9th March 2018



ASX Release

Rimfire Pacific Mining NL ABN 59 006 911 744

Corporate Details: ASX Code: RIM

Issued capital: 943,477,555 FPO 2,300,000 Unlisted Options

Cash Status (31-12-2017): \$1.981m

Mineral Focus: Gold, Silver, Copper, Cobalt, Platinum

Established Resource: Sorpresa 125k oz Au, 7.9m oz Ag (inferred and indicated)

Directors:

Non-Executive Chairman: lan McCubbing Managing Director & CEO: John Kaminsky Non-Executive Directors:

Ramona Enconniere Andrew Greville

Company Secretary: Melanie Leydin

Contact Details: Suite 411, 530 Little Collins St Melbourne Victoria 3000 Australia

T: +61 (0)3 9620 5866 F: +61 (0)3 9620 5822 E: <u>rimfire@rimfire.com.au</u> W: <u>www.rimfire.com.au</u>



Drilling Starts Aiming to Extend Avondale Cobalt Prospect at Fifield

- 11 holes planned for approximately 400~500m depending on depth of basement
- Mixture of RC and Aircore drilling is anticipated with drilling complete within 7 days
- Despatch to laboratory is expected within 2 weeks for multi-element (ME) assay
- Historic drill pulps also to be resubmitted for Cobalt Nickel assays

Rimfire Pacific Mining NL (ASX: RIM) ("the Company" or "Rimfire") has quickly moved to confirm and extend historic indications of significant lateritic Cobalt and Nickel mineralisation at the Avondale Prospect (<u>Hyperlink RIM:ASX announcement 5 March 2018</u>), by implementing a new drill program of 11 holes, *which is now underway.*

Drill holes have been designed to both confirm indications of mineralisation in historic holes and to test the interpreted southern extension of the ultramafic body believed to be associated with Cobalt and Nickel mineralisation (*Figure 1 page 2*).

John Kaminsky, CEO, Rimfire stated:



"With the drill rig already in the Fifield district just finishing the balance of the Tout East holes, it was very opportune to swing the rig onto the Avondale prospect for a rapid follow through on our historic compilation of Cobalt and Nickel numbers.

"We are going to validate the historic work which had some very encouraging numbers, including:

5m @ 0.12% Co & 0.27% Ni from 12 m & **9m @ 0.09% C**o & % 0.36% Ni from 18m

11m @ 1.46% Ni & 0.03% Co from 13m

"The historic results, when combined with the new holes and the re-submissions of some of the historic pulps for re-assay, could start to see a solid advance in the Avondale prospect for cobalt and nickel.

"Once results are received a review of the prospect will be undertaken with a view to explore Avondale in more detail to understand the continuity, thickness and grade of the elevated cobalt and nickel.

"Positive results will provide a basis to undertake a more comprehensive program of work aimed at determining resource potential.

"With the Sunrise Cobalt deposit (CleanTeq ASX "CLQ") heading towards development, right on our doorstep, it certainly gives a potential commercial underpinning to any additional cobalt discoveries in the district, like Avondale (*see Figure 3 page 3*).

"The Cobalt and Nickel prices have had positive gains in recent times offering continued incentive to accelerate the work on our observations for these metals."

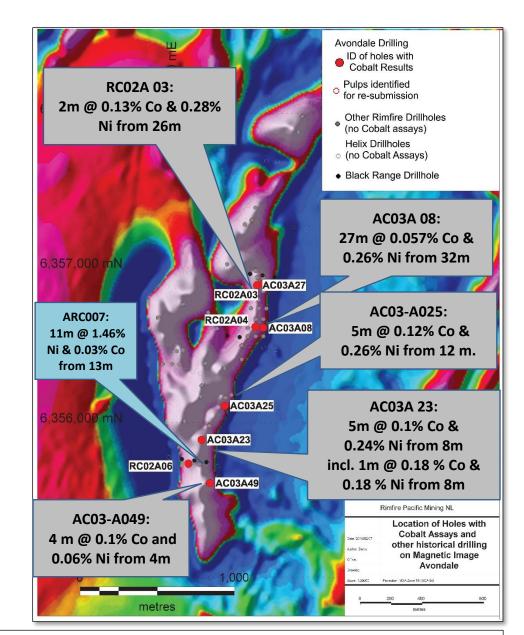


Drilling at Avondale

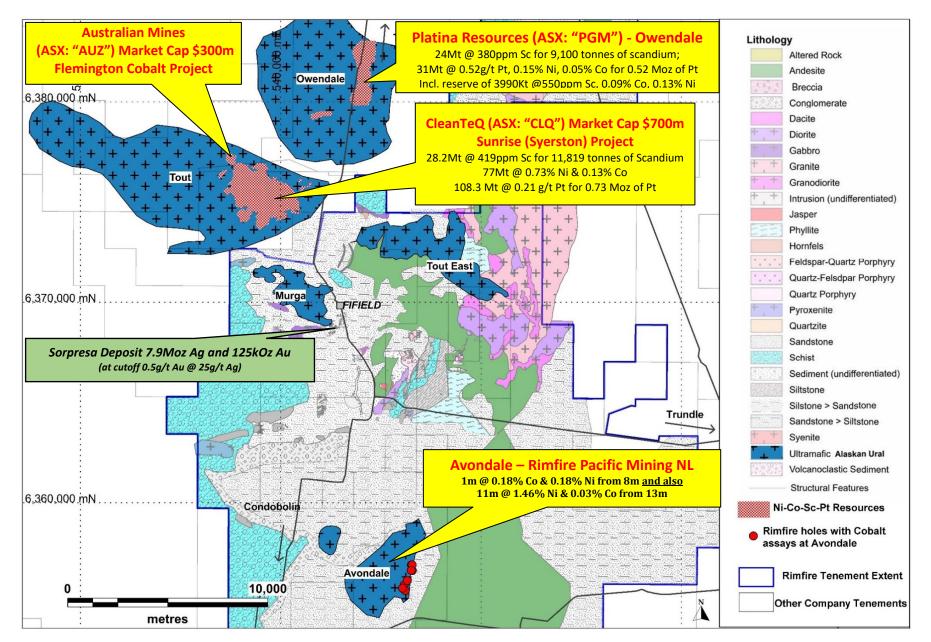


Avondale Prospect Historic drilling with Cobalt Assays Other Rimfire holes 0 (no Cobalt assays) 222 O Other explorers holes Current program 357.5 0 INTERPRETED SUB-SURFACE GEOLOGY from RAB + magnetics Alluvial channel Ionzonite-diorite Clinopyroxenite AM/10 Peridotite - dunite Sediments Fault - -Coordinates MGA94 Zone 55 kilometres Scale: 1:10,000

Figure 2: Location of Historic Drillholes with Cobalt assays on Magnetic Image



The current drilling is being conducted within the prospective geological units currently thought to extend for 2.5 km to understand continuity, thickness and grade of cobalt already identified in historic drilling between limited sample points that traverse a 1.3km extent.



Background to historic results at Avondale Cobalt-Nickel-Platinum Prospect

Historical exploration by Helix Resources, Black Range Minerals and Rimfire Pacific Mining has been conducted at the Avondale prospect, *however, the key focus was for platinum group metals at that time* and very little multi-element (ME) assays exist in the available datasets. Limited assay results by Black Range Minerals identified elevated nickel and low grade cobalt in some drill holes, and indicate the highest nickel grades are adjacent to (not coincident with) the higher cobalt assays.

Rimfire published *platinum assay results* from its own drilling, released to the ASX in three reports:

Table 1: Rimfire Pacific Mining NL relevant historical reports to the ASX

Date	Title of historic ASX Report
9 July 2002	Fifield Platinum Project – Drilling Results
24 July 2002	Final Platinum Drilling Results from Fifield
10 June 2003	Positive Platinum Results

Subsequently, in 2004, Rimfire conducted limited testing for ME looking for possible pathfinder elements associated with the better platinum intersections from this earlier Rimfire drilling. In 2004, the cobalt results were not considered as being of any significant value, so nothing was published or pursued at that time.

Table 2: Summary of Historical Drilling at Avondale

Date/Period	Company	Number of Holes	Type of Drilling	Primary Metal Focus	Assays for Cobalt	Cobalt Results	Original ASX Reporting
Dec 1987 - June 1988	Helix Resources NL	34	RAB	Platinum	Non	NA	NA
June 1988 - Dec 1988	Helix Resources NL	105	RAB	Platinum	Non	NA	NA
2000	Black Range Minerals Ltd	8	RC	Platinum	8 holes	11m @ 0.03% Co from 13m (ARC007), 3m @ 0.05% Co from 9m (ARC008), 4m @ 0.07% Co from 8m (ARC009)	29th Jan 2001
2002	Rimfire Pacific Mining NL	6	RC	Platinum	3 holes	See this report	24th July 2002
2003	Rimfire Pacific Mining NL	43	AC	Platinum	5 holes	See this report	10th June 2003

JOHN KAMINSKY CEO and Managing Director

ABOUT RIMFIRE

Rimfire Pacific Mining is an ASX listed (code: RIM) resources exploration company that has its major focus at Fifield in central NSW, located within the Lachlan Transverse Zone (LTZ). In 2010~11 the Company made a greenfields gold and silver discovery, named "Sorpresa", announcing a JORC Compliant Inferred & Indicated Maiden resource in 2014.

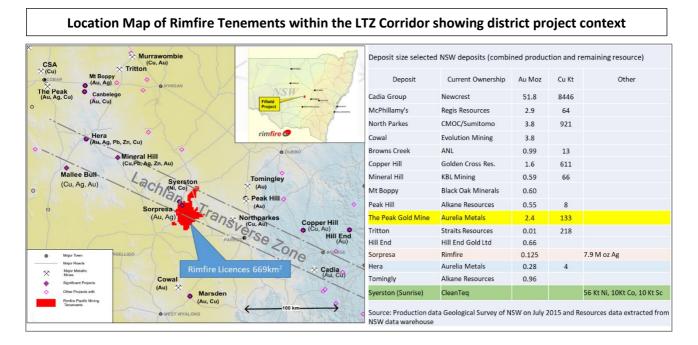
The current main Sorpresa trend containing gold and silver mineralisation is approximately 1.5km in length and is at various stages of further discovery growth assessment, including the larger 7km x 2km Sorpresa corridor.

Multiple prospects involving hard rock potential for Gold, Silver, Copper and Platinum have been established within a >6km radius of the Sorpresa discovery at Fifield, which is part of the contiguous 669km² tenement position held.

More recently, Rimfire is also examining for cobalt potential within its tenements.

Aspiration target in the wider Fifield District

The discovery aspiration for the Fifield area is an aggregate discovery outcome in excess of 4 million ounces of gold equivalent metal, being capable of supporting a mine life in excess of 10 years, and within the lower third of industry costs of production.



Recent Presentation and ASX Activity Summary Reports and Analyst hyperlinks related to Rimfire

- The Company released its <u>Investor Forum Presentation on 31st January 2018</u>
- An analyst update was provided on the Company, through Share Café, Gavin Wendt (of Minelife)
- ASX Release December 2017 Quarterly Activities

Competent Persons Declarations

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 Todd Axford who is deemed to be a Competent Person and is a Member of The Australasian Institute of Mining and Metallurgy.

Mr Axford has over 23 years' experience in the mineral and mining industry. Mr Axford is employed by Geko-Co Pty Ltd and is a consulting geologist to the Company. Todd Axford 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'. Todd Axford consents to the inclusion of the matters based on the information in the form and context in which it appears.

Historic material previously published under 2004 JORC standard that is referenced in this report:

The information provided in "About Rimfire Pacific Mining section" is available to view on the Company Website at hyperlink: <u>ASX Announcements</u>. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements.

In addition, the Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements which operated under the 2004 JORC reporting requirements.

Table 3: Sorpre	sa Mineral Resource estin	nate reported under JORC 2012 cod	e
-----------------	---------------------------	-----------------------------------	---

Resource	Cut off	Category	Mt	Grade		Contained Metal	
				(g/t) Au	(g/t) Ag	Koz Au	Moz Ag
Gold	0.5 g/t Au	Indicated	2.0	1.14	27	73	1.7
		Inferred	1.0	0.9	12	29	0.4
		Total	3.0	1.06	22	103	2.1
Silver	25 g/t Ag	Indicated	2.1	0.21	62	14	4.2
		Inferred	1.2	0.19	40	7	1.6
		Total	3.4	0.20	54	22	5.8
Combined	0.5 g/t Au & 25 g/t Ag	Indicated	4.1	0.67	45	88	5.9
		Inferred	2.2	0.51	27	37	2.0
		Total	6.4	0.61	38	125	7.9

Notes:

1. Sorpresa Mineral Resource reported to JORC 2012 standards, at 0.50 g/t Au and 25g/t Ag cut-off

2. The figures in this table are rounded to reflect the precision of the estimates and include rounding errors.

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", or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.