cobalt targets referred to in this Announcement

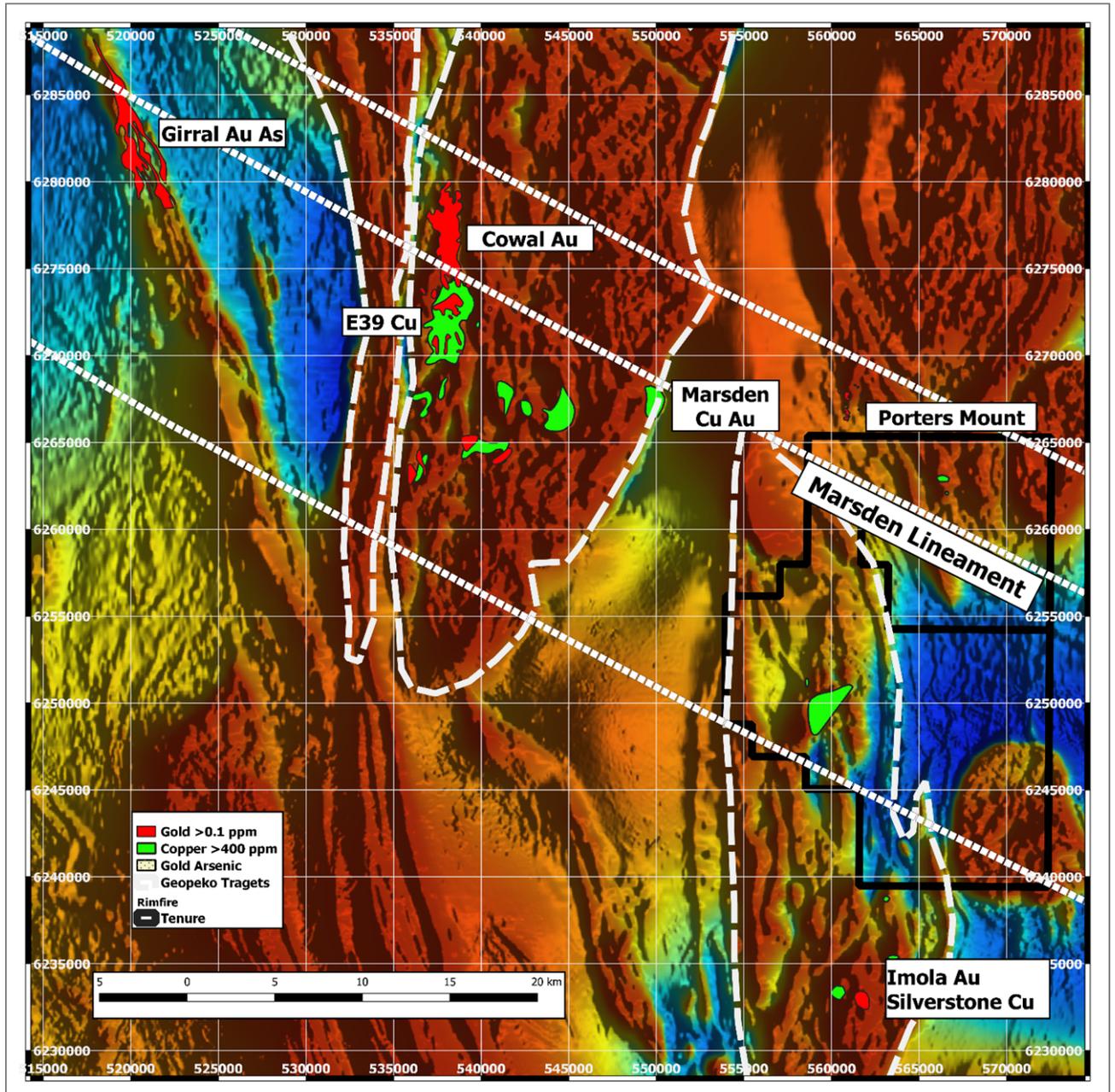


Figure 3: Cowal area aeromagnetic image showing Ordovician volcanic complexes (white dashed lines), key geochemical anomalies and structural features, and Rimfire tenure (black outline).

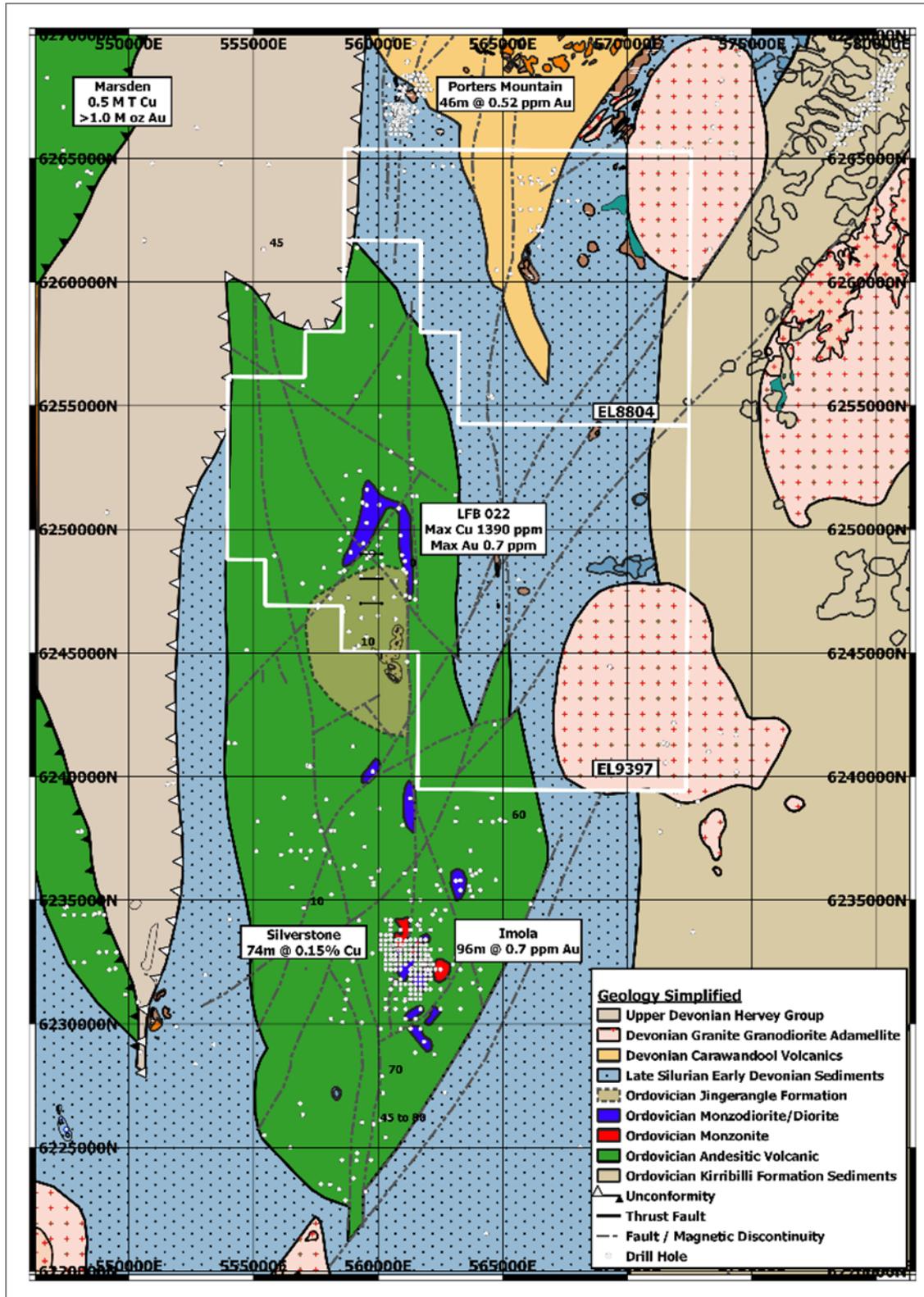


Figure 4: Rimfire East Cowal Project (white outline) on magnetics background. Key local prospects shown.

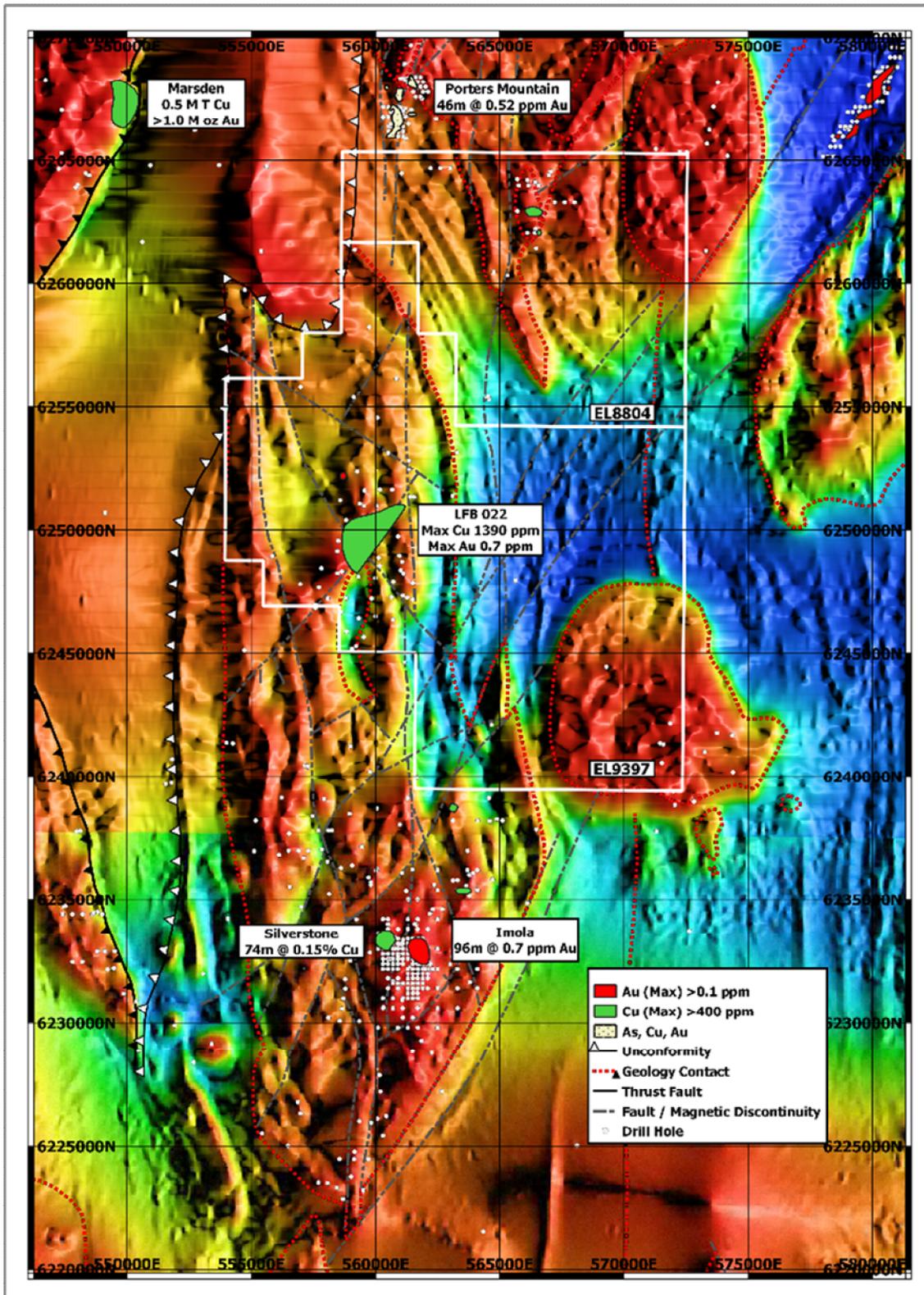


Figure 5: Rimfire East Cowal Project (white outline) on aeromagnetic imagery background. Key local prospects shown.

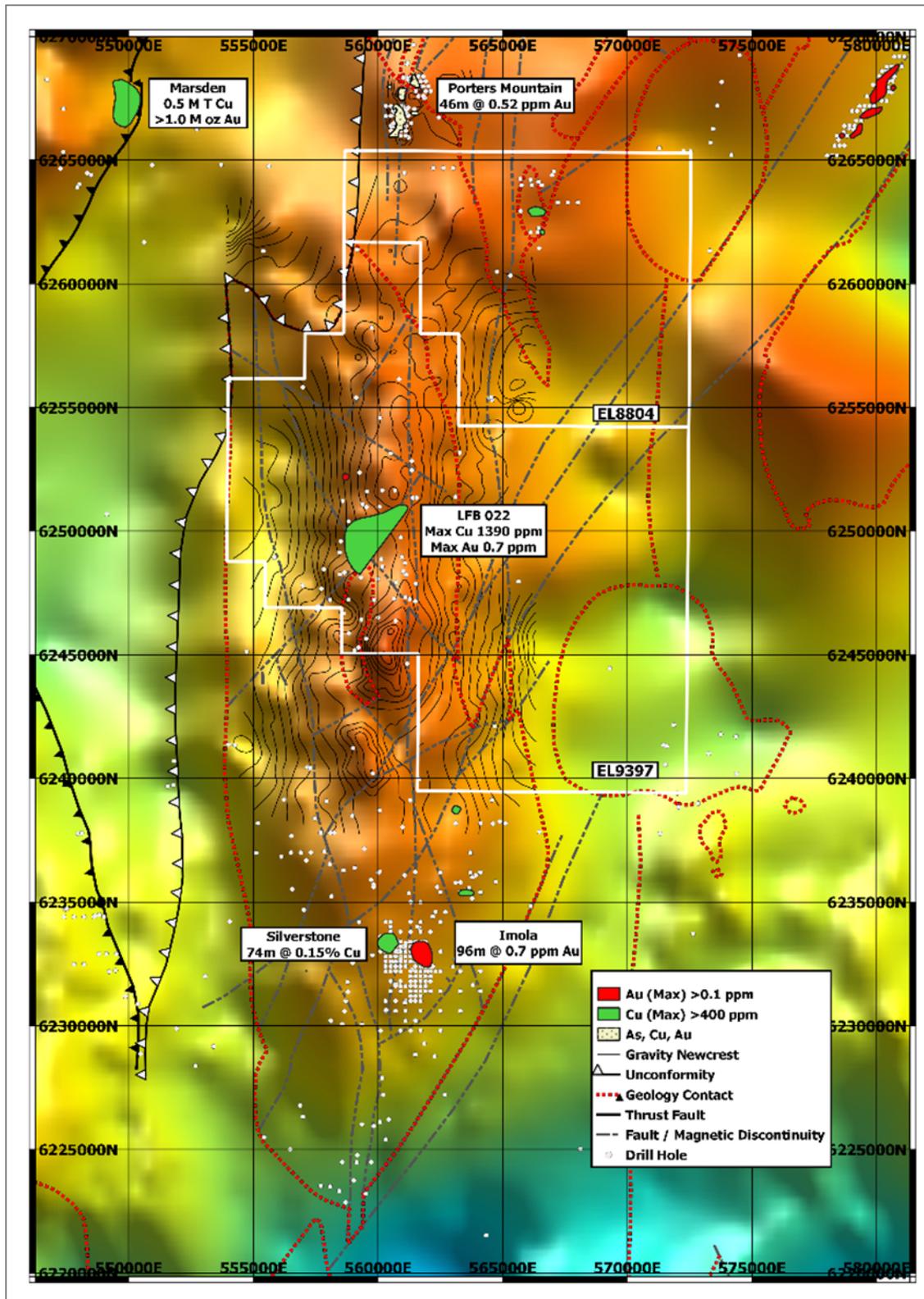


Figure 6: Rimfire East Cowl Project (white outline) on gravity imagery background. Key local prospects shown.

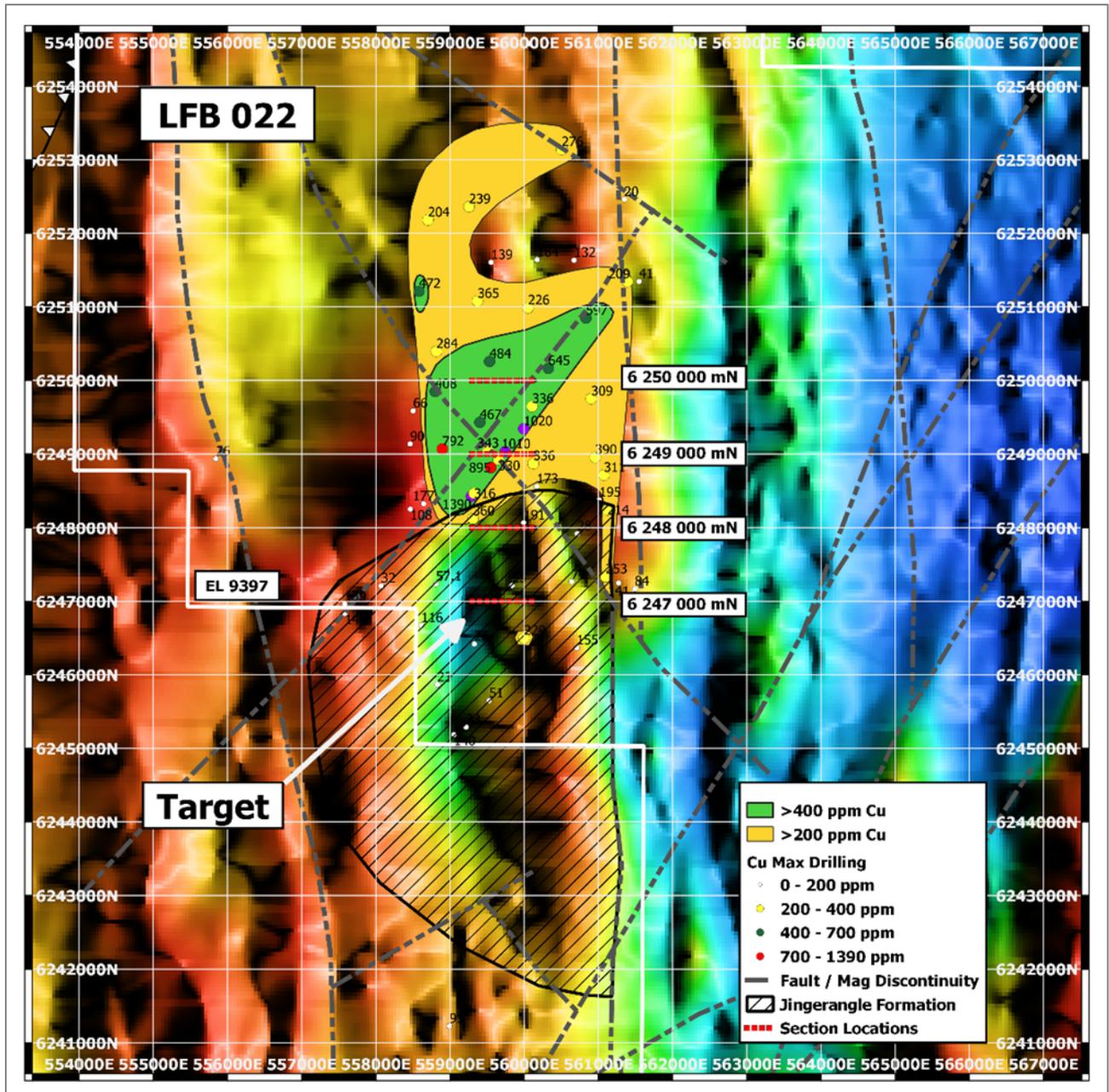


Figure 7: LFB022 target on gravity imagery background with drill collars (maximum downhole copper) and demagnetised zone.

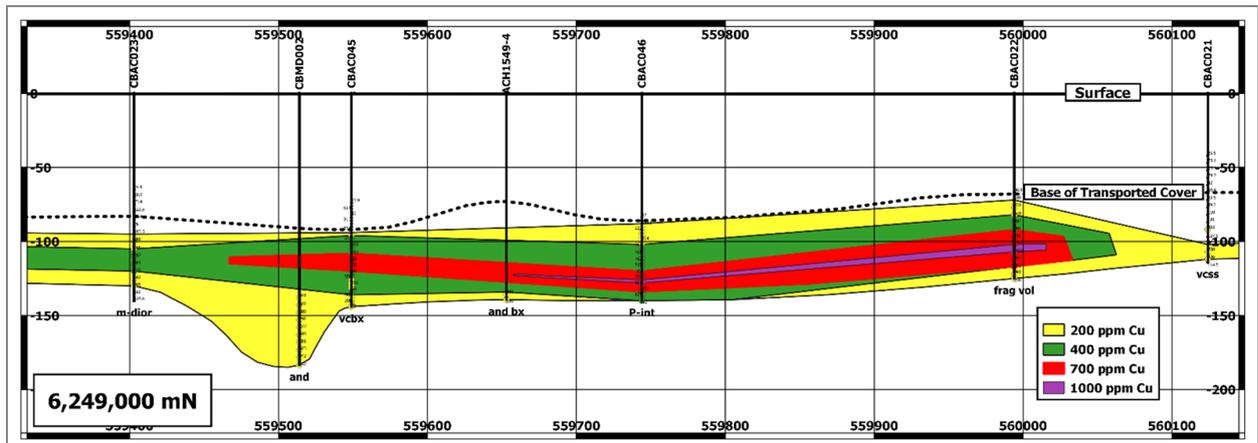


Figure 7: LFB022 target – 6,249,000mN section showing copper in saprolite anomaly beneath base of transported cover.

JORC Reporting (TO BE UPDATED)

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 historic air core drilling undertaken by Clancy Exploration Limited (Clancy) in late 2008 across portions of Rimfire's East Cowal Project (EL9397) and specifically the LFB022 target.</p> <p>Information regarding Clancy's exploration activities is largely sourced from Clancy Exploration Limited's Annual Report for the period ending 21 May 2009 on EL6784 "Currumburrama".</p> <p>Clancy undertook aircore drilling which produces drill chips and broken pieces of narrow diameter drill core.</p>
	Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used.	To ensure sample representativity, the entire aircore drillhole was composite sampled for analysis. It is not known what / of any QA/QC techniques were applied.
	<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>	<p>To ensure sample representativity, and because the geology of each drilling location is largely unknown (due to no previous drilling beneath the base of weathering), the entire drillhole was sampled and composite samples (intervals of 3 – 5 metres) were submitted to ALS Pty Ltd in Orange, NSW for analysis.</p> <p>Industry standard preparation and assay is conducted at ALS Pty Ltd in Orange, NSW, including sample crushing and pulverising prior to subsampling for an assay sample.</p>
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).	Historic drillholes reported in this ASX Announcement are aircore, the specifications of which are included in Table 1. Aircore hole locations are shown on the various figures included in this ASX Announcement. All holes were vertical and drilled to test basement lithologies
Drill sample recovery	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.
	Measures taken to maximise sample recovery	Due to the historic nature of this work, these

Criteria	JORC Code explanation	Commentary
	and ensure representative nature of the samples.	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.	Aircore 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 aircore 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.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Not Applicable as no diamond drill core was collected.
	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.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	For the aircore drilling, (either 5 metre or 2 metre) composited samples were collected and submitted to ALS for sample preparation and analysis using industry standard and appropriate techniques.
	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 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.	Samples were taken from the aircore drilling and submitted to ALS Orange for analysis. Samples were analysed for Au, Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn and Zr. Methods utilised were fire assay for Au, and four acid digestion with ICP-MS or ICP-AES finish for all other elements. Four acid digest is considered to be a 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 ASX Announcement.
	Nature of quality control procedures adopted	Due to the historic nature of this work, these

Criteria	JORC Code explanation	Commentary
	(e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	details are unknown.
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 Rimfire's Exploration Manager.
	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.	Due to the historic nature of this work, these details are unknown.
	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 GPS with a nominal accuracy +/- 5m.
	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 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 aircore 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.	Sample compositing (either 2 metre or 5 metre composite) has been applied.
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.	Reported results all from EL9397 which is wholly - owned by Rimfire Pacific Mining Limited. 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.	<p>Historic exploration on the East Cowal Project which began in 1970, has been sporadic and of limited scope, largely due to the extensive Quaternary cover and almost complete lack of outcrop.</p> <p>Geopeko conducted a regional exploration program for porphyry Cu systems over the Currumburrama Igneous Complex between 1981 and 1984. Exploration comprised reconnaissance drilling of magnetic features throughout the area.</p> <p>Newcrest conducted ground gravity surveying throughout the area in 1991.</p> <p>Goldminco Corporation held the project area in the earlier 2000's after inheriting projects from Auriongold. Auriongold flew high resolution aeromagnetic surveys that covered the southern portion of East Cowal Project. Goldminco's focus was on the Silverstone – Imola prospects which lie to the south of Rimfire's EL9397.</p>
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.
Drill hole Information	<p>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:</p> <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 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.

Criteria	JORC Code explanation	Commentary
	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.	A lower cut-off grade of 400ppm copper (0.04% copper) has been used in determining the reported intercepts. No top cuts have been used.
	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.	Length weighting has not been applied because all samples were of equal length.
	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 lying zone and given all the aircore holes are vertical, the significant intercepts are considered to represent true 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 ASX 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.

Criteria	JORC Code explanation	Commentary
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 Ltd (ASX: RIM) is an ASX-listed exploration company focused on exploring for critical minerals (nickel, cobalt, scandium, copper, gold, and PGEs) within the Lachlan Orogen and Broken Hill districts of NSW.

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 Project which is located immediately west and northwest of Broken Hill and covers a number of 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 Critical Materials (PGEs, Nickel, Copper & Cobalt) - which are essential for renewable energy, electrification, and green technologies.
 - ✓ The development ready Sunrise Energy Metals Ni-Co-Sc Project (ASX: SRL) is adjacent to both projects.
 - ✓ The Fifield Project hosts the historical Platina Lead mine, the largest producer of Platinum in Australia.

For more information on the 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](#)

[ASX Announcement: 30 June 2022 - Rimfire to receive \\$1.5M cash to vary Fifield Project Earn In](#)

[ASX Announcement: 4 August 2022 – Exploration Partner funding update](#)

ENDS

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

For further information please contact:

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Competent Persons Declaration

The information in the report to which this statement is attached that relates to Exploration and Resource Results is based on information reviewed and/or compiled by David Hutton who is deemed to be a Competent Person and is a Fellow of The Australasian Institute of Mining and Metallurgy.

Mr Hutton has over 30 years' experience in the minerals industry and is the Managing Director and CEO of Rimfire Pacific Mining. Mr Hutton has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr Hutton consents to the inclusion of the matters based on the information in the form and context in which it appears.

Forward looking statements Disclaimer

This document contains "forward looking statements" as defined or implied in common law and within the meaning of the Corporations Law. Such forward looking statements may include, without limitation, (1) estimates of future capital expenditure; (2) estimates of future cash costs; (3) statements regarding future exploration results and goals.

Where the Company or any of its officers or Directors or representatives expresses an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and the Company or its officers or Directors or representatives as the case may be, believe to have a reasonable basis for implying such an expectation or belief.

However, forward looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward looking statements. Such risks include, but are not limited to, commodity price fluctuation, currency fluctuation, political and operational risks, governmental regulations and judicial outcomes, financial markets, and availability of key personnel. The Company does not undertake any obligation to publicly release revisions to any "forward looking statement".