

24th October 2018

ASX Release

Successful Completion of Detailed Gravity Survey at Fifield NSW

Gravity data will drive prioritisation of targets for summer field season

Rimfire Pacific Mining NL
ABN 59 006 911 744

Corporate Details:

ASX Code: RIM

Issued capital:

943,477,555 FPO
1,500,000 Unlisted Options

Cash Status (30-06-2018):

\$0.894m

Mineral Focus:

Gold, Silver, Copper,
Cobalt, Platinum

Established Resource:

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

Directors:

Non-Executive Chairman:

Ian McCubbing

Managing Director & CEO:

John Kaminsky

Non-Executive Directors:

Ramona Enconniere
Andrew Greville

Company Secretary:

Melanie Leydin

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Gravity readings at Fifield

Highlights and program objectives

- ❑ Gravity Survey was completed on time and on budget, covering ~200 km², with final data compilation expected by early November
- ❑ Preliminary data indicates significantly improved resolution and presence of subtle detail that will allow more efficient and effective assessment and testing of targets
- ❑ High quality gravity data will be integrated with other data such as field maps, surface geochemistry and magnetics to ensure field programs are pursuing the best targets during the 2018 summer field season period (prior to farmers sowing fields in April 2019)
- ❑ Detailed gravity survey data was also collected on some interpreted extensions of the existing Sorpresa mineralisation. This work will assist in identification of targets that could provide additional discoveries close to the Sorpresa resource.

Rimfire Pacific Mining NL (**ASX: RIM**) (“the Company” or “Rimfire”) provides an update on its detailed gravity survey undertaken at the Fifield project ([ASX 5th September: Detailed Gravity Survey Scheduled at Fifield NSW](#)), with Atlas Geophysics completing field data collection.

Completion of Gravity Survey

The detailed gravity survey was primarily to provide better information over the newly recognized Ordovician volcanic sequences of the Fifield Project area. These are the same age rocks that host the Northparkes (copper / gold) and Cowal (gold) mines.

The Company, due to some access restrictions in the southern area had the opportunity to collect additional gravity survey data at potential Sorpresa extensions and other prospect areas.

Figure 1 shows the areas covered by the current gravity survey, and the area covered by pre-2018 gravity surveys which was completed as part of the Sorpresa resource discovery and exploration. The current program was undertaken on a nominal 400m x 400m grid (locally tighter), whilst the earlier pre-2018 surveys were designed with variable and tighter station spacings. Overlapping areas on Figure 1 indicate specific targets where data density has been increased with the recent survey.

Atlas Geophysics will now complete final processing, data checking and combination of this new data with previous gravity surveys on the project area. Final versions of the survey are expected in 2 weeks.

The initial review of data indicates significantly more detail is available when compared with existing regional data. Once final processed data is received, the Company will incorporate with existing datasets and knowledge to prioritise the next phase of discovery work during the 2018 summer field season (before cropping commences again in April 2019). The completion of this work is an important next step in the execution of the Company’s strategy reported ([ASX 25th September 2018: Dual Strategy - Sorpresa Appraisal and Regional Discovery](#)).



John Kaminsky, CEO, Rimfire commented:

“This gravity survey should enhance our other recent work completed in mapping, sampling and magnetic geophysics reviews in the Southern and Central areas reported ([ASX 3rd July 2018: Fieldwork in the Southern Project Area Highlights Gold Potential](#)).

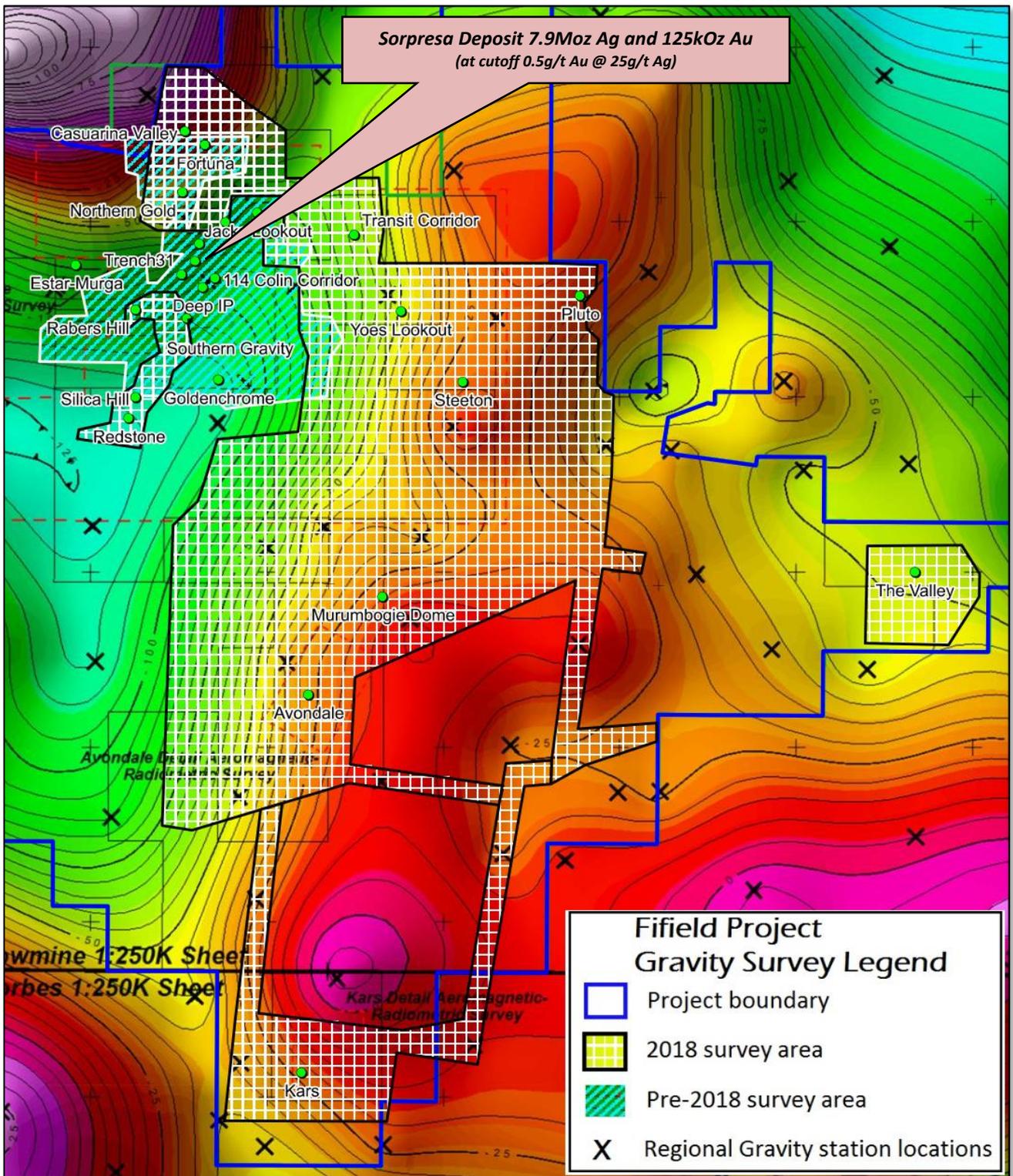
“The additional selected areas surveyed around Sorpresa, including the Fortuna gold anomaly to the north, and areas to the south west, should both benefit from the gravity survey. This looks interesting, particularly as we know that the historic gravity has a good correlation with the Sorpresa mineralization.

“The preliminary survey data definitely looks encouraging and is providing greater insights than the publicly available low resolution regional gravity data.

“Finalising the data compilation , integration and interpretation will be important in prioritising the next steps in these exciting surveyed areas and should further advance the implementation of the Company’s strategic pursuits of new discoveries within the Fifield Project.”

JOHN KAMINSKY
CEO and Managing Director

Figure 1: Completed gravity survey areas over regional gravity image

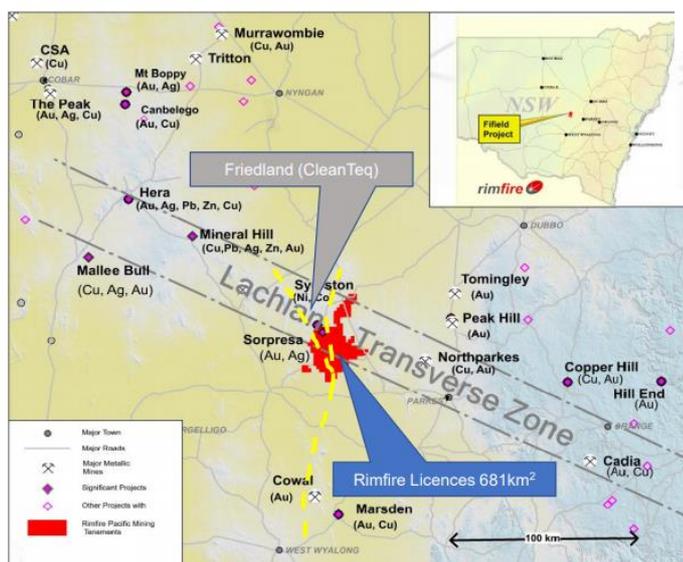


ABOUT RIMFIRE

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 discovery history of Sorpresa is shown in the [Hyperlink to the ASX presentation to the Mineral Council May 2017](#). High grade intersections at Sorpresa have included:

Fi160	14m @ 21.9g/t Au from 34m	Incl. 2m @ 87.5g/t Au and 6m @ 94g/t Ag
Fi212	14m @ 24.4g/t Au from 26m	Incl. 2m @ 118g/t Au and 26m @ 155g/t Ag from 14m
Fi241	10m @ 1.01g/t Au and 535g/t Ag from 70m	Incl. 2m @ 2020g/t Ag
Fi329	1m @ 114g/t Au from 159m	
Fi689	9m @ 18.15g/t Au and 100g/t Ag from 18m	Incl. 1m @ 69g/t Au and 254g/t Ag
Fi706	7m @ 13.41g/t Au and 751g/t Ag from 19m	Incl. 1m @ 76.7g/t Au and 2490g/t Ag

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. This area lies within the larger 7km x 2km Sorpresa corridor.



Deposit size selected NSW deposits (production + remaining resource)

Deposit	Current Ownership	Au Moz	Cu Kt	Other
Cadia Group	Newcrest	51.8	8446	
McPhillamy's	Regis Resources	2.9	64	
North Parkes	CMOC/Sumitomo	3.8	921	
Cowal	Evolution Mining	~7.0		2017/18 Upward Estimate
Browns Creek	ANL	0.99	13	
Copper Hill	Golden Cross Res.	1.6	611	
Mineral Hill	KBL Mining	0.59	66	For sale
Mt Boppy	Black Oak Minerals	0.60		
Peak Hill	Alkane Resources	0.55	8	
The Peak	New Gold Inc.	2.4	133	Sold to Aurelia Nov 2017
Tritton	Straits Resources	0.01	218	
Hill End	Hill End Gold Ltd	0.66		
Sorpresa	Rimfire	0.125		7.9 M oz Ag
Hera	Aurelia Metals	0.28	4	
Tomingley	Alkane Resources	0.96		
Syerston (Sunrise)	CleanTeq			56 Kt Ni, 10Kt Co, 10 Kt Sc

Source: Production data Geological Survey of NSW - July 2015 & Resources data extracted from NSW data warehouse

✓ **The LTZ (Lachlan Transverse Zone) - A proven mining district in Australia for Copper and Gold**

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 Rimfire's 681km² contiguous tenements. The project area is very accessible by bitumen road and only 4.5 hours from Sydney.

More recently, Rimfire has also examined for cobalt, nickel and scandium potential within its tenements.

Aspiration target scale in the wider Fifield District

The discovery aspiration ([established with New Gold Inc., during the 2017 earn-in venture](#)) 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 and Analyst reports related to Rimfire

- [Broker and Investor Dual Strategy Presentation](#)
- The Company's Fifield Project Strategy outlined in [Dual Strategy - Sorpresa Appraisal and Regional Discovery](#)
- [June 2018 Quarterly Activities Report](#)
- A research report on the Company was compiled by Independent Investment Research (IIR) April 2018 – Senior Analyst Mark Gordon, and is available on the Company website (www.rimfire.com.au)

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: [ASX Announcements](#). 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 1: Sorpresa Mineral Resource estimate reported under JORC 2012 code

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.