

## **QUARTERLY EXPLORATION AND ACTIVITIES REPORT** (For the period 1<sup>st</sup> January 2017 to 31<sup>st</sup> March 2017)

### **Regional Programs Advancing Jointly with New Gold Inc.**

Rimfire Pacific Mining NL (ASX codes: RIM, RIMOA) (“Rimfire” or “The Company”) is pleased to provide a summary of activities for the March 2017 quarter at Fifield NSW.

#### **Highlights – Corporate and New Gold Inc. (TSX/NYSE: NGD) Earn-In**

- ❑ **The final condition precedent for the earn-in agreement with New Gold Inc. was completed**
  - The first year earn-in period has now officially commenced in March 2017 for New Gold Inc.
- ❑ **Discovery strategies and goals for the 2017 field programs were completed with New Gold Inc.**
- ❑ **Rimfire and New Gold Inc. agreed on an aspiration to achieve an aggregate of 4 million plus ounce gold equivalent discovery outcome in the Fifield district in the medium term**
  - Such discoveries capable of production over a 10 year or longer mine life, in the lower third of industry costs.
- ❑ **Two additional tenements were granted at Fifield giving an expanded area of 669km<sup>2</sup> in total**
  - Includes a strategic single block tenement, EL8543, transferred from CleanTEQ (ASX: CLQ) to Rimfire

#### **Highlights – Field Program Initiatives and Outcomes at Fifield NSW (refer Figures 1 to 6)**

- ❑ **Regional reconnaissance aircore and auger drilling commenced (253 holes covering 144sq km)**
  - Drilling is testing bedrock at nominal 250m hole spacing with line intervals of 1km apart. Closer spaced drilling may be conducted according to the results, following up prospective geology and geochemistry.
  - The program also incorporates the results of the recently completed geophysical survey covering the entire Fifield property position.
- ❑ **Laterite geology was intersected 5km North of Sorpresa in this regional drilling**
  - Based on mapping, geophysics and this latest drilling, it seems that the geology encountered could represent an extension of the Tout Intrusive complex which hosts the neighbouring Syerston laterite deposit (Nickel, Cobalt, Scandium and Platinum).
  - Completion of the drilling program and assays are pending.
- ❑ **Reverse circulation drilling (1818m) was completed at Sorpresa within the Roadside and Boundary Gate locations. Best individual holes were:**
  - Roadside hole Fi0633: **16m @ 1.92g/t Au & 251 g/t Ag from 58m and including 1m @ 2240 g/t Ag**
  - Boundary Gate hole Fi0626: **26m @ 1.89g/t Au from 6m including 1m @ 24.9g/t Au from 12m**
- ❑ **The high resolution airborne magnetic and radiometric survey was completed and now provides coverage over the entire Fifield tenement position (669km<sup>2</sup>)**
  - Levelling and integration with other survey data was completed and now provides a new important data layer to assist geology interpretation and targeting.
- ❑ **The Transit gold prospect additional bedrock auger drilling was completed**
  - Results interpretation is pending, and Reverse Circulation (RC) drill permitting is granted.
- ❑ **More than 13 priority areas have been identified by Rimfire for prospecting assessment**
  - Mapping, sampling and advancement of targeting concepts continues, aided by data from the recently completed geophysical survey and current reconnaissance aircore/auger drilling.
  - Locations include possible extensions of neighbouring mineralisation into the Company tenement areas to the north of Fifield, adjacent to the Tout Intrusive and incorporating the 7km x 2km Sorpresa corridor.



**CEO and Managing Director, John Kaminsky commented:**



“This has been a great quarter for the Company. We have the formal commencement of the New Gold earn-in arrangements and have established the strategic goals for advancing the project toward the next discovery. We have kicked off the various work programs in the field and we look forward to the array of targets emerge for drill testing.

“The New Gold exploration methodology will provide an increased geological understanding of the district as a base to help identify the best prospects for drill testing. New Gold continues to consolidate a comprehensive data package, filling gaps with new information and working towards its first series of priority drill targets to be tested in subsequent quarters.

“The overall exploration methodology also incorporates expertise from Rimfire which is funded by New Gold<sup>1</sup>. Rimfire will continue its district wide prospecting in parallel with New Gold Inc. and test targets that are generated, as appropriate.

“We have an impressive list of initiatives that have been successfully deployed in the quarter, using the combined efforts of both companies and includes:

- ✓ Geological concept development, particularly in the northern areas
- ✓ Greenfields prospecting and sampling on multiple areas (Tout East, Fortuna, Transit amongst others)
- ✓ Completion and use of the high resolution airborne geophysical survey
- ✓ Systematic surface reconnaissance through geochemistry (aircore and auger drilling) on a regional scale
- ✓ Sorpresa infill drilling

“New Gold’s approach is to digest the bigger picture of the underlying geologic framework and controls to mineralization in the Fifield district and then test the priority targets that could meet the scale and commercial objectives they have set.

“The blend of field activities provided by Rimfire in the first two quarters, including developing additional prospects, and testing some established prospects, compliments the structured exploration methodology of New Gold in the first half.

“Rimfire has a range of targets ready for RC drill testing and will be looking to do so when access arrangements, scheduling and permitting have been finalised.

“The structure of the earn-in arrangement gives the Company a strong financial position, and additional technical resources whilst still offering great flexibility. The deal structure maximises incentives for both Rimfire and New Gold to continue to unlock the value of the project for the longer term.

“We look forward to the continued roll out of our work plans in the next quarter.”

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More details are provided, as follows, on the work programs undertaken in the quarter and the concepts reviewed.

***Tout Intrusive Extension Concept***

Rimfire’s field mapping and interpretation of the geophysics north of Sorpresa indicates that aspects of the geology from the Tout Intrusive may continue into the Rimfire tenement holding. The concept area is referred to as Tout East, extension.

The laterite geology profile intersected in the current aircore drilling in this Tout East area provides additional validation of this concept. Five of eight aircore holes drilled encountered laterite up to 40m thick (field review) with assays pending. Drilling in this area will continue as part of the broader bedrock geochemistry program.

The drilling is an important step in confirming prospective geology that may have an association with the adjacent Tout Intrusive, which hosts Cobalt, Nickel, Scandium and Platinum in laterite. This could be significant, and the potential for an additional mineralisation style with attributes relating to the neighbouring geology of Tout Intrusive Complex (controlled by CleanTEQ) becoming more of a possibility.

The Tout East area has Alaskan-Ural rocks with laterite. This area seems more structurally complex than Tout itself, which could favour the introduction of gold into the metal mix at Tout East. There is evidence to suggest a major structural corridor passes through the Company tenements in this location.



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<sup>1</sup> The New Gold Inc. funding commitment for the workplans in the first year is A\$ 2 million, from which Rimfire has direct discretionary control over \$300,000 (i.e.15%) of this expenditure. Earn-in JV terms hyperlink ([28<sup>th</sup> October 2016 ASX Announcement](#))

The Company has not previously encountered laterite geology in drill intersections in any of its prior work at Fifield.

The area between the Fortuna prospect and the emerging Tout East area has also benefited from the recent high resolution magnetic survey and mapping with gold potential also being seen in this area.

### **Transit Regional Gold Prospect**

Additional auger drilling was completed at the Transit gold prospect, with results interpretation under review and RC drill plans are being developed to test the prospect.

The gold surface expression remains encouraging with an area of more than 200m x 200m of elevated gold (up to 2.3g/t Au) in bedrock based auger drilling, within a wider envelope of anomalous gold in soils (>9ppb gold anomaly of 750m x 500m size).

### **New Tenement – EL8543**

EL 8543 is a single strategic block secured from CleanTEQ (ASX:CLQ). The block has a key unexplained 1.5km diameter magnetic anomaly within this cross cutting structural area. The magnetic feature is proximal to some important mineralisation trends, and justifies closer examination. Preliminary surface work has begun.

In exchange for this tenement block, Rimfire has provided mining lease application rights to CleanTEQ, in the north west of our tenement holding, for their proposed development. By securing this block, Rimfire has now removed a gap in its tenement holding in this key location (see figure 2 for details).

During the first quarter, Rimfire completed surface mapping and sampling, whilst also reviewing the new geophysics as a first steps. Sampling has revealed silicified breccia and andesite with disseminated iron oxides with assays pending.

### **Multi-element data received at Glen Iris gold prospect**

The Company also obtained multi-element geochemical data from the previously sampled area at the Glen Iris prospect which will further aid the understanding of the mineralised context here. This multi-element work will be ongoing within the wider district over time.

The Company re-analysed soil and rock chip samples for multi-element, including Cobalt. An approximate area 500m x 500m is anomalous in Cobalt (soil results >30ppb Co), with associated rock chip values in the range ~0.1% to 1.0% Cobalt. The geologic and structural context is at a very early stage of understanding. More detailed field work and interpretation is needed.

### **Sorpresa Reverse Circulation (RC) Drilling**

RC drilling was undertaken at the Sorpresa gold and silver resource at Roadside (1422m) and Boundary Gate (396m) areas. The drilling depth range was 0~90m in the known high grade lenses at these locations.

Some excellent results were achieved, which included high gold results not previously seen in the Boundary Gate area. Significant intercepts ranging from 2 to 28 meters were returned at both drill locations (see highlights **Table 1** below).

This latest information will be examined and incorporated into an updated model of the high grade lenses at Sorpresa at an appropriate time. After performing some additional metallurgical test work, our technical assessment of the known Sorpresa area is considered complete for the time being.

The next stages of work will concentrate on the discovery potential in the larger 7km x 2km Sorpresa Corridor, where a range of targets exist (see Figure 4), and awaits drill scheduling.

**Table 1: Highlight intersections from March Quarter RC drilling at Sorpresa included:**

Hole (location)	Main Intersection(s) #1	Including Intersection(s) #2
Fi0633 (Roadside)	3m @ 0.45g/t Au from 42m <u>AND</u> 16m @ 1.92g/t Au & 251 g/t Ag from 58m <u>AND</u> 4m @ 0.27g/t Au from 74m	1m @ 0.92g/t Au & 2240 g/t Ag from 59m 1m @ 9.04g/t Au & 284 g/t Ag from 65m 1m @ 3.65g/t Au & 480 g/t Ag from 66m 1m @ 4.44g/t Au & 124 g/t Ag from 71m
Fi0637 (Roadside)	17m @ 1.24g/t Au & 172 g/t Ag from 62m <u>AND</u>	2m @ 1.87g/t Au & 335 g/t Ag from 66m 1m @ 0.9g/t Au & 723 g/t Ag from 68m 2m @ 0.91g/t Au & 375 g/t Ag from 76m

Hole (location)	Main Intersection(s) #1	Including Intersection(s) #2
Fi0640 (Roadside)	10m @ 0.12g/t Au & 22 g/t Ag from 48m <u>AND</u> 12m @ 2.39g/t Au & 129 g/t Ag from 58m <u>AND</u> 14m @ 0.27g/t Au & 12 g/t Ag from 70m	2m @ 4.42g/t Au & 482 g/t Ag from 60m 1m @ 8.94g/t Au & 141 g/t Ag from 62m 1m @ 5.08g/t Au & 33 g/t Ag from 66m 1m @ 1.25g/t Au & 14 g/t Ag from 78m
Fi0626 (Boundary Gate)	26m @ 1.89g/t Au from 6m	14m @ 3.16g/t Au from 8m Which incl. 1m @ 24.9g/t Au from 12m Which Incl. 1m @ 8.13g/t Au from 17m
Fi0631 (Roadside)	13m @ 2.34g/t Au & 93 g/t Ag from 47m <u>AND</u> 2m @ 1.37g/t Au from 74m	1m @ 2.19g/t Au & 117 g/t Ag from 52m 1m @ 21.6g/t Au & 307 g/t Ag from 54m
Fi0630 (Roadside)	10m @ 0.84g/t Au & 239 g/t Ag from 50m	2m @ 0.9g/t Au & 331 g/t Ag from 51m 1m @ 2.24g/t Au & 31 g/t Ag from 55m 2m @ 0.87g/t Au & 740 g/t Ag from 56m
Fi0642 (Roadside)	4m @ 46 g/t Ag from 50m <u>AND</u> 12m @ 0.74g/t Au & 184 g/t Ag from 64m <u>AND</u> 1m @ 1.77g/t Au from 82m	1m @ 1.22g/t Au & 442 g/t Ag from 69m 1m @ 3.12g/t Au & 1100 g/t Ag from 70m 3m @ 1.11g/t Au & 153 g/t Ag from 71m
Fi0643 (Roadside)	4m @ 31 g/t Ag from 42m <u>AND</u> 12m @ 1.04g/t Au & 154 g/t Ag from 67m <u>AND</u> 7m @ 0.17g/t Au & 23 g/t Ag from 79m	1m @ 1.14g/t Au & 103 g/t Ag from 71m 1m @ 0.76g/t Au & 693 g/t Ag from 72m 1m @ 3.11g/t Au & 443 g/t Ag from 74m
Fi0624 (Boundary Gate)	18m @ 1.74g/t Au from 0m	1m @ 4.91g/t Au from 6m 1m @ 15.4g/t Au from 7m 1m @ 2.60g/t Au from 8m
Fi0644 (Roadside)	2m @ 130 g/t Ag from 50m <u>AND</u> 3m @ 22 g/t Ag from 66m <u>AND</u> 12m @ 1.54g/t Au & 68 g/t Ag from 74m	6m @ 2.84g/t Au & 99 g/t Ag from 75m Which incl. 1m @ 0.59g/t Au & 262 g/t Ag from 75m Which Incl. 1m @ 11.35g/t Au & 147 g/t Ag from 78m
Fi0632 (Boundary Gate)	9m @ 23 g/t Ag from 44m <u>AND</u> 15m @ 1.01g/t Au & 68 g/t Ag from 53m <u>AND</u> 10m @ 0.19g/t Au & 25 g/t Ag from 68m	1m @ 3.51g/t Au & 72 g/t Ag from 58m 1m @ 1.29g/t Au & 251 g/t Ag from 59m
Fi0638 (Roadside)	2m @ 79 g/t Ag from 50m <u>AND</u> 2m @ 0.47g/t Au from 54m <u>AND</u> 15m @ 0.8g/t Au & 49 g/t Ag from 65m	1m @ 1.09g/t Au & 141 g/t Ag from 66m 1m @ 2.51g/t Au & 98 g/t Ag from 67m
Fi0627 (Boundary Gate)	28m @ 0.69g/t Au from 0m	1m @ 1.57g/t Au from 20m 1m @ 1.87g/t Au from 22m

#1 Highlight holes have a main intersection of >15 gram-metres (gold equivalent). Minor intersection(s) are also shown in that same hole if minimum 1m >0.25g/t Au or 1m > 22g/t Ag.

#2 Assays with 1m > 8g/t Au or 1m > 500g/t Ag also highlighted

## COMMODITY PRICING FOR THE MARCH 2017 QUARTER

As at 26<sup>th</sup> April 2017, precious metal prices recovered from low points in the quarter. Prices quoted [www.kitco.com](http://www.kitco.com), in New York based on closing Ask in USD).

	Price (Ask) 26 April 2017
Gold	USD\$1270/oz
Silver	USD\$17.58/oz
Platinum	USD\$954/oz

## **CORPORATE ACTIVITIES**

### **Cash, Funding, Facilities and Investments**

As at 31<sup>st</sup> March 2017 the Company had \$2.236 million in cash.

Commencing 1<sup>st</sup> quarter 2017, the Company has been receiving re-imbusement for certain expenditures incurred as part of the earn-in agreement and the implementation of a services agreement with New Gold Inc.

An application for Ausindustry R&D expenditure was submitted.

### ***Capital structure***

As at 31<sup>st</sup> March 2017 the capital structure of the Company was:

Fully Paid Ordinary Shares	943,330,058
Options, expiry 15 <sup>th</sup> May 2017, exercisable at 3.5 cents	52,385,951

### **Tenement Position**

New Exploration Licences were awarded in the period:

- EL 8543, 1 unit as part of a transfer deal with CleanTEQ subsidiary, Scandium21 was completed. Part of Rimfire EL5534 (NW corner will be available to CleanTEQ for a Mining Lease Application on their Syerston Nickel, Cobalt Scandium project).
- EL 8542, 32 units, representing the area along strike from Ben Hur copper-gold prospect.

The new areas are considered prospective for gold and base metal, including copper.

The total area now held by the Company is 669 km<sup>2</sup>. (Figure 3)



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

Figures and Location and maps	Pages 6~11
Company Background and Competent Authority Declaration	Pages 12~13

Figure 1: Fifield District Prospect Map – Adjacent Deposits to the North – on geology and structure background

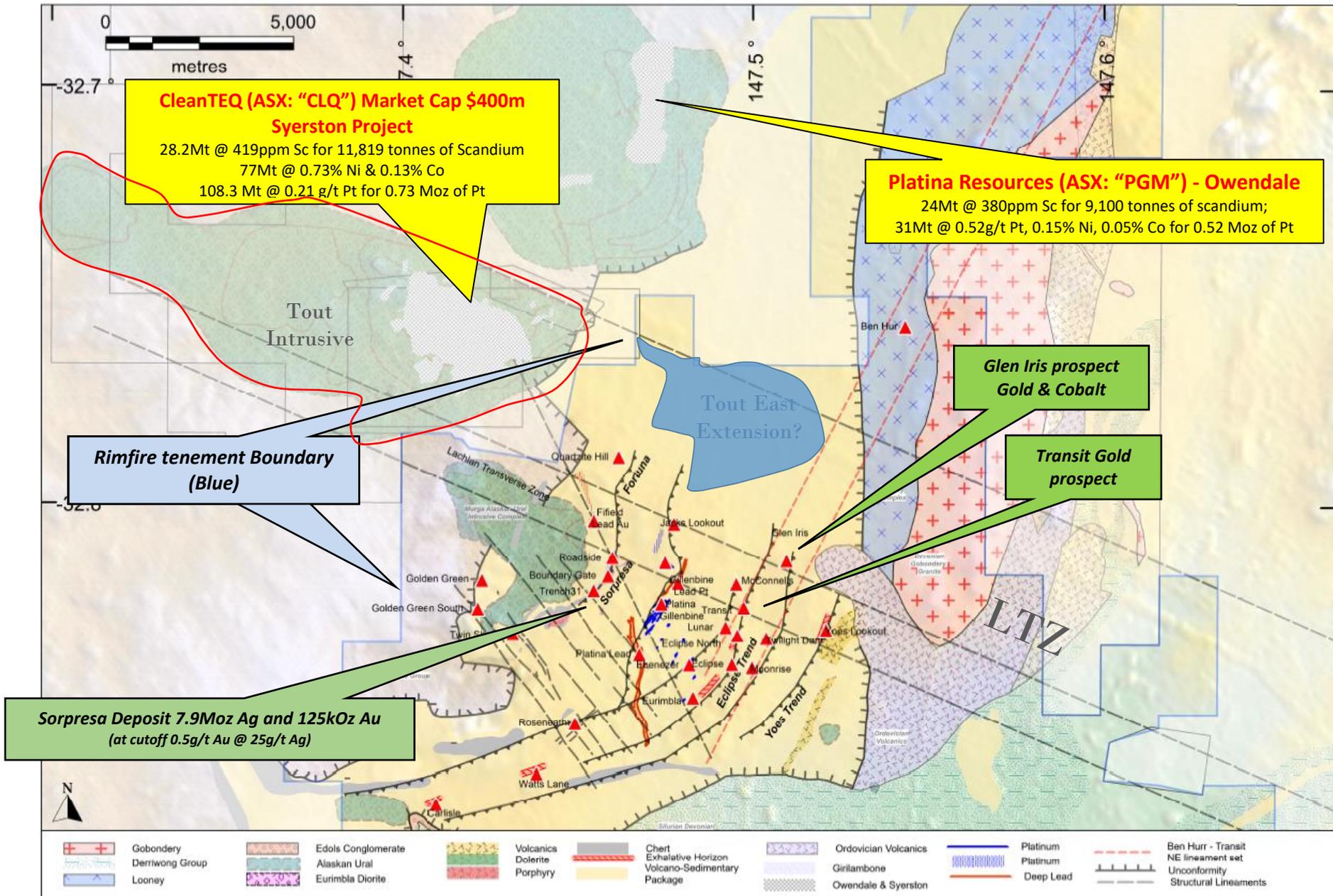
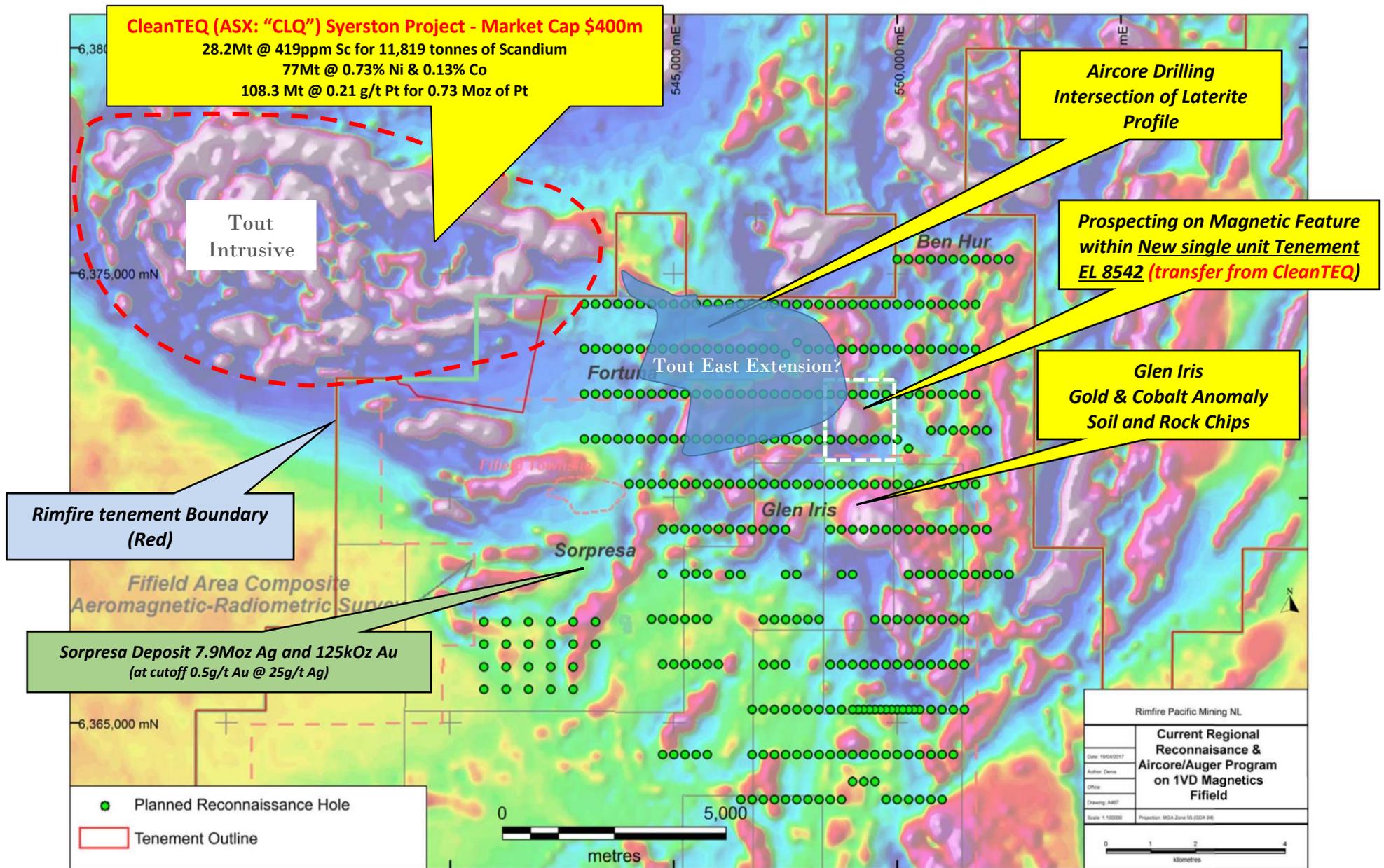
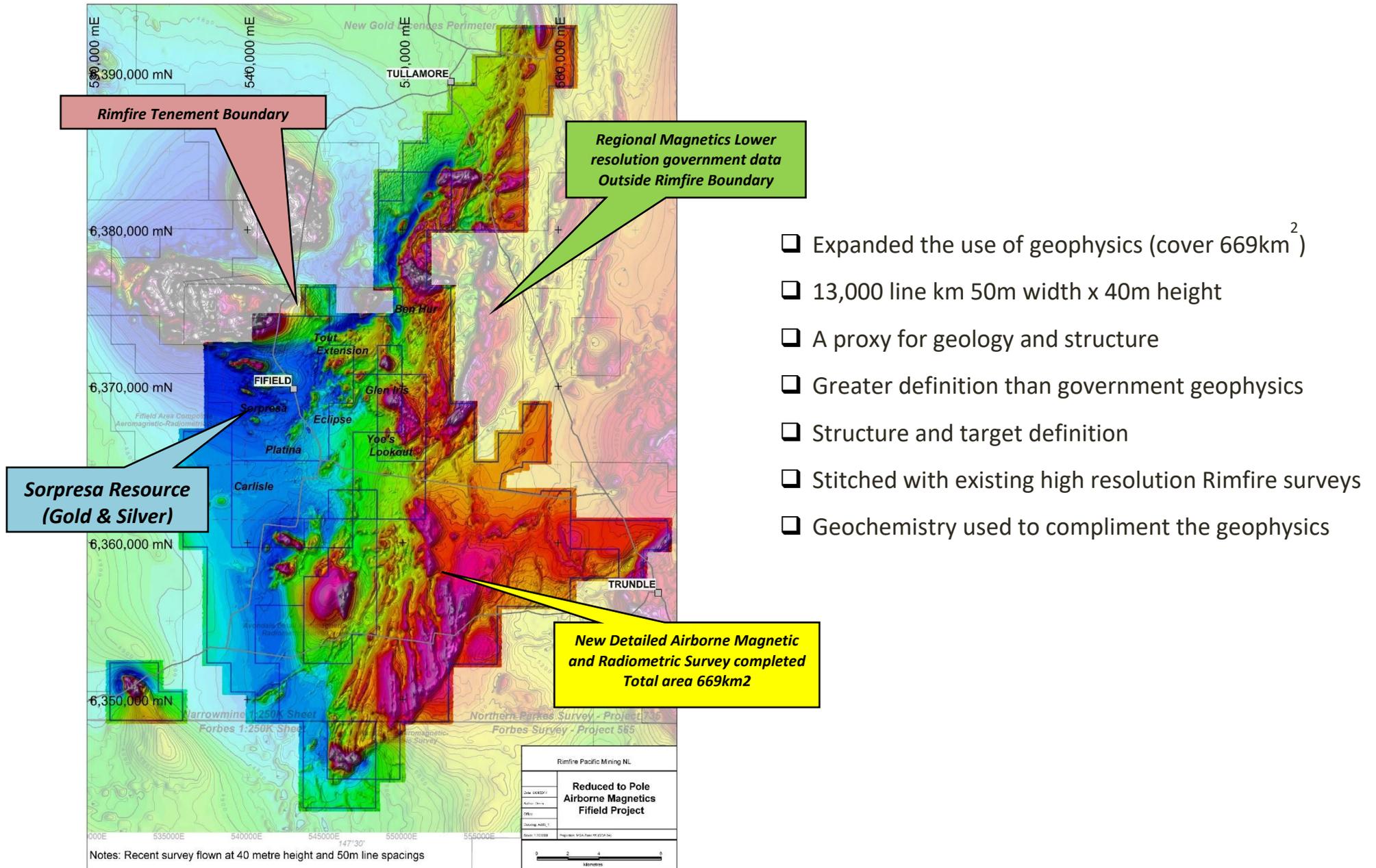


Figure 2: Regional Reconnaissance Aircore/Auger Drilling Geochemistry Program – On 1<sup>st</sup> Vertical Derivative Magnetics



**Figure 3: Map of Total Tenements area 669km<sup>2</sup> – Showing Completed Airborne High Resolution Geophysics Survey (Magnetics Reduced to Pole)**



**Figure 4: Geological & Structural Setting for Sorpresa Corridor – Discovery Growth & Gold Targets**

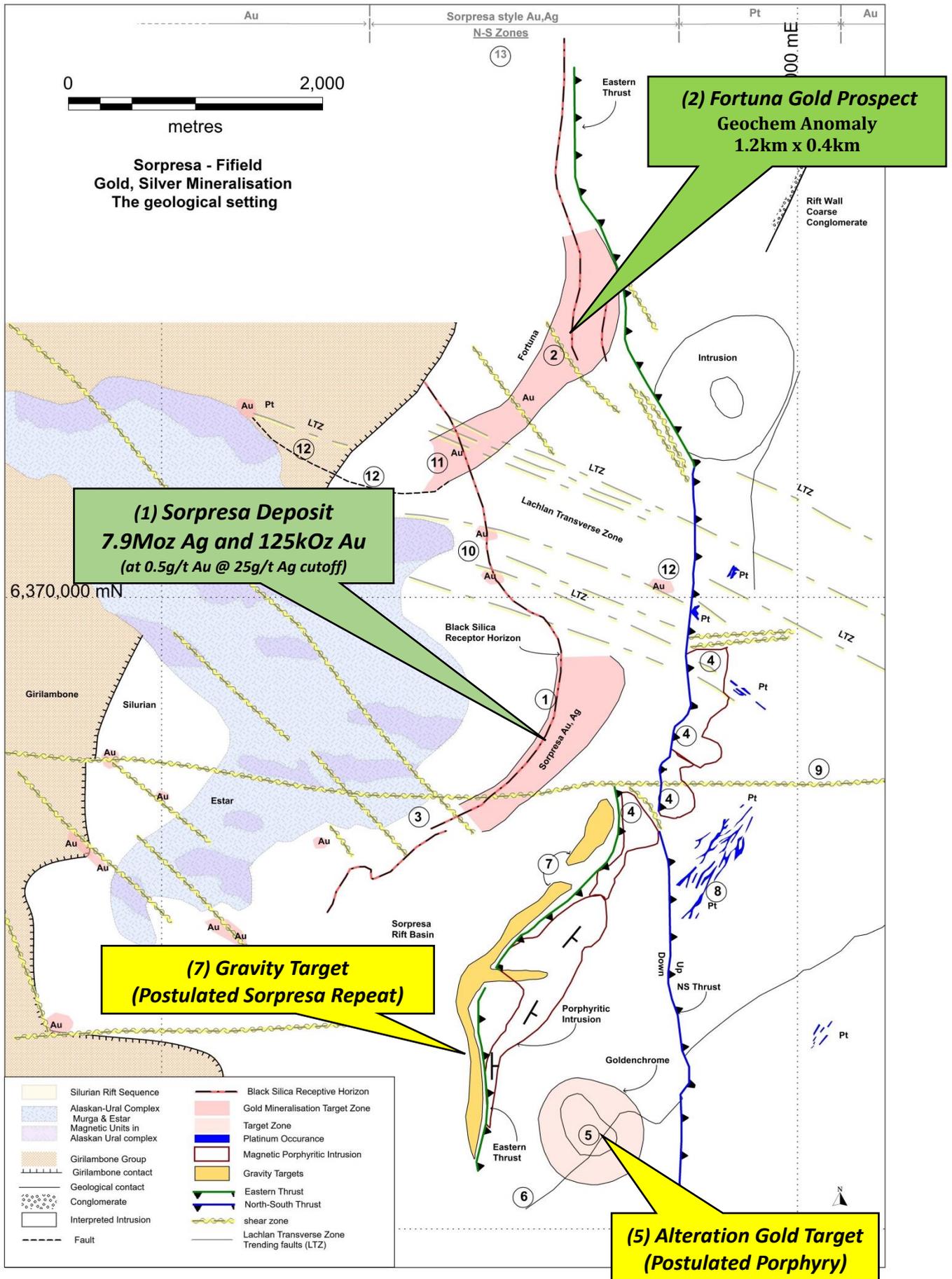


Figure 5: RC Drilling at Sorpresa – Roadside Area - showing gram-metre in plan view Au Equivalent (1gm Au = 70gm Ag conversion)

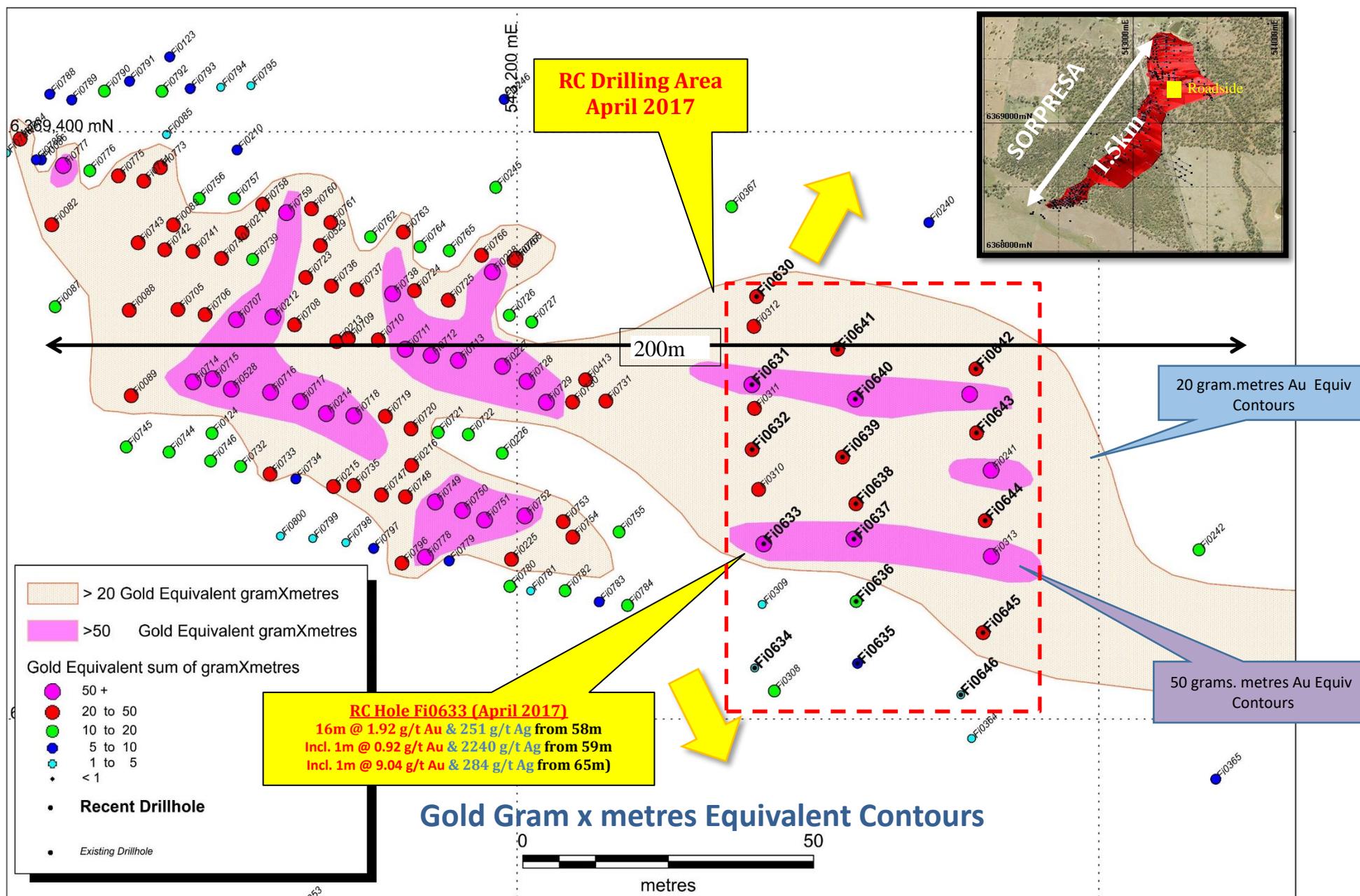
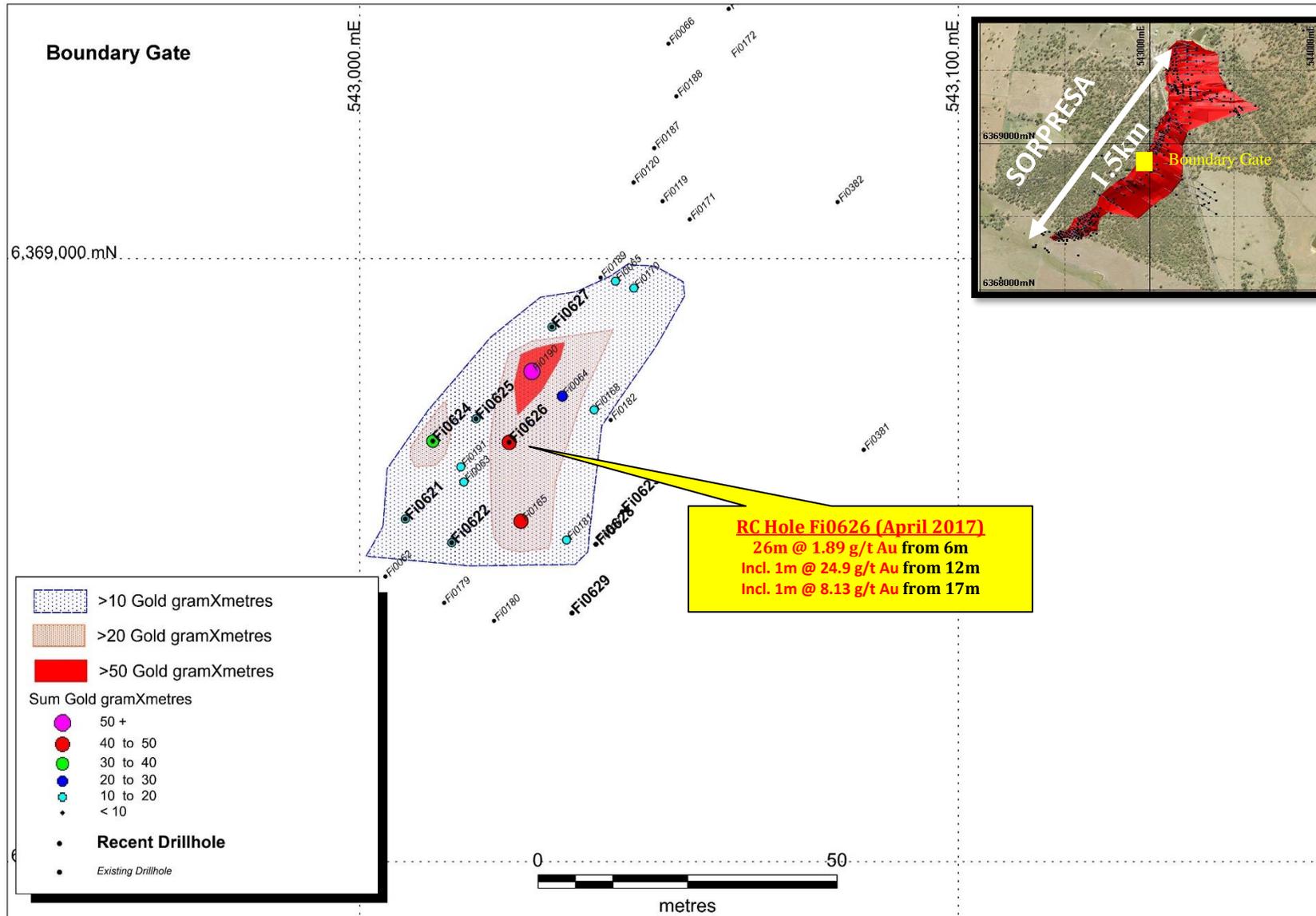


Figure 6: RC Drilling at Sorpresa – Boundary Gate Area - showing gram-metre Gold in plan view



## **ABOUT RIMFIRE**

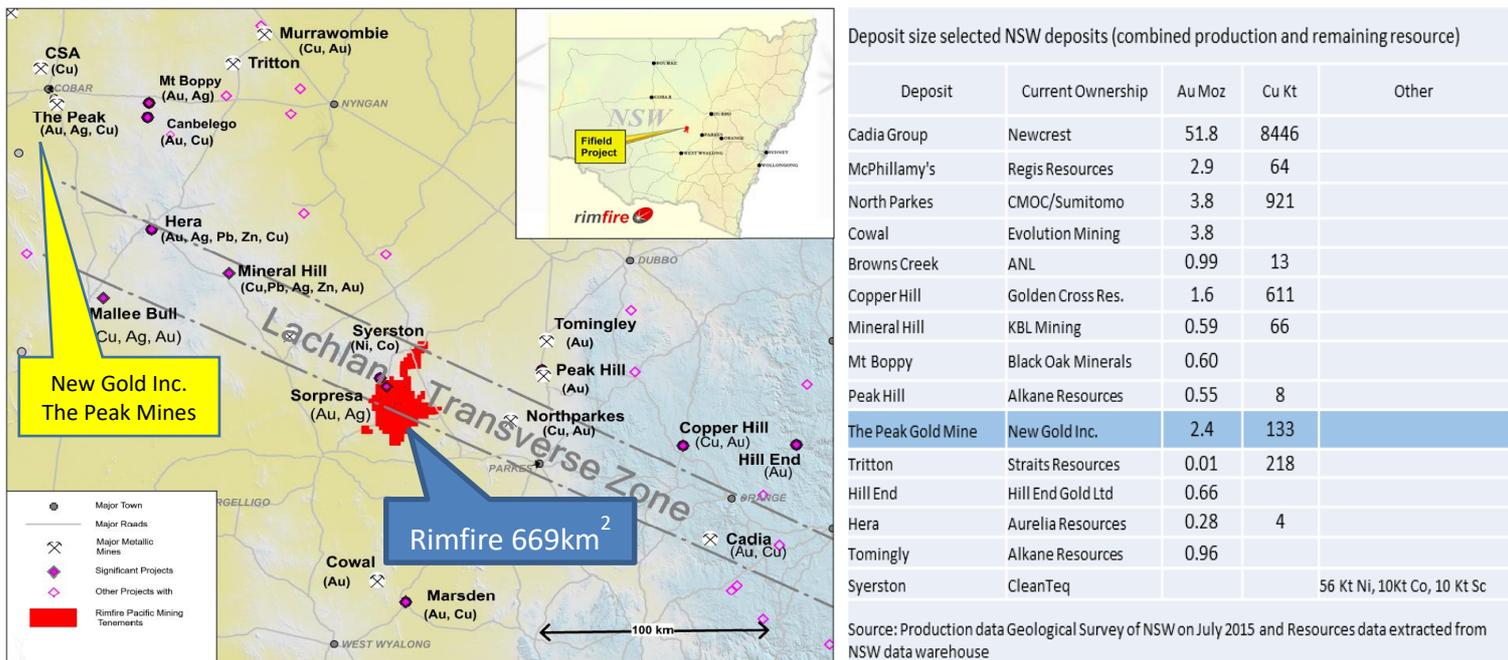
Rimfire Pacific Mining is an ASX listed (code: RIM) resources exploration company that has its major focus at Fifield in central NSW, located within the Lachlan Transverse Zone (LTZ).

In 2010~11 the Company delivered a greenfields gold and silver discovery, named “Sorpresa”, in the Fifield district. Subsequent exploration has provided evidence that the “Wider Sorpresa Area” is now considered a significant gold mineralised system of some potential.

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. The Company announced a JORC 2012 Compliant Inferred & Indicated Maiden resource for Sorpresa in December 2014.

Multiple prospects areas of importance involving hard rock Gold, Silver, Copper and Platinum have been established within a >6km radius of the Sorpresa discovery at Fifield, which is part of the contiguous 669km<sup>2</sup> tenement position.

### **Location map of Rimfire Tenements within the LTZ, showing proximal projects from others**



### **Earn-in by New Gold Inc.**

On 28<sup>th</sup> October 2016, Rimfire and New Gold Inc. (TSX/NYSE: NGD) signed an [Earn-in Agreement](#) (ASX Release) under which New Gold has committed to spend A\$2 million during 2017 (subject to certain conditions) and may choose to spend more on the property (upto \$12 million within 5 years) to earn up to a 70% interest in Rimfire’s tenements in the Fifield district.

### **The presentations on the Company are at hyperlinks:**

#### **[Progress through Partnership – AGM 22 November 2016 Presentation](#)**

A 3D Exploration Model, as at May 2014, depicting gold mineralisation at Sorpresa with a description of the RC drill program goals at that time is available as a [video by hyperlink: Click Here](#).

#### **[Recent videos available on Rimfire Website Hyperlink](#)**

Video Hyperlink: [Discussion on recent Fortuna surface sampling, Sorpresa gold corridor, Fifield NSW](#)

## **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 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 deposit 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 information and previously published material under 2004 JORC standard that is referenced in this report:**

The information provided in "About Rimfire Pacific Mining" is available to view additionally 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 3: Sorpresa Mineral Resource estimate reported under JORC 2012**

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
		<b>Total</b>	<b>3.0</b>	<b>1.06</b>	<b>22</b>	<b>103</b>	<b>2.1</b>
Silver	25 g/t Ag	Indicated	2.1	0.21	62	14	4.2
		Inferred	1.2	0.19	40	7	1.6
		<b>Total</b>	<b>3.4</b>	<b>0.20</b>	<b>54</b>	<b>22</b>	<b>5.8</b>
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
		<b>Total</b>	<b>6.4</b>	<b>0.61</b>	<b>38</b>	<b>125</b>	<b>7.9</b>

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.