

27<sup>th</sup> July 2021

## Valley Results Support Potential for Nearby Porphyry System

### HIGHLIGHTS

- ✓ Drilling at The Valley intersects prospective Cu porphyry style host rocks analogous to other significant producing mines in the Lachlan Fold Belt
- ✓ A strong propylitic epidote-chlorite altered volcanoclastic unit was identified at ~350m vertical depth, interpreted as Raggatt Volcanics sequence which is equivalent to host rocks at Northparkes copper – gold mine
- ✓ Diamond core drilling at the Valley also intersected a zone of steeply dipping (near vertical) fault breccias assaying 10m @ 800ppm Cu from 97m downhole in the younger cover sequence above interpreted Raggatts Volcanics bedrock that may represent later leakage (remobilisation) from a deeper porphyry copper mineralisation.
- ✓ Reprocessed magnetic data highlights a cluster of interpreted intrusive rock bodies adjacent to recent drilling which are high priority porphyry style copper – gold drill targets analogous to Northparkes copper – gold mine.

Rimfire Pacific Mining NL ("Rimfire", "Company"; ASX Code "RIM") releases assay results from a deep diamond drillhole at its Valley Prospect that targeted a near surface Induced Polarisation (IP) geophysical feature and deeper porphyry copper style mineralisation of similar provenance as the Northparkes mine at The Valley Project (100% RIM) located in the Lachlan Fold Belt central NSW (Figures 1 and 2).

A deep diamond drill hole, FI2079 of 463m total downhole depth and a shallow diamond drill hole, FI2081 of 151m total downhole depth (Figure 3) were completed to test two targets:

- ✓ A deeper magnetic target interpreted as Ordovician volcanics that are related to porphyry style mineralisation in the region which occurs beneath younger Devonian sediments;
- ✓ The source of surface geochemical anomalism along a ferruginous ridge and an Induced Polarisation (IP) geophysical feature in same vicinity.

Only the assay results from FI2079 from 75m to 462.6m (End of Hole) are currently available. The magnetic target was intersected at ~350m vertical depth. The unit is a strongly epidote-chlorite altered volcanoclastic, polymictic conglomerate and is interpreted as representing the Raggatt volcanics (Ordovician). The source of the surface geochemical anomaly was delineated when a series of breccia fault zone were intersected and yielded anomalous copper (Cu) values of 26m @ 410ppm Cu downhole from 96m including 10m @ 800ppm Cu from 97m downhole or (Figures 4, 5, 6, 7 and Table 1).

A second diamond drill hole, FI2081 (150m total depth), was completed ~320m NW of FI2079 in order to test the lateral extent of the ferruginous ridge and an Induced Polarisation (IP) geophysical response. FI2081 is a scissor hole to FI2079 with the purpose of testing the steep structure as a host for copper mineralisation and determine if it was also responsible for the IP response. Very little copper mineralisation was observed and logging indicates the IP feature is associated with disseminated pyrite (iron sulphide) in younger sediments (Devonian). Assay results for this drill hole are pending and expected to be available next month.

In the context that this area was largely unexplored until last year, these results are very encouraging and bode well for the next phase of the program to vector into the source of a prominent mineralised centre.

### **Exploration Plans**

The next stage of the exploration program (Figure 8) involves a dual approach of:

- ✓ Drilling magnetic features which are potentially a cluster of porphyry intrusive centres, consisting of magnetic lows and highs with marginal zones which could host mineralization. A total of 6 diamond drillholes (RC precollars) totalling approximately 3,000m will be necessary to adequately test these zones.
- ✓ Testing a number of surface geochemical and alteration zones across the project area with focused aircore drilling. A total of 100 aircore holes totalling approximately 1,500m is planned to test these areas of interest.

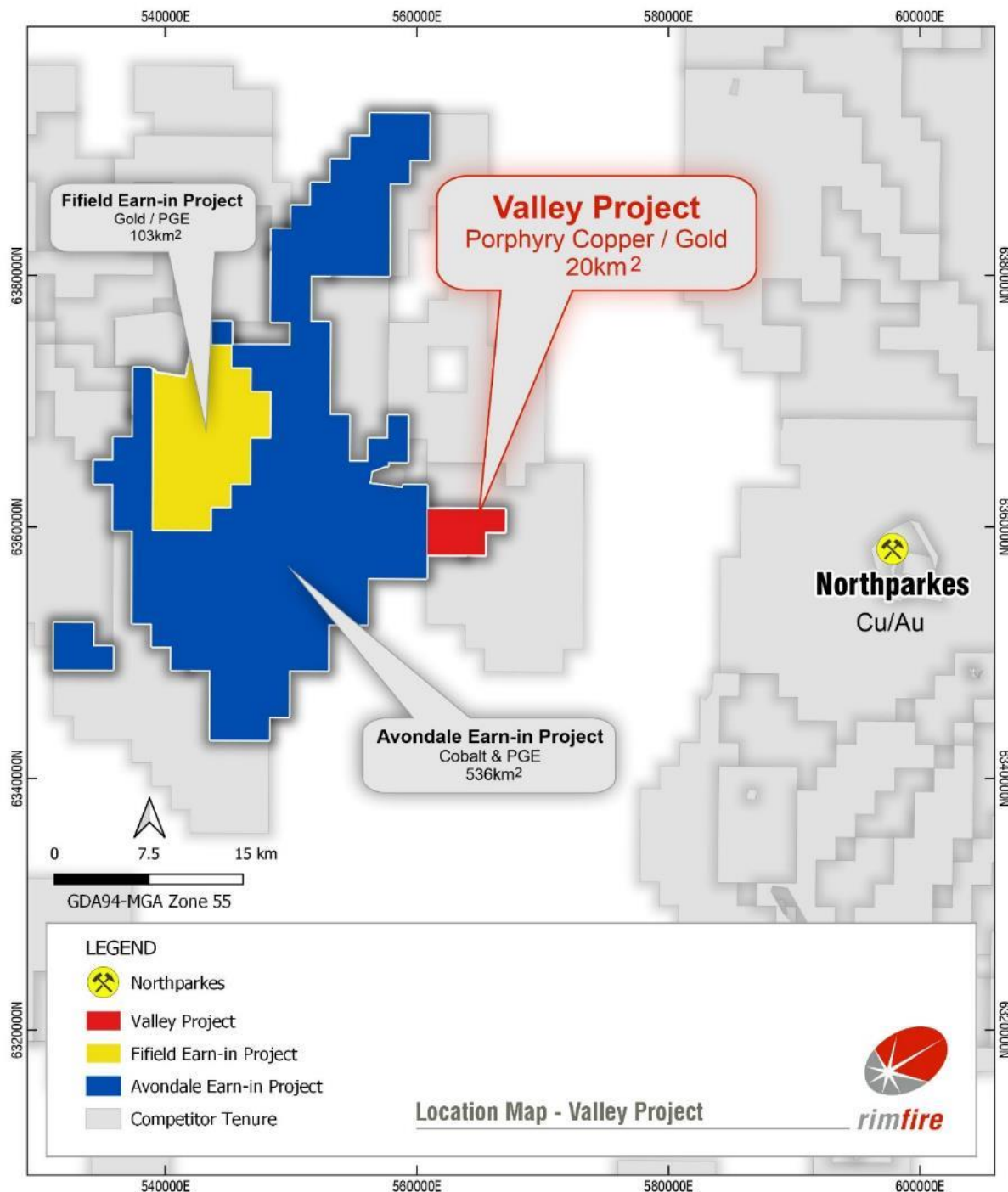
Rimfire Managing Director Craig Riley states:

"These encouraging recent results demonstrate that The Valley Project has many characteristics that are supportive of hosting a potentially significant porphyry Cu source in a similar setting to that observed at the Northparkes and Cadia mines. The company is excited about undertaking the next round of deeper drilling at The Valley Project to better vector to areas of mineralisation."

**This announcement is authorised for release to the market by the Board of Directors of Rimfire Pacific Mining NL. For further information, please contact:**

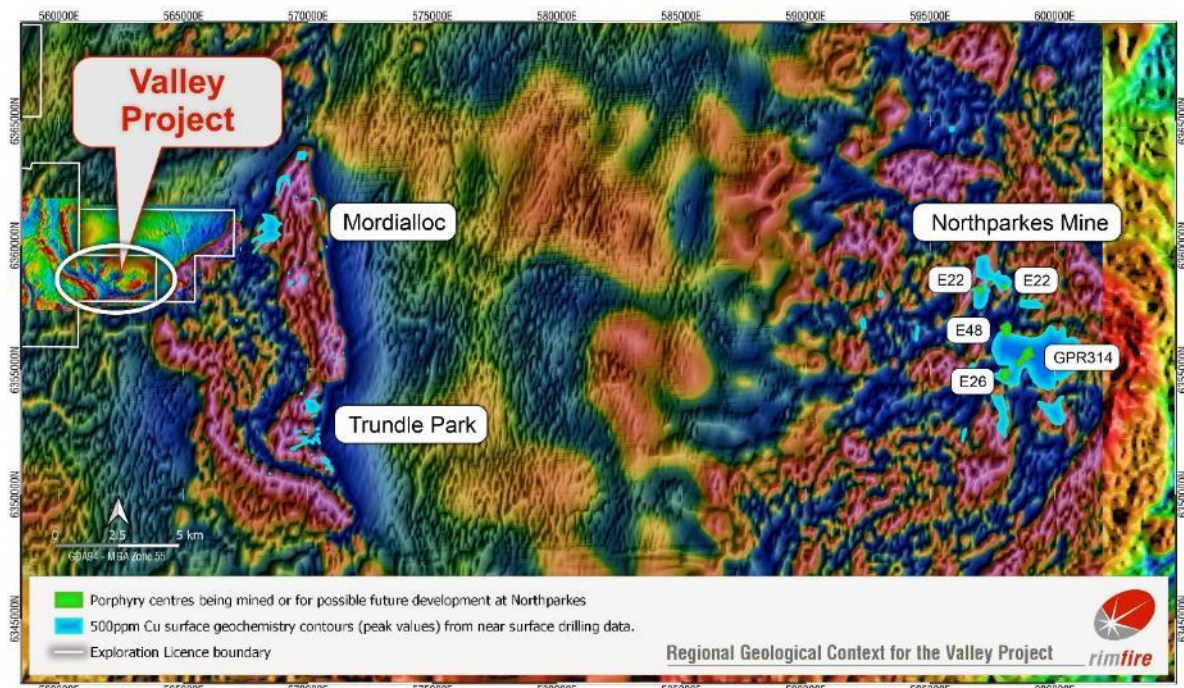
**Craig Riley**  
Managing Director

**Figure 1: Location Map Valley Project**



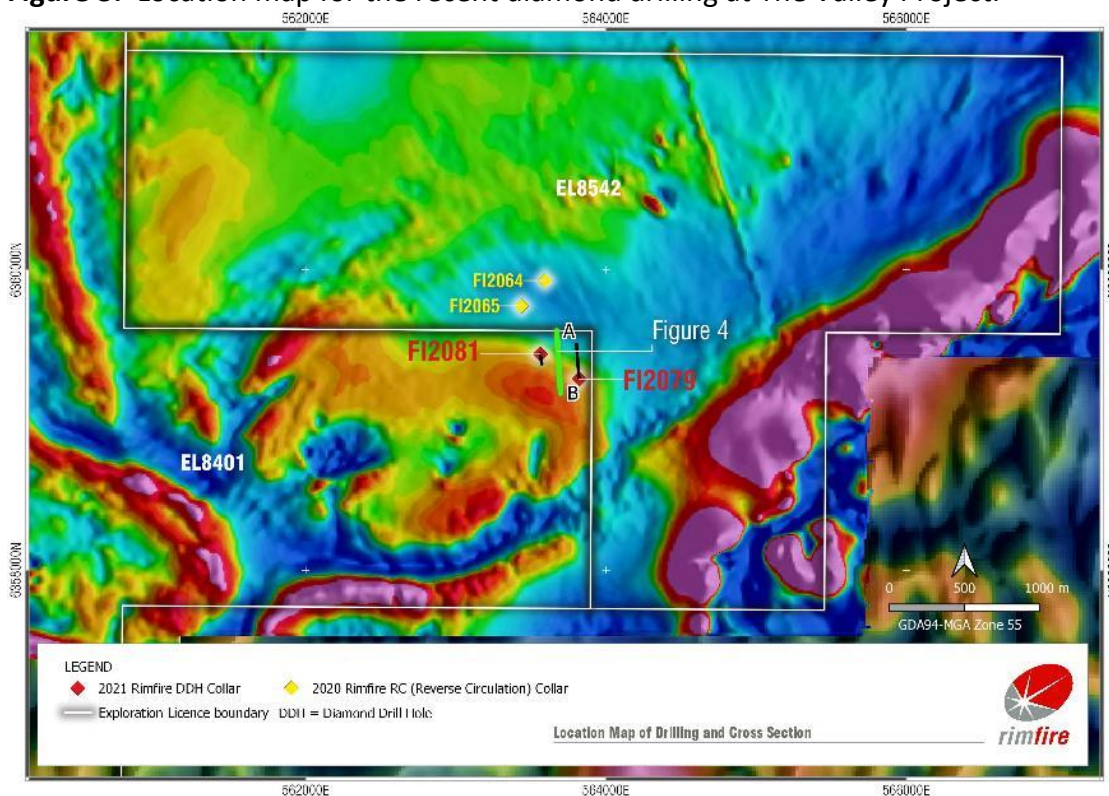


**Figure 2: Regional Geological Context for The Valley project**

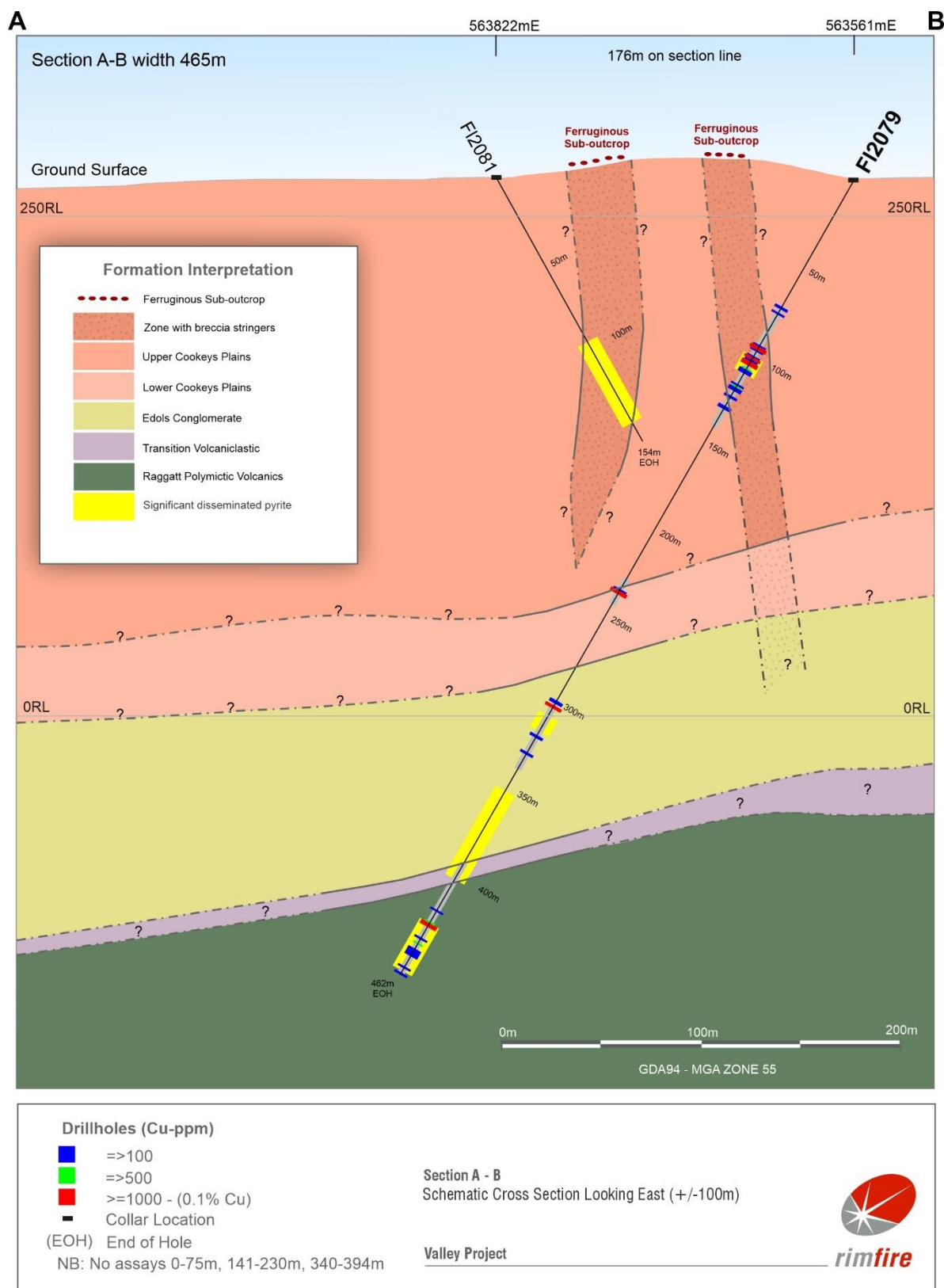


NB: Geochemical footprints of Northparkes Cu-Au porphyry and local porphyry prospects Trundle Park and Mordialloc are compiled from multiple open file sources. *Background image is aeromagnetic.*

**Figure 3: Location map for the recent diamond drilling at The Valley Project.**



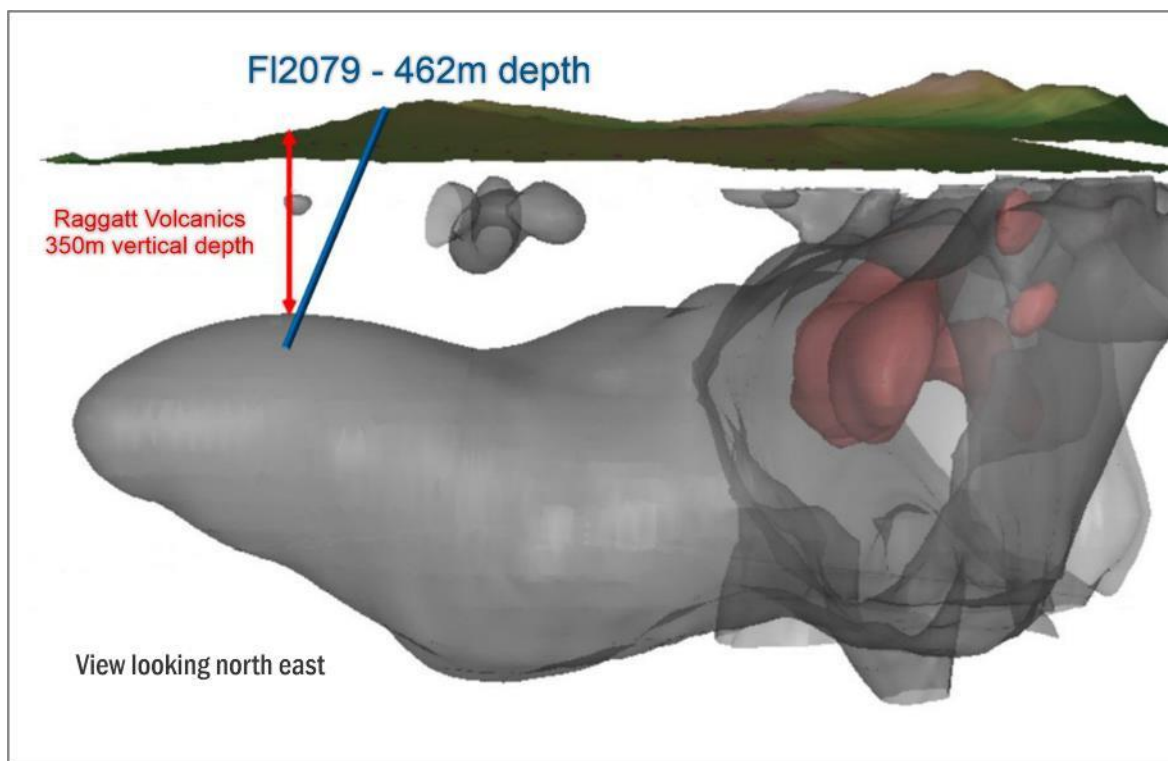
**Figure 4:** Cross Section Looking West Valley Core Holes FI2079 and FI2081.





Hole ID	Mag. Azimuth	Dip	End of Hole	GDA94	GDA94	RL
FI2079	346 deg	-59.6 deg	462.6m	563561mE	6359443mN	269m
FI2081	171 deg	-60.3 deg	150.7m	563822mE	6359273mN	268m

**Figure 5:** 3D magnetic model filtered to show the higher magnetic response in grey shape. Schematic depiction of drill hole FI2079 which penetrated into the magnetic zone and confirmed the depth of the Raggatt Volcanic unit.



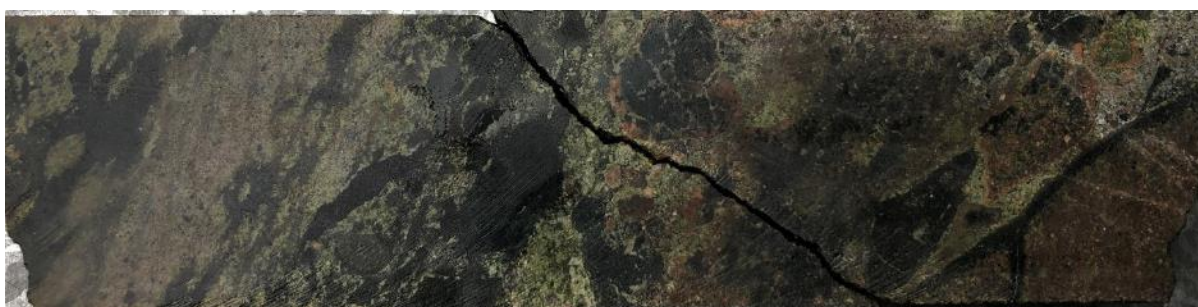
3D Magnetic Model – Valley Project



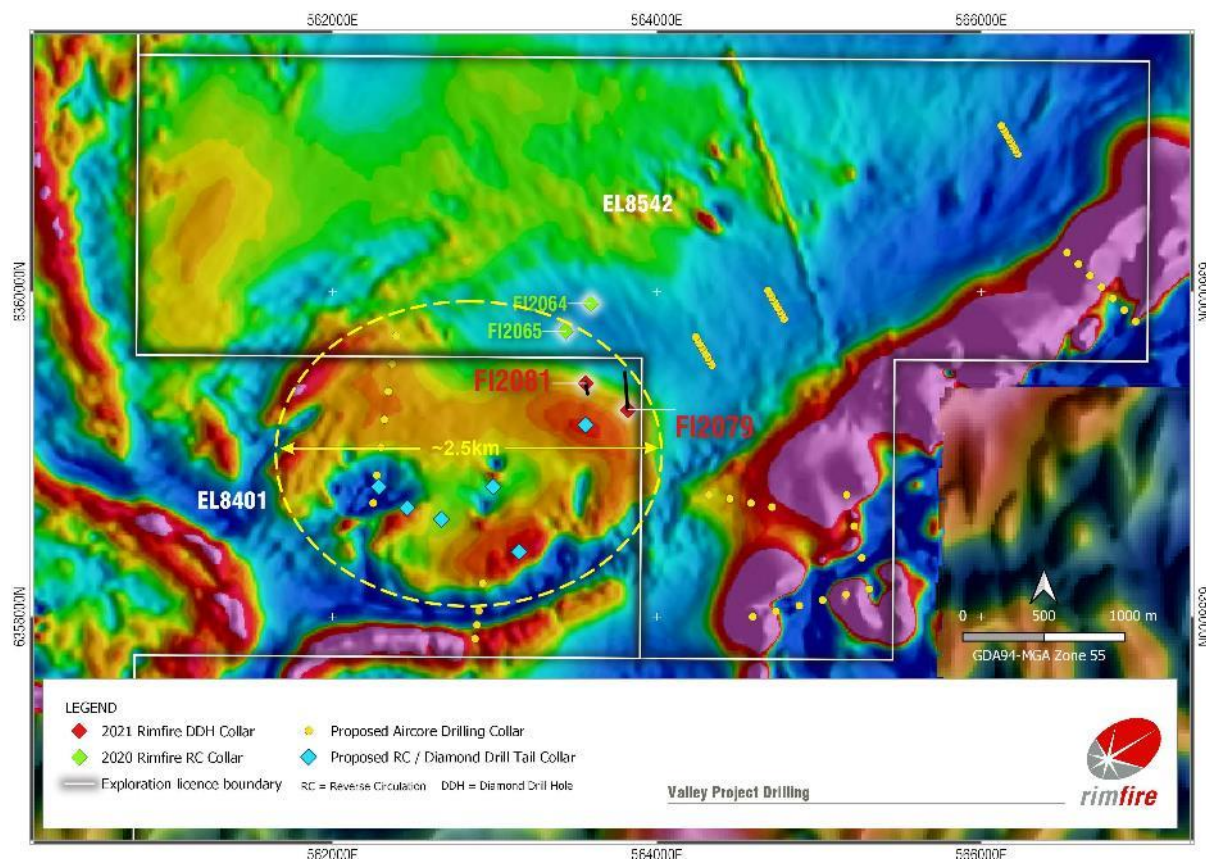
**Figure 6:** FI2079 core photo at 341.0m. Pink Kspar-quartz-carbonate infill irregular veins (<5mm). Associated fracture controlled pyrite with very minor chalcopyrite. The K-Spar vein indicates a Cu-rich hydrothermal event likely occurs in the Siluro- Devonian and this hole might be proximal to a copper zone. (NB: Assay, 1000 ppm Cu between 304 – 305m).  
*Vertical width of photo is ~60mm.*



**Figure 7:** FI2079 core photo at 440.35m: Spectacular Ordovician volcanoclastic polymictic conglomerate with strong propylitic epidote altered groundmass and selectively pink hematite dusted pebbles. This style of alteration is typical of the mineralised Ordovician. Minor disseminated and vein-controlled pyrite is associated with the epidote alteration. Epidote can comprise up to 20% of the rock volume.  
*Vertical width of photo is ~60mm.*



**Figure 8: Planned Valley Deep Diamond Drilling (RC precollars)**



NB: Magnetic ASVI image underlay where

- AS = analytic signal - generates an image of the data independent of magnetization direction (remanence) so anomalies are coincident with underlying source regardless of magnetization direction
- VI = vertical integration – reverses effects of derivative filters (like the AS), so the image can then be compared to a regular Total Magnetic Intensity (TMI) or Reduced to the Pole (RTP) image.



**Table 1 Assay Results for Diamond Drill Hole FI2079**

Eastings and Northings GDA 94 MGA Zone 55

From (m)	To (m)	mE	mN	Cu_ppm	From (m)	To (m)	mE	mN	Cu_ppm
74.0	75.0	563819.2	6359310.5	197	124.0	125.0	563817.0	6359335.5	57
75.0	76.0	563819.1	6359311.0	18	125.0	126.0	563817.0	6359336.0	275
76.0	77.0	563819.1	6359311.5	89	126.0	127.0	563816.9	6359336.5	12
77.0	78.0	563819.0	6359312.0	351	127.0	128.0	563816.9	6359337.0	6
78.0	79.0	563819.0	6359312.5	86	128.0	129.0	563816.9	6359337.5	6
79.0	80.0	563818.9	6359313.0	99	129.0	130.0	563816.8	6359338.0	7
80.0	81.0	563818.9	6359313.5	40	130.0	131.0	563816.8	6359338.5	12
81.0	82.0	563818.9	6359314.0	8	131.0	132.0	563816.7	6359339.0	153
82.0	83.0	563818.8	6359314.5	9	132.0	133.0	563816.7	6359339.5	48
83.0	84.0	563818.8	6359315.0	4	133.0	134.0	563816.6	6359340.0	14
84.0	85.0	563818.7	6359315.5	24	134.0	135.0	563816.6	6359340.5	12
85.0	86.0	563818.7	6359316.0	14	135.0	136.0	563816.5	6359341.0	31
86.0	87.0	563818.6	6359316.5	12	136.0	137.0	563816.5	6359341.5	18
87.0	88.0	563818.6	6359317.0	10	137.0	138.0	563816.4	6359342.0	14
88.0	89.0	563818.6	6359317.5	12	138.0	139.0	563816.4	6359342.5	7
89.0	90.0	563818.5	6359318.0	9	139.0	140.0	563816.3	6359343.0	9
90.0	91.0	563818.5	6359318.5	9	140.0	141.0	563816.3	6359343.5	6
91.0	92.0	563818.4	6359319.0	8	230.0	231.0	563811.9	6359388.2	49
92.0	93.0	563818.4	6359319.5	4	231.0	232.0	563811.8	6359388.7	31
93.0	94.0	563818.3	6359320.0	6	232.0	233.0	563811.8	6359389.2	6
94.0	95.0	563818.3	6359320.5	8	233.0	234.0	563811.7	6359389.7	6
95.0	96.0	563818.3	6359321.0	15	234.0	235.0	563811.7	6359390.2	77
96.0	97.0	563818.2	6359321.5	102	235.0	236.0	563811.6	6359390.7	32
97.0	98.0	563818.2	6359322.0	1170	236.0	237.0	563811.6	6359391.2	5
98.0	99.0	563818.1	6359322.5	471	237.0	238.0	563811.5	6359391.7	492
99.0	100.0	563818.1	6359323.0	21	238.0	239.0	563811.4	6359392.2	6460
100.0	101.0	563818.0	6359323.5	25	239.0	240.0	563811.4	6359392.7	61
101.0	102.0	563818.0	6359324.0	34	240.0	241.0	563811.3	6359393.2	14
102.0	103.0	563818.0	6359324.5	338	241.0	242.0	563811.3	6359393.7	30
103.0	104.0	563817.9	6359325.0	1050	242.0	243.0	563811.2	6359394.2	27
104.0	105.0	563817.9	6359325.5	341	243.0	244.0	563811.2	6359394.7	52
105.0	106.0	563817.8	6359326.0	3400	244.0	245.0	563811.1	6359395.2	21
106.0	107.0	563817.8	6359326.5	1170	300.0	301.0	563808.3	6359423.0	5
107.0	108.0	563817.7	6359327.0	58	301.0	302.0	563808.3	6359423.5	120
108.0	109.0	563817.7	6359327.5	151	302.0	303.0	563808.3	6359424.0	166
109.0	110.0	563817.7	6359328.0	696	303.0	304.0	563808.2	6359424.5	49
110.0	111.0	563817.6	6359328.5	318	304.0	305.0	563808.2	6359425.0	1100
111.0	112.0	563817.6	6359329.0	112	305.0	306.0	563808.2	6359425.5	7
112.0	113.0	563817.5	6359329.5	24	306.0	307.0	563808.1	6359426.0	10
113.0	114.0	563817.5	6359330.0	54	307.0	308.0	563808.1	6359426.5	4
114.0	115.0	563817.4	6359330.5	37	308.0	309.0	563808.0	6359427.0	5
115.0	116.0	563817.4	6359331.0	23	309.0	310.0	563808.0	6359427.5	12
116.0	117.0	563817.4	6359331.5	47	310.0	311.0	563808.0	6359428.0	7
117.0	118.0	563817.3	6359332.0	24	311.0	312.0	563807.9	6359428.5	12
118.0	119.0	563817.3	6359332.5	220	312.0	313.0	563807.9	6359429.0	6
119.0	120.0	563817.2	6359333.0	540	313.0	314.0	563807.9	6359429.6	5
120.0	121.0	563817.2	6359333.5	114	314.0	315.0	563807.8	6359430.1	12
121.0	122.0	563817.2	6359334.0	119	315.0	316.0	563807.8	6359430.6	23
122.0	123.0	563817.1	6359334.5	20	316.0	317.0	563807.7	6359431.1	19
123.0	124.0	563817.1	6359335.0	18	317.0	318.0	563807.7	6359431.6	4

# ASX Announcement



From (m)	To (m)	mE	mN	Cu_ ppm	From (m)	To (m)	mE	mN	Cu_ ppm
318.0	319.0	563807.7	6359432.1	5	422.0	423.0	563805.3	6359485.3	151
319.0	320.0	563807.6	6359432.6	6	423.0	424.0	563805.3	6359485.8	8
320.0	321.0	563807.6	6359433.1	48	424.0	425.0	563805.3	6359486.3	2
321.0	322.0	563807.5	6359433.6	109	425.0	426.0	563805.3	6359486.9	9
322.0	323.0	563807.5	6359434.1	6	426.0	427.0	563805.3	6359487.4	4
323.0	324.0	563807.5	6359434.6	4	427.0	428.0	563805.2	6359487.9	29
324.0	325.0	563807.4	6359435.1	3	428.0	429.0	563805.2	6359488.4	44
325.0	326.0	563807.4	6359435.6	5	429.0	430.0	563805.2	6359488.9	533
326.0	327.0	563807.4	6359436.1	16	430.0	431.0	563805.2	6359489.5	1100
327.0	328.0	563807.3	6359436.6	37	431.0	432.0	563805.2	6359490.0	26
328.0	329.0	563807.3	6359437.1	5	432.0	433.0	563805.2	6359490.5	4
329.0	330.0	563807.2	6359437.6	4	433.0	434.0	563805.2	6359491.0	12
330.0	331.0	563807.2	6359438.1	4	434.0	435.0	563805.2	6359491.5	25
331.0	332.0	563807.2	6359438.6	309	435.0	436.0	563805.2	6359492.1	72
332.0	333.0	563807.1	6359439.1	4	436.0	437.0	563805.2	6359492.6	5
333.0	334.0	563807.1	6359439.6	3	437.0	438.0	563805.2	6359493.1	17
334.0	335.0	563807.1	6359440.1	4	438.0	439.0	563805.2	6359493.6	477
335.0	336.0	563807.1	6359440.7	3	439.0	440.0	563805.1	6359494.1	61
336.0	337.0	563807.0	6359441.2	16	440.0	441.0	563805.1	6359494.6	45
337.0	338.0	563807.0	6359441.7	28	441.0	442.0	563805.1	6359495.2	723
337.0	338.0	563807.0	6359441.7	28	442.0	443.0	563805.1	6359495.7	61
338.0	339.0	563807.0	6359442.2	6	443.0	444.0	563805.1	6359496.2	65
339.0	340.0	563806.9	6359442.7	4	444.0	445.0	563805.1	6359496.7	180
394.0	395.0	563805.6	6359470.8	3	445.0	446.0	563805.1	6359497.2	277
395.0	396.0	563805.6	6359471.3	2	446.0	447.0	563805.1	6359497.8	105
396.0	397.0	563805.6	6359471.8	4	447.0	448.0	563805.1	6359498.3	233
397.0	398.0	563805.6	6359472.4	5	448.0	449.0	563805.1	6359498.8	311
398.0	399.0	563805.6	6359472.9	4	449.0	450.0	563805.1	6359499.3	58
399.0	400.0	563805.6	6359473.4	4	450.0	451.0	563805.1	6359499.8	33
400.0	401.0	563805.6	6359473.9	4	451.0	452.0	563805.1	6359500.4	24
401.0	402.0	563805.5	6359474.4	12	452.0	453.0	563805.0	6359500.9	73
402.0	403.0	563805.5	6359474.9	16	453.0	454.0	563805.0	6359501.4	39
403.0	404.0	563805.5	6359475.5	16	454.0	455.0	563805.0	6359501.9	38
404.0	405.0	563805.5	6359476.0	27	455.0	456.0	563805.0	6359502.4	140
405.0	406.0	563805.5	6359476.5	6	456.0	457.0	563805.0	6359503.0	25
406.0	407.0	563805.5	6359477.0	20	457.0	458.0	563805.0	6359503.5	24
407.0	408.0	563805.5	6359477.5	3	458.0	459.0	563805.0	6359504.0	100
408.0	409.0	563805.5	6359478.1	3	459.0	460.0	563805.0	6359504.5	7
409.0	410.0	563805.4	6359478.6	29	460.0	461.0	563805.0	6359505.0	25
410.0	411.0	563805.4	6359479.1	68	461.0	462.0	563805.0	6359505.6	81
411.0	412.0	563805.4	6359479.6	3	462.0	462.6	563805.0	6359506.0	86
412.0	413.0	563805.4	6359480.1	82	454.0	455.0	563805.0	6359501.9	38
413.0	414.0	563805.4	6359480.6	14	455.0	456.0	563805.0	6359502.4	140
414.0	415.0	563805.4	6359481.2	10	456.0	457.0	563805.0	6359503.0	25
415.0	416.0	563805.4	6359481.7	7	457.0	458.0	563805.0	6359503.5	24
416.0	417.0	563805.4	6359482.2	6	458.0	459.0	563805.0	6359504.0	100
417.0	418.0	563805.3	6359482.7	10	459.0	460.0	563805.0	6359504.5	7
418.0	419.0	563805.3	6359483.2	4	460.0	461.0	563805.0	6359505.0	25
419.0	420.0	563805.3	6359483.7	2	461.0	462.0	563805.0	6359505.6	81
420.0	421.0	563805.3	6359484.3	77	462.0	462.6	563805.0	6359506.0	86
421.0	422.0	563805.3	6359484.8	41					

Assay Techniques: Au 30g Fire Assay with AA finish (Au-AA23 Code)  
 ns = no sample  
 Base Metals Aqua Regia digest ICP-AES (ME-ICP41 Code)

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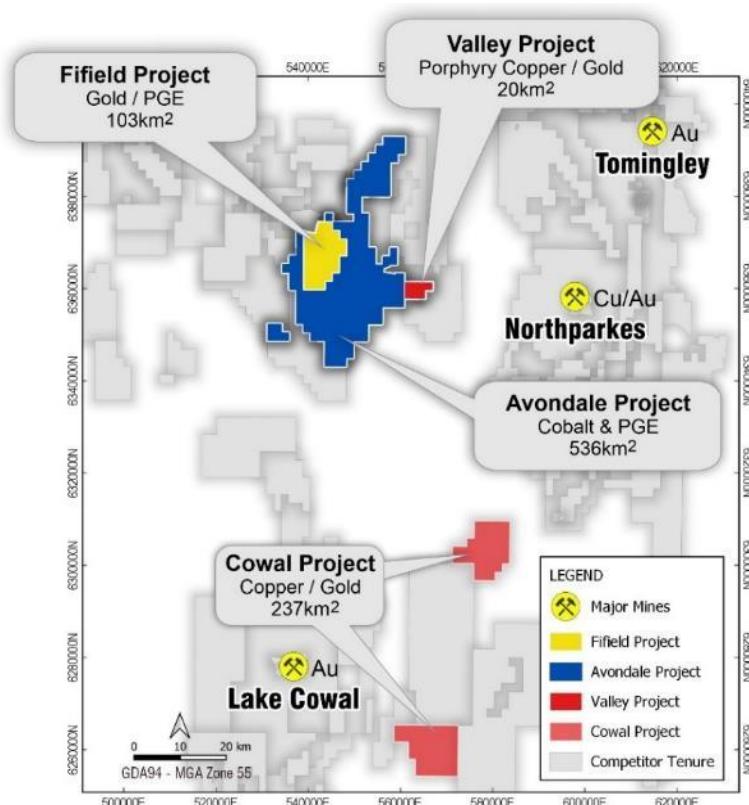
## **ABOUT RIMFIRE**

Rimfire Pacific Mining (ASX:RIM) is an ASX listed exploration company focused on projects in the Lachlan Fold Belt in central NSW. The company has a track record of successful exploration and asset monetisation through partnership agreements.

Rimfire currently has four key project areas under management in the Lachlan Fold Belt:

1. **Fifield Project - Gold / PGE's**
  - ✓ GPR earning up to 50.1%, RIM free carried for development.
  - ✓ Maiden JORC 2012 resource of 125Koz gold + 7.9Moz silver.
  - ✓ Recent drilling at the Transit Prospect returned 55m @ 0.94g/t gold with the final 1m intersection increasing to 9.98g/t gold.
  - ✓ Next stage of drilling at Transit is planned to commence in June 2021.
2. **Avondale Project – Cobalt, PGE's and Gold**
  - ✓ GPR earning up to 75%
  - ✓ Avondale and KARS prospects located in the southern area of the project area and prospective for Cobalt and PGE's respectively.
3. **The Valley – Porphyry Copper / Gold, RIM 100%**
  - ✓ Located 5km west of Kincora Copper/RareX Mordialloc porphyry copper-gold target.
  - ✓ Recently completed a drilling program to test near surface IP targets and interpreted Ordovician basement that hosts regional major discoveries such as Northparkes, Cadia and Cowal.
  - ✓ Results are expected in June, and these will influence the next steps in the program.
4. **Cowal Project - Copper / Gold, RIM 100%.**
  - ✓ Located to the east of Evolution's Lake Cowal Copper / Gold mine
  - ✓ Little exploration has occurred on these tenements and prospective for Copper / Gold
  - ✓ Located in Forbes moratorium area for new Exploration Licence applications

**Rimfire's Lachlan Fold Belt Projects**





## **Competent Persons Declaration**

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

*Mr Riley has over 25 years' experience in the mineral and mining industry. Mr Riley is employed by Rimfire Pacific Mining (RIM) and is an employee of the Company. Craig Riley has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Craig Riley consents to the inclusion of the matters based on the information in the form and context in which it appears.*

## **Forward looking statements Disclaimer**

*This document contains "forward looking statements" as defined or implied in common law and within the meaning of the Corporations Law. Such forward looking statements may include, without limitation, (1) estimates of future capital expenditure; (2) estimates of future cash costs; (3) statements regarding future exploration results and goals. Where the Company or any of its officers or Directors or representatives expresses an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and the Company or its officers or Directors or representatives as the case may be, believe to have a reasonable basis for implying such an expectation or belief. However, forward looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward looking statements. Such risks include, but are not limited to, commodity price fluctuation, currency fluctuation, political and operational risks, governmental regulations and judicial outcomes, financial markets and availability of key personnel. The Company does not undertake any obligation to publicly release revisions to any "forward looking statement",*



**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.	<i>DDH (Diamond Core Drill Hole)</i> Diamond core drilling was undertaken by Durock Drilling Pty Ltd. All of the diamond drill core is placed in core trays and labelled with metre depth markers by the drilling team. Drill run length, recovered core length and core loss length are recorded on wooden core blocks placed in the trays. The core recoveries and RQD are measured by the geologist. The core is orientated into a direction that best matches geological continuity. A line is drawn down the long axis of the core and then cut in half down this line using a diamond saw. One half of the core is placed into labelled calico bags at 1m intervals.
	Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used.	<i>DDH (Diamond Core Drill Hole)</i> Diamond core drill runs were carefully measured by the drilling team and again by the geologist before processing to define the core recoveries and core loss and the total true length drilled. 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. Where 'industry standard' work done this is relatively simple (e.g. 'RC 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.	<i>DDH (Diamond Core Drill Hole)</i> Core was cut in half for HQ and samples collected at 1m intervals with half retained in core trays. Industry standard preparation at ALS, Orange, including sample crushing and pulverising prior to subsampling for Au fire assay (30g) and aqua regia digest ICP-ME41 to yield 35 elements.
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).	<i>DDH (Diamond Core Drill Hole)</i> All diamond core holes were at 60 angle orientation using triple tube HQ3 wireline bit producing 61.1mm diameter cores. All core was orientated where material was competent enough to measure.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Core loss was identified by drillers and calculated by geologists when logging. Generally recovery was good with any loss usually in portions of the oxide zone or strongly fractured shear zones
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	<i>DDH (Diamond Core Drill Hole)</i> HQ3 triple tube coring was used at all times to maximise core recovery. In broken ground the drillers reduced the length of the drill runs and added more drill muds and slowed penetration rate.
	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.	<i>DDH (Diamond Core Drill Hole)</i> There is no known relationship between sample recovery and grade

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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.	<i>DDH (Diamond Core Drill Hole)</i> Each one metre interval is geologically logged for characteristics such as lithology, weathering, alteration (type, character and intensity), veining (type, character and intensity) and mineralisation (type, character and volume percentage)
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	<i>DDH (Diamond Core Drill Hole)</i> Logging was qualitative with visual estimates of characteristics. All drill holes were geologically logged by qualified geologists into Logchief program and uploaded to 3 <sup>rd</sup> party database host.
	The total length and percentage of the relevant intersections logged.	<i>DDH (Diamond Core Drill Hole)</i> All drill holes were logged in full
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	<i>DDH (Diamond Core Drill Hole)</i> Core sawn with half core samples submitted for analysis
	If non-core, whether riffled, tube sampled, rotary split, etc and if sampled wet or dry.	<i>DDH (Diamond Core Drill Hole)</i> Not Applicable
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<i>DDH (Diamond Core Drill Hole)</i> The sample collection methodology was considered suitable (refer to sampling techniques section above).
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	<i>DDH (Diamond Core Drill Hole)</i> Care was taken to cut core along a straight line down the axis of the core and split all samples evenly by always sampling on same side or quadrant of core in core box. Further sub-sampling is undertaken in controlled laboratory conditions.
	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.	<i>DDH (Diamond Core Drill Hole)</i> 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.	1m sample intervals of cut HQ core are representative size of at least 3-5 kg.
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.	A reputable industry analytical laboratory with internal controls and processes was utilised for all assaying using industry accepted assaying methodology and techniques. Gold was assayed via Aqua Regia which is considered a partial method of dissolution with a 30g fire assay finish. A 35 Multielement Aqua Regia Digest with ICP-AES finish was used for a range of significant elements
	For geophysical tools, spectrometers, handheld XRF (fpXRF) etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	<i>DDH (Diamond Core Drill Hole)</i> All holes were surveyed with a downhole Reflex camera
	Quality control procedures (e.g. standards, blanks, duplicates, external laboratory checks) and if acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	<i>DDH (Diamond Core Drill Hole)</i> A blank and a recognized Standard were inserted in the sample stream. The reported results for these samples are as expected.



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Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	All reported mineralised results have been reviewed by at least 2 company personnel.
	The use of twinned holes.	Not applicable
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Data was recorded on field sheets at the sample site. Field data was entered into an excel spreadsheet and saved on Cloud server. Assay results were reported in a digital format suitable for direct loading into a Datashed database with a 3 <sup>rd</sup> party expert consulting group.
	Discuss any adjustment to assay data.	No adjustments have been made.
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.	Drill collar locations are recorded using handheld Garmin GPS expected accuracy +/- 5m.
	Specification of the grid system used.	GDA94 zone55.
	Quality and adequacy of topographic control.	DDH (Diamond Core Drill Hole) Handheld GPS was used to measure RL.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Data spacing is controlled by the interpretation of the prospect and potential orientation of mineralisation. For data discussed in this report spacing varies from 10 to 100 metres.
	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.	DDH (Diamond Core Drill Hole) Not applicable – holes were for exploration purpose
	Whether sample compositing has been applied.	DDH (Diamond Core Drill Hole) No compositing 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.	DDH (Diamond Core Drill Hole) Due to this being the first DDH in this prospect it was not possible to accurately define the orientation of the lithology and mineralisation trend. The holes were drilled at a relative low angle to the lithology and mineralisation trend.
	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.	DDH (Diamond Core Drill Hole) Not applicable
Sample security	The measures taken to ensure sample security.	DDH (Diamond Core Drill Hole) 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.	DDH (Diamond Core Drill Hole) No audits or reviews completed.

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	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 EL8401 at Trundle, NSW which is held 100% by Rimfire Pacific Mining NL. All samples were taken on Private Freehold Land. No native title claims exist. 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.
<b>Exploration done by other parties</b>	Acknowledgment and appraisal of exploration by other parties.	No results are relied on from other parties in this report.
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	<i>DDH</i> The 2 DDH's were drilled at the target called "The Valley" for dual purpose of testing the depth extent of surface geochemistry anomalism and a deeper magnetic zone. The near surface mineralisation encountered was Cu within a fault zone and interpreted as leakage from a deeper source. The deeper magnetic target is a porphyry style hosted in Raggatt Volcanics similar setting to the host rocks at North Parkes mine ~35km to the east.
<b>Drill hole Information</b>	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"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	The drillhole location (mE, mN and RL) data for all holes are included within the report. Locational data is GDA94 – MGA Zone 55. RL is elevation above sea level in metres
	dip and azimuth of the hole	All dip and azimuth information is included with drillhole locations within the report. Azimuths are magnetic.
	down hole length and interception depth	If applicable downhole mineralised intercepts are reported as downhole lengths
	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

Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	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 cuts have been applied to assay data and bulked averages have been used for reporting of Exploration Results.
	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 with typical examples should be shown in detail.	All relevant grade data has been provided in Table 1 and any averages are bulked intervals
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Metal equivalents are not reported
<b>Relationship between mineralisation widths and intercept lengths</b>	These relationships are particularly important in the reporting of Exploration Results.	Intercept lengths as shown on figures in this document are not true widths of mineralisation based on current knowledge
	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').	Figures included in document provide an interpretation of mineralisation boundaries that are shown as being subvertical and of variable true thickness depending on location within a particular section. Insufficient work has been done at this stage to understand the broader geometry of the mineralisation beyond the sectional profiles
<b>Diagrams</b>	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery and include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Included within the report (or as appendices)
<b>Balanced reporting</b>	Where reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting	Any significant or important results are included in tables or on plans within the report (or as appendices) A complete set of assay results for diamond drill hole FI2081 are not yet available.
<b>Other substantive exploration data</b>	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical results; geochemical 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 beyond what has been provided in various figures with this document.
<b>Further work</b>	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further work is discussed in the document in relation to the exploration results.
	Diagrams clearly highlighting the areas of possible extensions, including main geological interpretations, future drilling areas, provided this information is not commercially sensitive.	Further possible work in relation to the exploration results are covered in the document.