

30 January 2018

ASX Release

Rimfire Pacific Mining NL
ABN 59 006 911 744

Corporate Details:
ASX Code: RIM

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

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

Mineral Focus:
Gold, Silver, Copper, Platinum
Cobalt

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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Aircore Steeton Area

Quarterly Report – December 2017

8,290m of Aircore Drilling Phase 2 Completed

New target areas being defined – includes potential for Gold, Copper, Cobalt

Key Highlights – work programs

Rimfire Pacific Mining NL (ASX: RIM) (“the Company” or “Rimfire”) is pleased to provide the December Quarterly Report for activities undertaken at Fifield NSW conducted jointly by Rimfire and its earn-in partner New Gold Inc. (TSX/NYSE: NGD).

Key activities and milestones on the Fifield Project area included:

❑ **Completion of Aircore Phase Two Drilling Geochemistry Program**

- ❖ 8,290m (343 holes) of Aircore Phase 2 reconnaissance drilling completed.
- ❖ The results of this program are still being collated and evaluated by New Gold Inc., with reporting due first quarter 2018.
- ❖ The major focus is Gold and Copper targeting which includes the potential for North Parkes style gold-copper porphyry in the Steeton prospect area

❑ **Cobalt Mineralisation Observations being Explored – Drilling Started**

The Company initiated early stage programs of reconnaissance RC and Aircore Drilling to further the understanding of two areas for potential cobalt mineralisation.

- ❖ A possible lateritic style of Nickel (Ni) and Cobalt (Co) mineralisation in the Tout East area with potential for a similar style to the neighbouring Sunrise nickel/cobalt/scandium deposit being developed by CleanTeQ, and
- ❖ A possible sulphide style of cobalt mineralisation in the Northern View area.

Aircore drilling at Tout East is still to be completed in the first quarter 2018, and currently awaits contractor availability. Scout RC Drilling is complete, with results pending.



CEO John Kaminsky commented on the positive progress during the Quarter:

“We have again achieved solid performance in this quarter, with the work programs continuing to lay a foundation to unlock the potential for the next round of discoveries.

“The broad scale geochemistry program (Aircore Phase 2) just completed will build upon the earlier key exploration initiatives performed during the year. Results are due shortly and are expected to enhance the targeting process for subsequent rounds of drilling in 2018.

“We remain very committed to the discovery foundation established in the core metals, gold, silver and copper. In addition, the regional work programs undertaken at Fifield have now highlighted a new opportunity for discovery potential in cobalt, so this is also being pursued.

“With the strong demand forecast for cobalt, and market leader CleanTeQ on our immediate northwest border, the Company intends to give more prominence to cobalt with dedicated program initiatives during 2018. We look forward to the outcomes from the recent reconnaissance drilling as the first step in this direction.”

Additional Field Program Activities at Fifield NSW

- ❑ **Further metallurgical test work was completed on the Sorpresa gold and silver resource**
 - Gravity recoveries, and finer grind sizes were tested on the gold/silver mineralisation at Roadside area
 - Gold and silver process circuit design parameters are being reviewed with the latest metallurgy results
- ❑ **Geological and structural understanding was significantly increased in the key areas of interest (North and East of Sorpresa) through a variety of work program inputs**
 - Major regional surface mapping programs, prospecting assessment and concept generation continued
- ❑ **RC and Diamond Drilling completion with finalised reporting (October 2017) occurred for 5 locations**
 - Results included new intersections at the Transit gold and copper prospect ([Hyperlink: ASX 27/10/2017](#))
 - This drilling, combined with recent surface mapping activities and the Phase 1 Aircore drilling geochemistry, has generated significant insights for new gold target positions at Fifield, particularly to the East and North of the Sorpresa discovery.

CEO and Managing Director, John Kaminsky further commented:



"The detailed geological mapping and structural interpretation was advanced in the quarter and is a key additional piece of information that will give greater context to the regional Aircore work completed.

"The Company delivered encouraging results in the recent drilling at Transit gold prospect, so adding information in the surrounds will be useful through the Aircore Phase 2 program.

"In addition, it is important to complete our understanding of the Sorpresa gold and silver mineralisation, and better assess its economic context. This latest round of metallurgy enables us to move towards this goal."

Rimfire Corporate Summary

- ❑ **The cash position at 31st December was \$1.981m**
- ❑ **The Company AGM was held 24th November, all resolutions passed, well supported**
 - Andrew Greville was elected as a [Non-Executive Director](#), and Graham Billingham retired
 - The Company released its [AGM Presentation](#)
- ❑ **The New Gold Inc. earn-in notification requirement for Year 1 completion, is due within March 2018 quarter**

CEO and Managing Director, John Kaminsky reflected on the Company corporate position:



"We had a pleasing Shareholder turnout for our Annual General Meeting. Shareholders provided strong support for the recommendations from Management and the Board, with all resolutions being overwhelmingly carried.

"The Company has a solid financial position and achieved substantial inground expenditure in its project area, so it has been a very satisfying performance in 2017. The Fifield project area is now very well placed.

"The nomination by New Gold Inc. to continue the earn-in with Rimfire is due within March quarter 2018. The first year expenditure obligation by New Gold Inc. of \$2m has been substantially completed.

“The earn-in arrangements have represented a good outcome for Rimfire at the corporate and project level. We believe that New Gold Inc. has a high regard for the Fifield project area, but we await the nomination of the earn-in status. It was noted that New Gold Inc. successfully entered into a binding sale agreement in November 2017 of The Peak Mines (Cobar NSW), reducing their Australian presence.

“Rimfire retains 100% ownership of the Fifield project area, until New Gold Inc. fulfils its earn-in obligations.”

PROJECT ACTIVITY DETAIL (also refer Figures 1 to 4)

Aircore Phase 2 drilling was completed

An Aircore Phase 2 program of 8,290m (343 holes) of combined infill and expanded step-out drilling designed and managed by New Gold Inc., was substantially increased in scale and intensity during its deployment, to more than double the original design size using two rigs.

The Aircore Phase 2 program tested bedrock geochemistry, with holes spaced on a grid pattern of 250m x 250m. Logging was completed on all holes reaching bedrock, thus providing an update on the geology interpretation.

It is anticipated that this additional Aircore drilling, combined with supplemental field reconnaissance work will generate significant insights for new target positions at Fifield, particularly to the East and North of the Sorpresa gold and silver resource.

The compilation of assay results and interpretations will be finalised shortly. This will include the use of other important data sets, such as geophysics, to provide the next range of discovery targets to be drilled in 2018.

Phase 2 Aircore Program Main Areas of Interest

The focus of the Aircore Phase 2 program is shown in **Figure 2**. Main areas covered with drilling included:

- *Fortuna – gold and copper anomaly*
- *Greater Transit - gold and copper anomaly*
- *Northern View - gold, manganese and cobalt anomaly*
- *Steeton – gold and copper porphyry potential*



The **Steeton epithermal/porphyry prospect**, with its gold and copper potential, has an excellent geological setting seen in the surface rocks, with similar geologic attributes to the North Parkes mine area, known for gold and copper porphyry style mineralisation.

The area has benefited from this extra work, confirming favourable geology under the surficial cover sequence, with the potential for North Parkes style gold-copper mineralisation the main concept being pursued in that location.

The **Fortuna gold anomaly** will gain some benefit from the Aircore Phase 2 program. It is a very large anomaly (1km²), with gold results in the surface (soils and chips) of a higher order than Sorpresa. Some additional geophysics is also warranted and may be considered here.

Areas of Focus for Dedicated Cobalt Exploration – Drilling Locations and Status

The Company committed resources to further explore cobalt occurrences observed within its tenements at Fifield NSW (Figures 1 & 3). The new cobalt prospect areas at Fifield, are located to the East and North of the Sorpresa gold and silver resource.

The focus of the two reconnaissance drilling programs is shown in **Figure 3**, covering the **Tout East and Northern View prospects**. Tout East permitting allows up to 55 Aircore holes, but a modified program of ~33 holes is planned in the first instance, influenced by access restrictions and a preference for additional mapping to assist collar locations.

Northern View prospect sits along strike from the Transit gold-copper prospect, in an important mineralised corridor now identified, so this broader area is gaining in prominence.

❑ Tout East Area

- A modified Aircore drill program of approximately 33 reconnaissance holes was commenced as infill and potential extension of the prior cobalt and laterite observations
- 10 holes (397m) were completed, with the balance of Aircore holes due for deployment in February 2018
- Program results are likely in February/March 2018

❑ The Northern View Area

- 7 holes (343m) of scout first pass RC drilling were completed on two locations
- Samples will be despatched to laboratory with results expected January/February 2018

Total Drilling and Sampling work for the December Quarter

The Fifield site was busy in the quarter as reflected in the drilling and sampling statistics for the period. In addition, large scale geologic mapping occurred, particularly focused to the eastern areas around the Steeton prospect. Surface sampling for the quarter included 52 Soil Samples.

Drilling Summary

Drilling Type	holes	metres
Auger	28	107
Aircore	371	9,321
Diamond Drill	1	275
Reverse Circulation	8	343
Totals	408	11,936

CORPORATE ACTIVITIES

Annual General Meeting

On November 24, 2017 the Company’s Annual General Meeting (AGM) was held, with a good representation of shareholders in attendance, reflecting the keen interest in the Company and its activities. The Board and Management received strong endorsement from the shareholders with all resolutions being overwhelmingly carried.

Andrew Greville was elected as a Non-Executive Director and Graham Billingham retired at the AGM.

Cash, Funding, Facilities and Investments

The Company’s cash at bank at 31 December 2017 was \$1.981m.

The Ausindustry R&D application is still undergoing internal review and is expected to be processed in the next quarter.

Earn-in Partner New Gold Inc. – Sale of Peak Mines (Cobar NSW)

As reported in November 2017, New Gold Inc. has sold its operating mines and associated exploration rights at Cobar NSW to Aurelia Metals. Sale completion is expected 1st Quarter 2018.

New Gold Inc. will nominate to Rimfire in the first Quarter 2018, its decision whether it will continue for the 2nd year of the earn-in agreement. Should New Gold Inc. not continue, then 100% of the project area remains with Rimfire.

COMMODITY PRICING FOR THE DECEMBER 2017 QUARTER

During the quarter the gold price continued its apparent rerating finishing at USD 1,302 per ounce at the end of the quarter representing a 12% increase over the calendar year.

Gold and Silver Prices quoted www.kitco.com in New York in USD and Copper and Cobalt Prices quoted LME.com in USD.

Industry commentators see a bullish sentiment developing for gold during 2018.

Commodity	Price USD 3 January 2017	Price USD 29 December 2017	2017 Calendar Year % change	Price USD 26 January 2018
Gold (oz)	1,159	1,302	12.3%	1,349
Silver (oz)	16.35	16.91	3.4%	17.38
Platinum (oz)	928	928	Nil	1,006
Copper (t)	5,574	7,157	28.4%	7,063
Cobalt (t)	32,500	75,000	130.8%	79,750

TENEMENT POSITION

The total area held by the Company remained unchanged at Fifield is 669km². The Company maintained its tenement interest in the Broken Hill area of 78km² held with Perilya as operator. Tenement details are contained in Appendix A.



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Figures, Appendices, tables provided for reporting under JORC 2012 compliance

Additional Figures, includes location maps	Pages 6~9
Company Background and Competent Authority Declaration	Pages 10~11
Schedule of Tenements	Page 12

Figure 1: Fifield District Prospect Map – with neighbouring activity – on geology and structure background

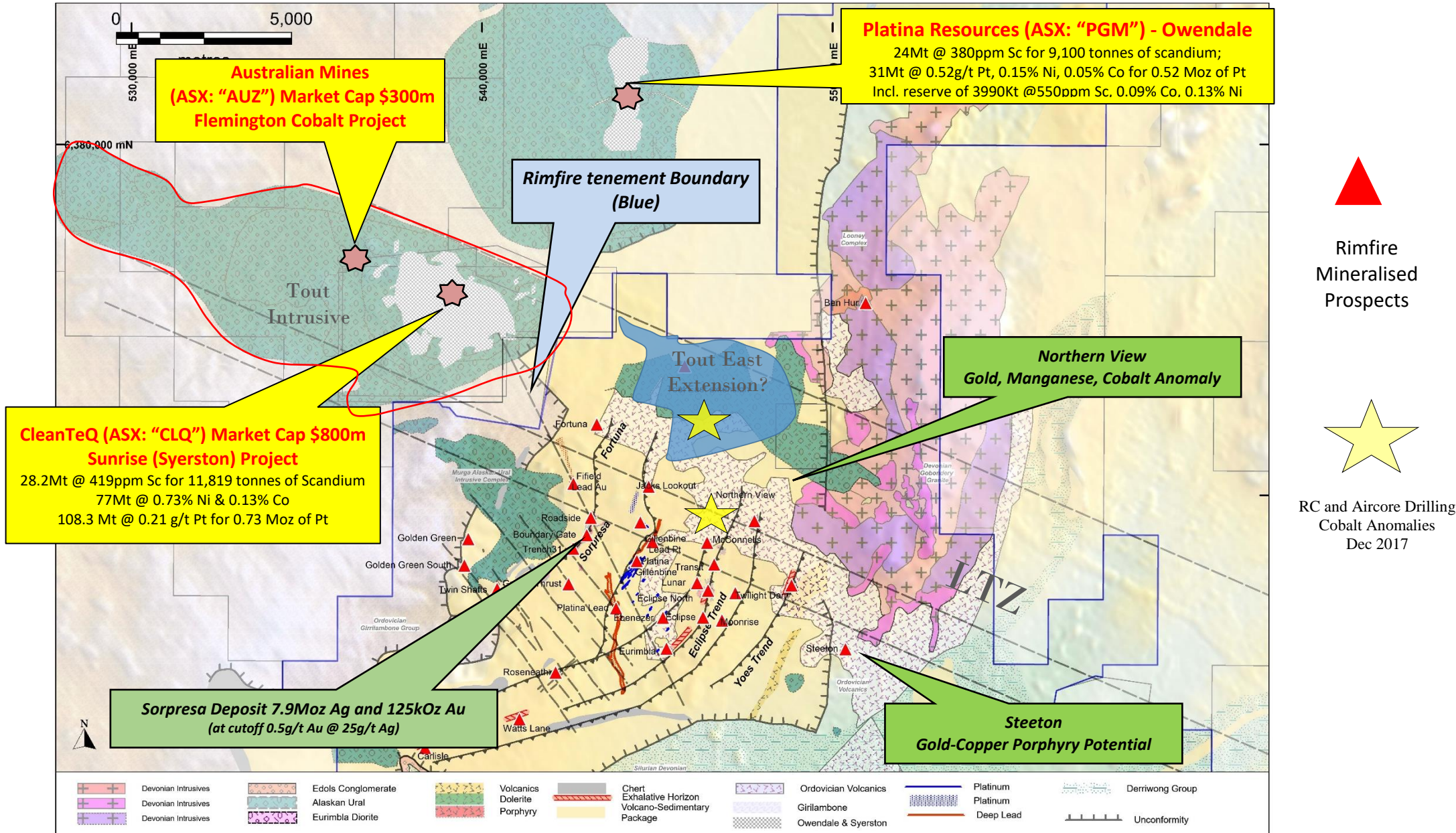
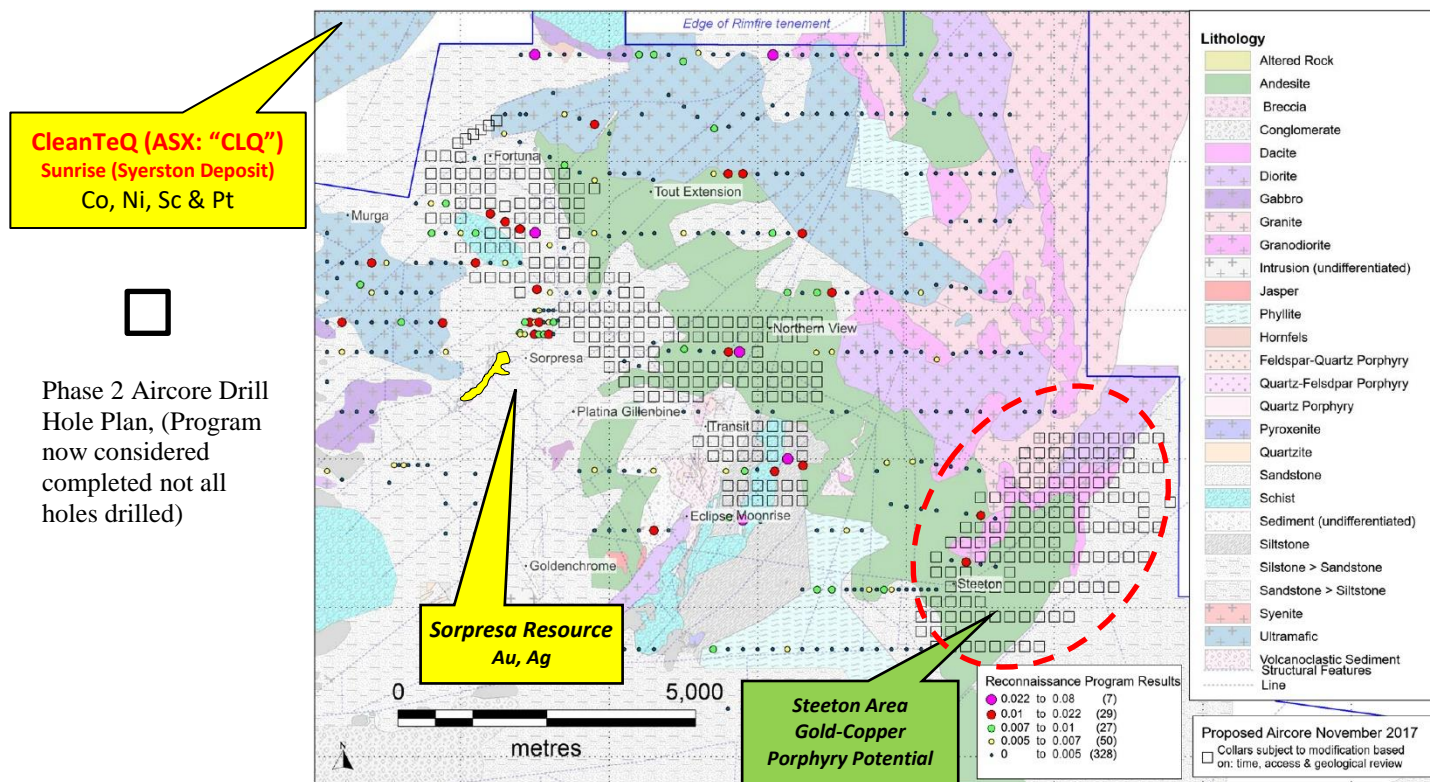


Figure 2: Infill and expanded Aircore Drill Plan (Phase 2) shown on Geology (Oct 2017 Interp) and previous Gold Geochemistry (Aircore Drilling Phase 1)

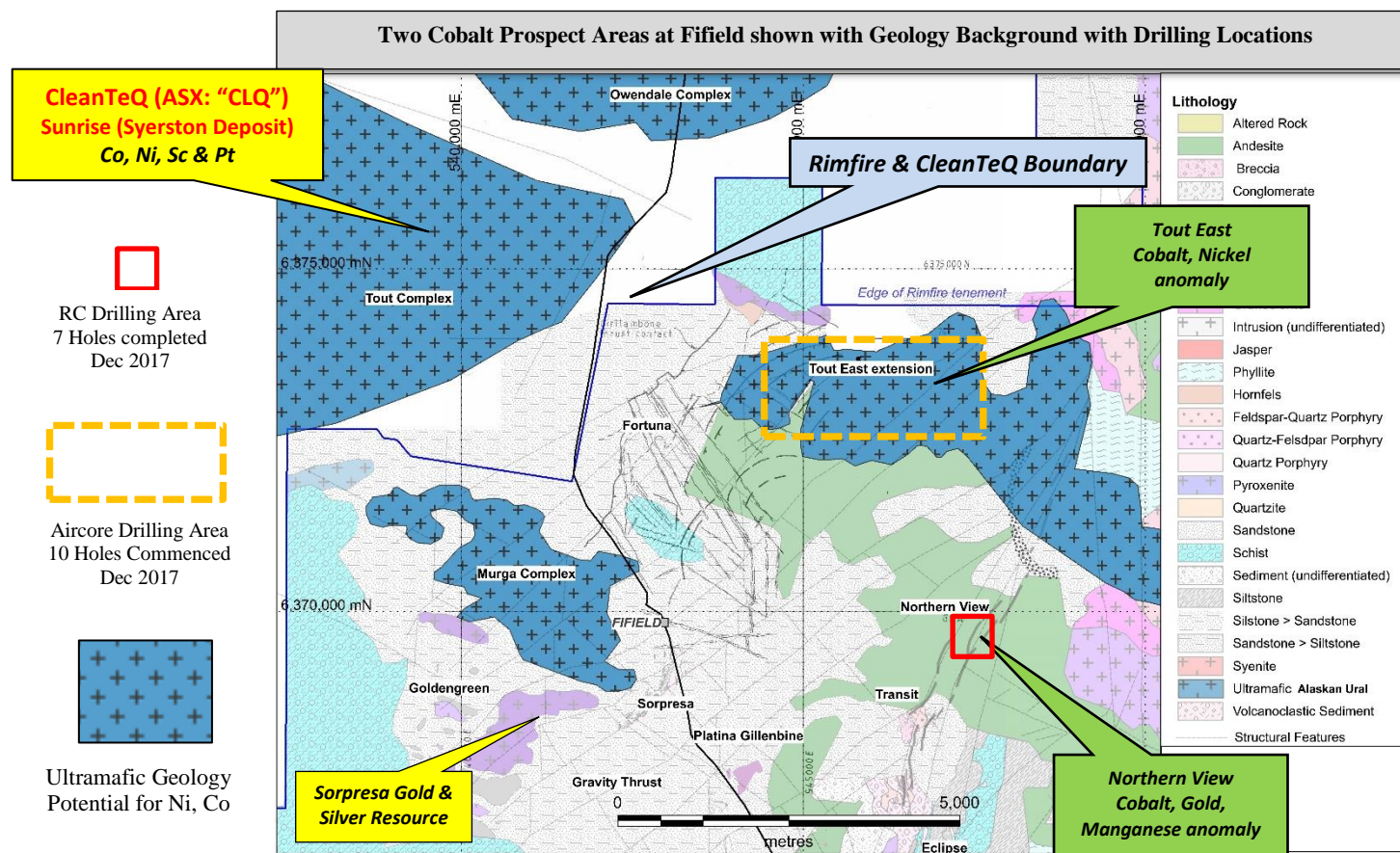


Many new target concepts continue to emerge from the combined work programs, including the Phase 2 Aircore drilling.

In particular, logging of Aircore holes in **the Steeton area** has identified some altered porphyry within mafic and felsic volcanics in the north-east. These lithologies fit the initial interpretation of Ordovician Volcanics under cover. The presence of sericite +/- epidote +/- chlorite +/- actinolite altered porphyry, within this volcanic sequence was also noted and considered important.

The goal at Steeton is for a potential discovery of a gold-copper porphyry system, similar to the North Parkes style of deposit 70km to the east.

Figure 3: First pass drilling locations to pursue cobalt observations at the Tout East and Northern View prospects

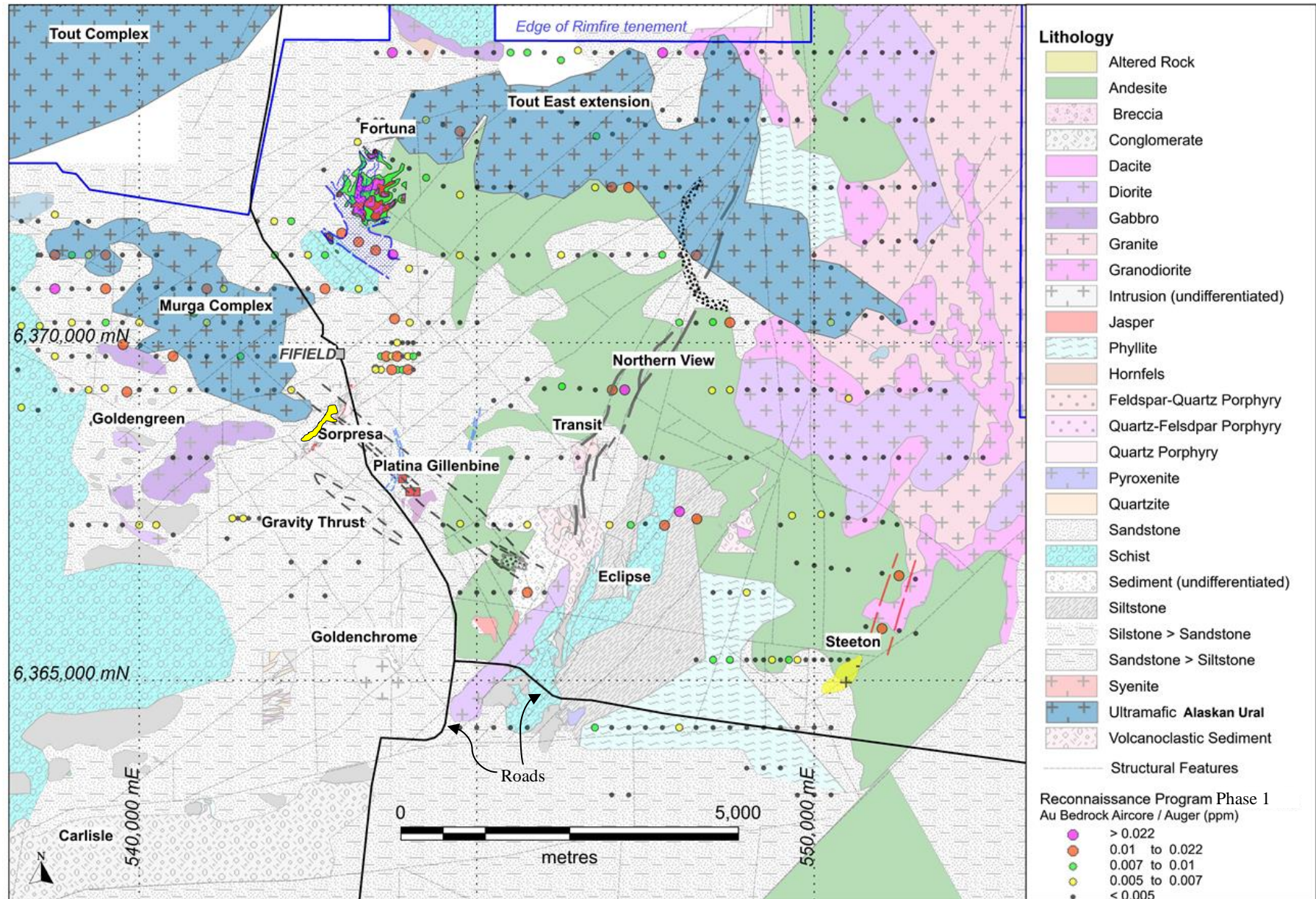


- ❑ **Tout East Prospect**
 - A prospective area of ~4km x 2km
 - Previous regional reconnaissance Aircore drilling indicated anomalous cobalt to 490ppm
- ❑ **Northern View Prospect**
 - cobalt anomaly with associated sulphide, gold and manganese
 - Earlier surface mapping and sampling programs, including rockchips assayed in the 0.1% to 1.0% cobalt range
 - The geologically mapped area is 500m x 500m and appears open laterally in most directions

A potential lateritic style of nickel (Ni) and cobalt (Co) mineralisation has been identified in the Tout East Extension area ("Tout East"), which demonstrates similar geologic attributes to the ultramafic Tout Intrusive trend that hosts the neighbouring **Sunrise (Syerston) nickel/cobalt/scandium/platinum deposit, being developed by CleanTeQ (ASX: CLQ).**

A second style of cobalt mineralization, sulphide/carbonate related, occurs at the Northern View area, and is anomalous in cobalt, gold and manganese. This mineralisation is distinctly different to the lateritic style observed at the Tout East area.

Figure 4: Some Key Targets shown on Geology, Structure Interpretations with Phase 1 Aircore (Au) at Fifield (Northern and Central Tenement Location)



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 strike line 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.

Earn-in by New Gold Inc. ([website: New Gold Inc.](#))

On 28th October 2016, Rimfire and New Gold Inc. (TSX/NYSE code: NGD) signed an [Earn-in Agreement](#) (ASX Release) under which New Gold Inc. has committed to spend A\$2 million during the first 12 month earn-in period (to 21 March 2018). Rimfire has direct discretionary control over \$300,000 (i.e.15%) of this expenditure.

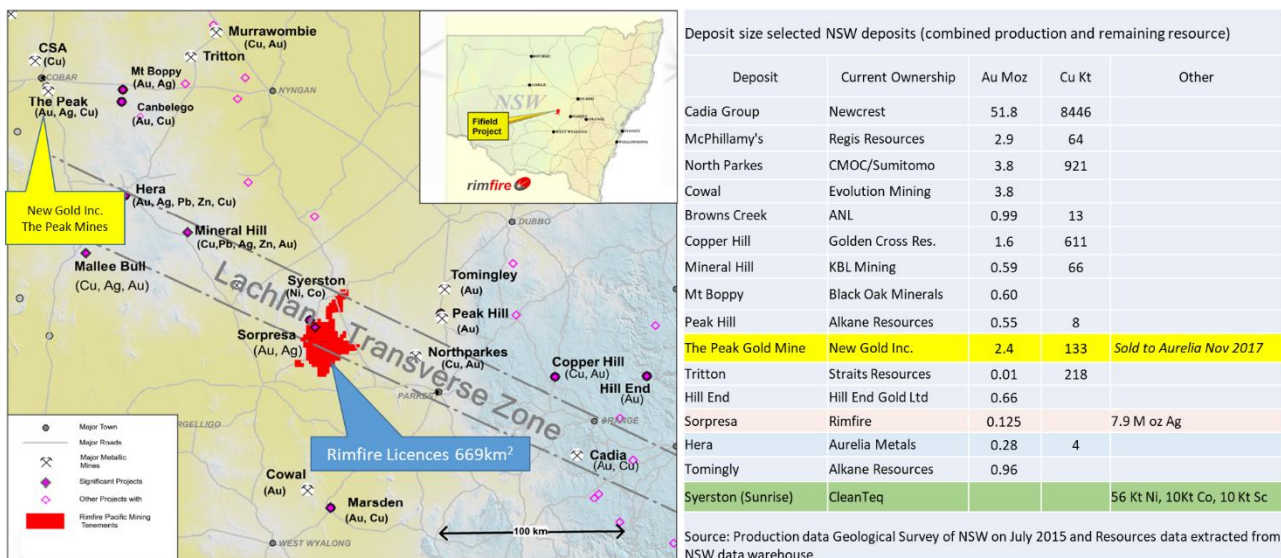
New Gold Inc. may choose to spend more on the property (up to \$12 million in total, within 5 years) to earn up to a 70% interest in Rimfire's tenements in the Fifield district.

The partnership allows Rimfire a high level of flexibility and engagement in its contributions to the Fifield project, to pursue Rimfire's own discovery concepts in parallel with New Gold Inc. This is a unique feature in this earn-in agreement and means there is no downside to the partnership for Rimfire.

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.

Location Map of Rimfire Tenements within the LTZ Corridor showing district project context



Recent Presentation and Analyst hyperlinks related to Rimfire

- The Company released its [24th November AGM presentation](#)
- [An analyst update was provided on the Company](#), through Share Café, Gavin Wendt (of Minelife)

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

Mr Plumridge has over 45 years' experience in the mineral and mining industry. Mr Plumridge is employed by Plumridge & Associates Pty. Ltd. and is a consulting geologist to the Company. Colin Plumridge 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'. Colin Plumridge has previously consented 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 both the historic results and 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. Mr Colin Plumridge as a Competent Person consented to the inclusion in the original reports in the form and context in which each appeared, please refer to the Competent Persons declaration above for additional information.

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.

RIMFIRE TENEMENTS – Appendix A

Below is a listing of the tenements held by Rimfire Pacific Mining NL as at 31 December 2017:

Tenement	Location	Beneficial Percentage Held	Units	Interest Acquired / Farmed in during Quarter	Interest Disposed / Farmed out during Quarter
EL7959	Fifield	100%	7	-	-
EL5534	Fifield	100%	40	-	-
EL5565	Fifield	100%	4	-	-
EL6241	Fifield	100%	15	-	-
EL7058	Fifield	100%	35	-	-
M(C)L305	Fifield	100%	1.9HA	-	-
M(C)L306	Fifield	100%	2HA	-	-
EL8401	Fifield	100%	100	-	-
EL8543	Fifield	100%	1	-	-
EL8542	Fifield	100%	32	-	-
EL5958	<i>Broken Hill</i>	*	27	-	-

* Rimfire retains a 10% free carried interest. Perilya is the operator, holding a 90% interest

Note: New Gold Inc. has an “earn-in right” under agreements on all the Fifield tenements, subject to conditions.