



QUARTERLY EXPLORATION AND ACTIVITIES REPORT

(For the period 1st October 2016 to 31st December 2016)

Farmin – JV and Subscription Agreements Completed with New Gold Inc. **Major airborne geophysics survey contracted, Transit gold anomaly advanced**

Highlights – Corporate – New Gold Inc. Agreements

- ❑ **Binding agreements in relation to a Farmin-in joint venture were signed between Rimfire and New Gold Inc. (TSX/NYSE:NGD) ([28th October 2016 ASX Announcement](#))**
 - New Gold Inc. is a gold producer based in Canada, market capitalization of approximately CAD\$2.0 billion
 - A subscription agreement (placement) of A\$0.5m (at 2.1cents per share) was also completed
- ❑ **Discussions for 2017 field programs and a key site visit were conducted with New Gold Inc.**
 - This provided further input into New Gold's knowledge assembly assisting planning for 2017 expenditure
- ❑ **The Foreign Investment Review Board (FIRB) has cleared the transactions proposed under the agreements with New Gold Inc.**
- ❑ **The expenditure commencement of the Farm-in period occurs from 1st January 2017**
 - The earn-in calendar begins once NSW regulators complete the agreement final compliance requirement

Highlights – Field Program Initiatives at Fifield NSW

- ❑ **The Transit gold prospect (3.5km east of Sorpresa) expanded through additional soil geochemistry**
 - Soil geochemistry gives approximately 750m x 500m gold anomaly (>9ppb Au), including a central higher order 300m x 300m gold-in-soil anomaly (>17ppb Au)
- ❑ **Bedrock Auger drilling at Transit confirmed gold values up to 2.3g/t Au**
 - There is a strong central gold-in-bedrock anomaly which defines an approximately 200m long trend that remains open to the north east
 - Follow up auger sampling within the anomaly has returned anomalous gold values of up to 2.3 g/t Au from the top of bedrock at shallow depths
 - Probable structural and geological controls are suggested by the gold contour shapes
 - Further auger traverses have now been deployed with results pending, and Reverse Circulation (RC) drill permitting is granted
- ❑ **Rockchips 400m southwest of the Transit surficial gold anomaly indicate a shallow level epithermal geochemical expression common to precious metal vein systems**
 - Assay results on the chips returned anomalous silver, copper, arsenic and lead (best 7.99g/t Ag, 1260ppm Cu, 442ppm As & 1700ppm Pb)
 - The Transit anomaly may be part of a larger trend of prospective geology that remains untested by drilling
- ❑ **The Ben Hur copper-gold prospect returned high rock chip values**
 - This included **14.35% Cu, 3.63g/t Au**, in outcropping multiple narrow veins (typical 2~10cm widths) contained within a broader 20m wide within an approximately 0.65km x 0.45km area that remains open along strike
 - A NE-SW magnetic trend (~15km length) extends through Ben Hur to the Eclipse area and contains the majority of the anomalous Cu rockchip results returned to date in the district
- ❑ **An airborne magnetics and radiometric survey has been contracted that will provide full coverage over the Fifield tenement position, including ELA's (in total about 13,000 line km, on 50m line spacing flown at 40m heights)**

□ Additional RC drilling within the Sorpresa resource at Roadside and Boundary Gate areas that was postponed in the quarter was rescheduled for the next quarter

CEO and Managing Director, John Kaminsky commented:



“The Company completed a series of agreements with New Gold Inc. in the quarter, including the injection of \$0.5m through a placement. The newly established relationship with New Gold Inc., creates a strong financial position for the Company heading into 2017 and beyond.

“It is the Board’s view that the Company has now assured a solid foundation and the additional financial and technical resources will help accelerate the discovery work on our numerous prospects, to pursue the multimillion ounce gold or gold equivalent potential seen within the project areas at Fifield.

“The genuinely collaborative nature of the interaction with New Gold has impressed us. Rimfire can pursue its concepts and field programs relatively autonomously within the parameters of the agreements. New Gold has a great team, and have now made the new appointment of Project Manager to the site and are strongly committed to the project area.

“This year will see an exciting direction for Rimfire. The key outline of the New Gold transaction is summarised:

- Immediate A\$0.5 million equity investment in Rimfire shares at 2.1 cents (completed).
- Minimum spend on the Fifield tenements by New Gold of A\$2 million within the first year, with no early withdrawal right. Commencement date is deemed to be 1st January 2017
- New Gold may elect to spend a further A\$5 million within the first three years, to earn a 51% interest in the Fifield tenements (New Gold total expenditure at Fifield A\$7 million to earn 51%).
- Subsequent to earning an initial 51% interest in the Fifield property, New Gold may elect to spend an additional A\$5 million within the first five years, to earn an additional 19% interest and form an unincorporated exploration, development and mining joint venture (Rimfire 30%: New Gold 70%), (New Gold total expenditure at Fifield A\$12 million to earn 70%). If this further funding of A\$5 million is not completed by New Gold within the first five years, an unincorporated exploration, development and mining joint venture will form (Rimfire 49%: New Gold 51%).
- Should the current Sorpresa gold and silver mineral resource ultimately be mined and processed, New Gold would pay Rimfire additional monies up to A\$5 million.
- In recognition of Rimfire’s outstanding technical work, Rimfire will have direct spending control of 15% of the first A\$7 million funded by New Gold, to continue its exploration work at Fifield contemporaneously with New Gold’s exploration activities at Fifield.

Transit Regional Gold Prospect



“At the Transit gold prospect, additional auger drilling was conducted and we await these results. The work this quarter has substantially increased the size and improved the focused shape of the gold anomaly at Transit, thereby upgrading the gold potential here.

“We now have 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).

“For perspective, at Sorpresa, the soil expression for the gold was weaker than we are now seeing at Transit. The discovery area Trench31, had comparable values in auger drilling, but over a shorter distance. On this basis, the Transit gold prospect certainly looks encouraging”.

Ben Hur Gold and Copper Prospect

“In the quarter, the Ben Hur Copper-Gold area returned some high value copper results on rock chips (up to 14% Cu) with associated gold, silver and bismuth. The prospect is located on a strong linear feature (~15km length) observed in the regional magnetics. This same feature also extends 10 km to the southwest across the known areas of prospective copper-gold mineralization identified previously at Eclipse (Figure 5)

“A review of this magnetic NNE trending structural corridor shows that many of the prospects associated with the Eclipse Trend occur directly on these interpreted structures. Rimfire’s historic regional rock chip geochemistry shows that significant copper and gold results are seen in this corridor.

“Previous drilling at Eclipse South (Fi0588, in 2015) encountered a copper-gold (**incl. 4m @ 6.5% Cu**)+/-Bi-Ag vein, similar to those seen at Ben Hur.



Assessment at Ben Hur

“This corridor will benefit from the airborne magnetic/radiometric survey due to commence shortly. The airborne survey also covers the application for a new exploration area north east along strike to cover the trend extension beyond our current ground holding.

“The copper-gold expression in this corridor is an important part of the Fifield mineralisation potential, so these new observations will be placed into context and pursued. See details in [ASX Hyperlink 17th October 2016](#).

“We will plan our next steps in consultation with New Gold as the assessment plan at Fifield is finalised. The next likely stages will require prospecting the knowledge gaps that remain on the 669 km² Fifield tenement area with additional reconnaissance mapping, and possible soil and auger drill sampling.

COMMODITY PRICING FOR THE DECEMBER 2016 QUARTER

As at 20th January 2017, precious metal prices recovered from low points in the quarter, and remained above pricing from a year ago. Prices quoted www.kitco.com, in New York based on closing Ask in USD).

	Price (Ask) 27 Jan 2016	Price (Ask) 30 January 2017	Year on Year gain %
Gold	USD\$1115/oz	USD\$1196/oz	7%
Silver	USD\$14.35/oz	USD\$17.18/oz	20%
Platinum	USD875/oz	USD\$992/oz	13%

CORPORATE ACTIVITIES

Cash, Funding, Facilities and Investments

As at 31st December 2016 the Company had \$2.636m in cash.

A placement of \$0.5m (at 2.1 cents per share) was made in November 2016 to New Gold Inc. Canada, as part of the new earn-in, joint venture agreements completed on 28th October 2016.

Commencing 1st quarter 2017, the Company will be 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.

Capital structure

As at 31st December 2016 the capital structure of the Company was:

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

Tenement Position

New ELA's (Exploration Licence Applications) were applied for in the period:

- ELA 5325, 1 unit as part of a transfer deal with CleanTEQ subsidiary, Scandium21. Part of Rimfire EL5534 (NW corner will be exchanged for this new ELA).
- ELA 5368, 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 or under application has expanded to 669 km². (Map page 10)

Annual General Meeting (AGM) held 22nd November 2016

The Annual General Meeting (AGM) of shareholders was well attended by approximately 30 people, indicating keen interest in the Company. The Board and management received strong endorsement from shareholders with all resolutions resoundingly carried.

Presentation Hyperlinks:

The following presentations were delivered at the 2016 AGM.

Title: **AGM 2016 CEO Presentation Corporate and Exploration:** [Click here](#) to view this announcement.

Title: **AGM 2016 Chairman Address:** [Click here](#) to view this announcement.

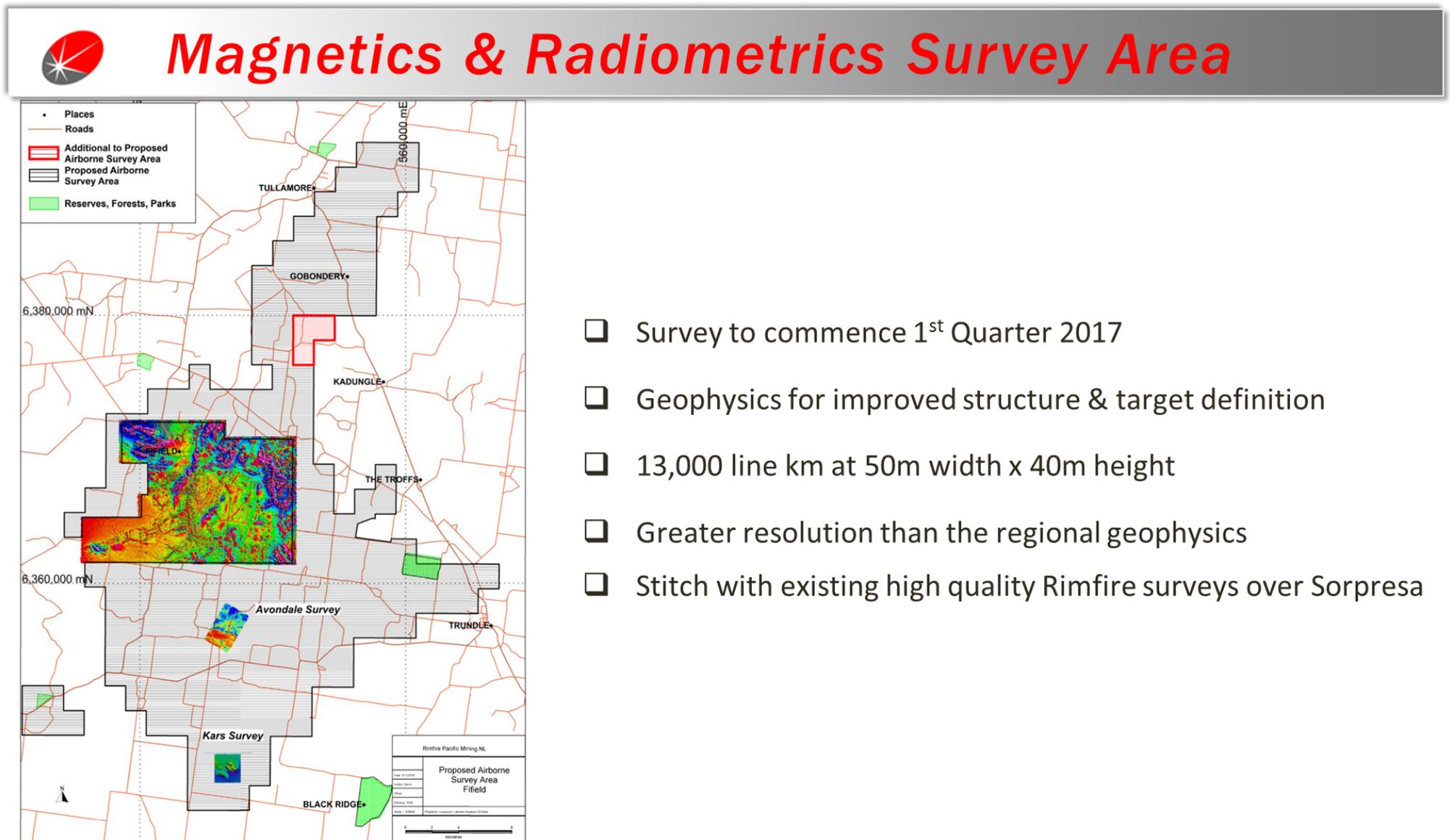


JOHN KAMINSKY
CEO and Managing Director

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

Location and prospect maps	Pages 5~9
Context for results and Competent Authority Declaration	Pages 10~11

Figure 1: Map of Current and Applied for tenements area – Showing Planned Airborne Geophysics Survey



- Survey to commence 1st Quarter 2017
- Geophysics for improved structure & target definition
- 13,000 line km at 50m width x 40m height
- Greater resolution than the regional geophysics
- Stitch with existing high quality Rimfire surveys over Sorpresa

Figure 2: Geological & Structural Setting for Sorpresa Corridor – Discovery Growth & Gold Targets

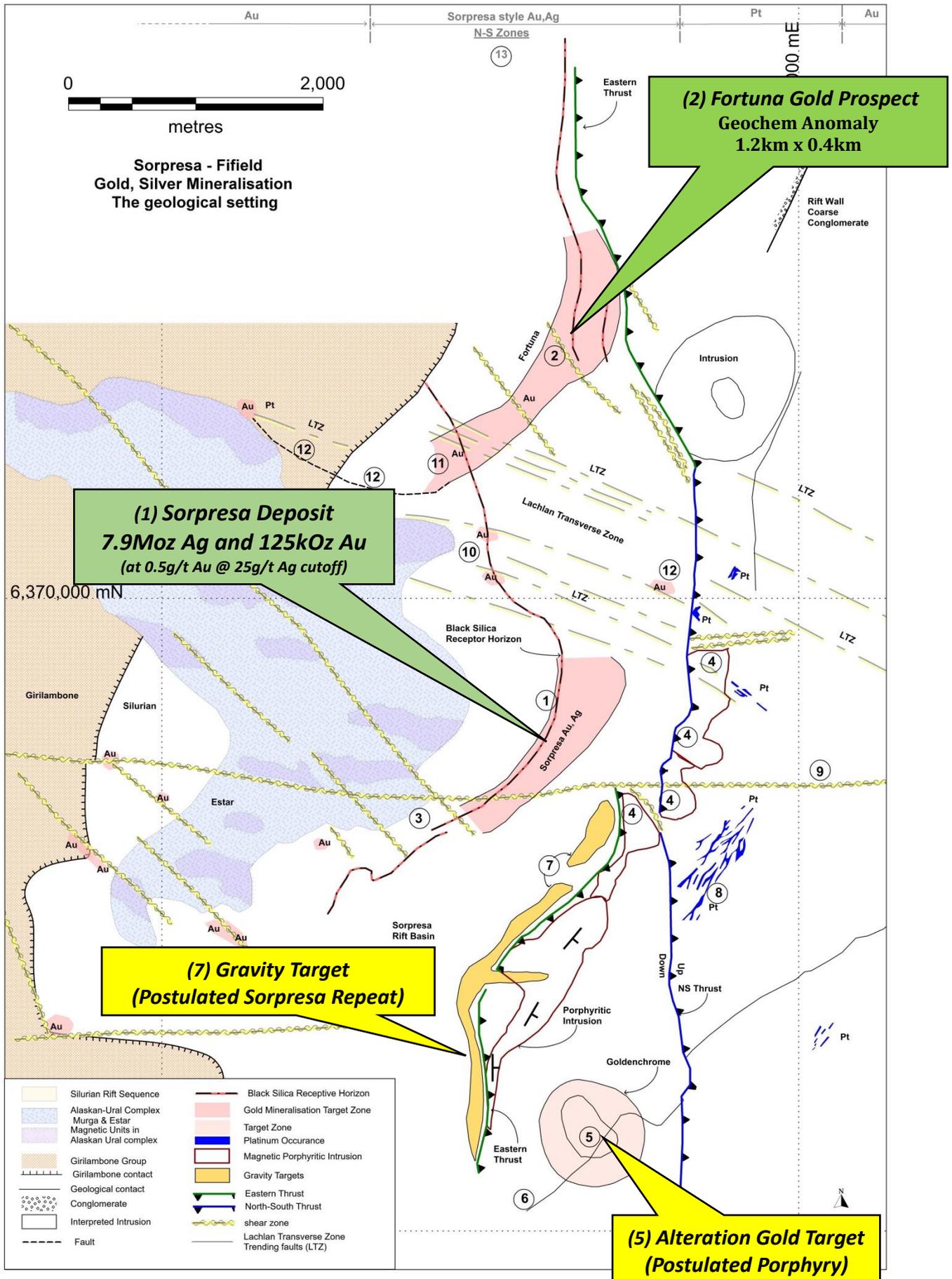


Figure 3: Regional Prospect Map – Locations of Transit gold anomaly

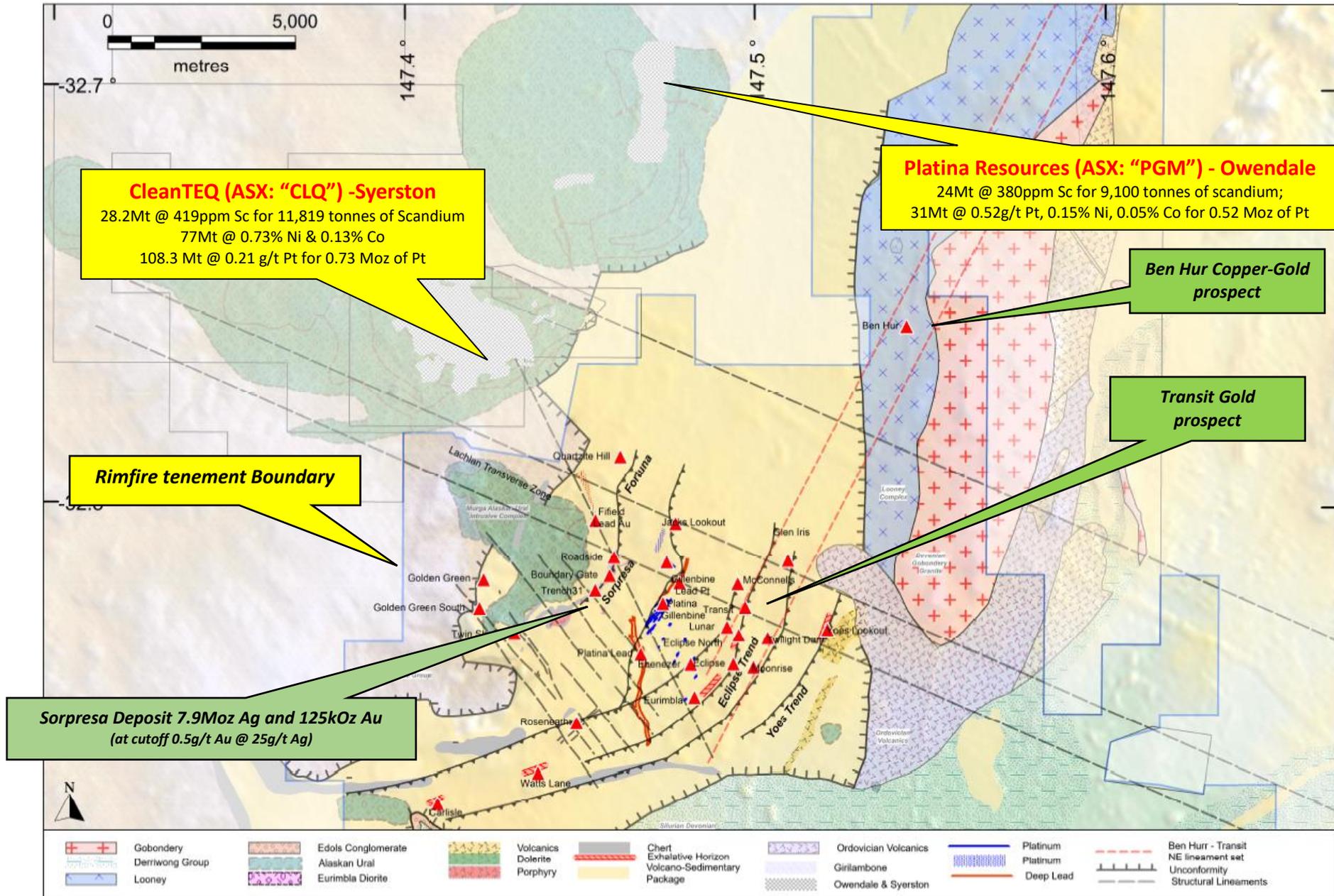


Figure 4: Transit gold assay results (ppb Au) for bedrock Auger Drilling – on a backdrop of Soil Contour gold results

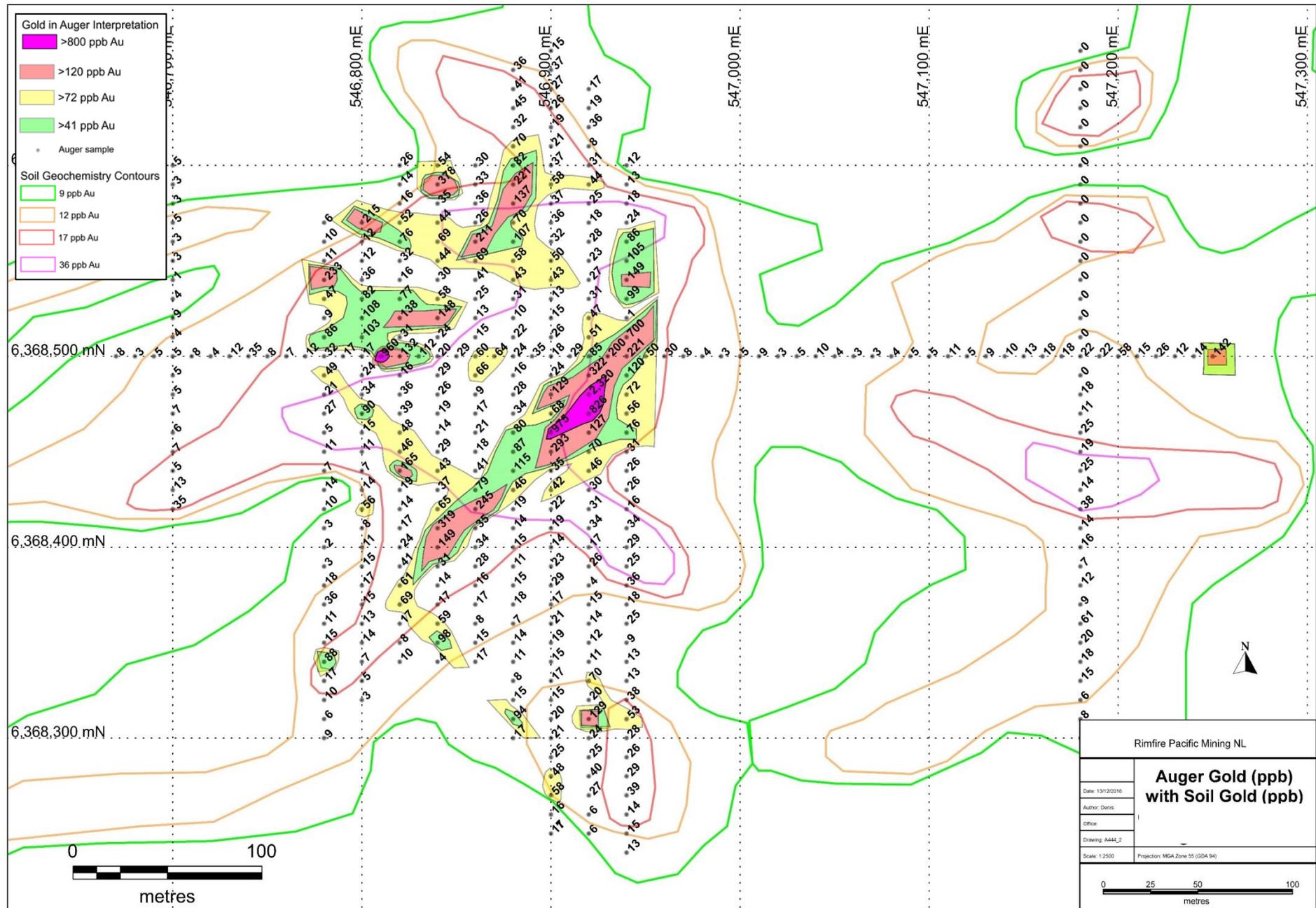
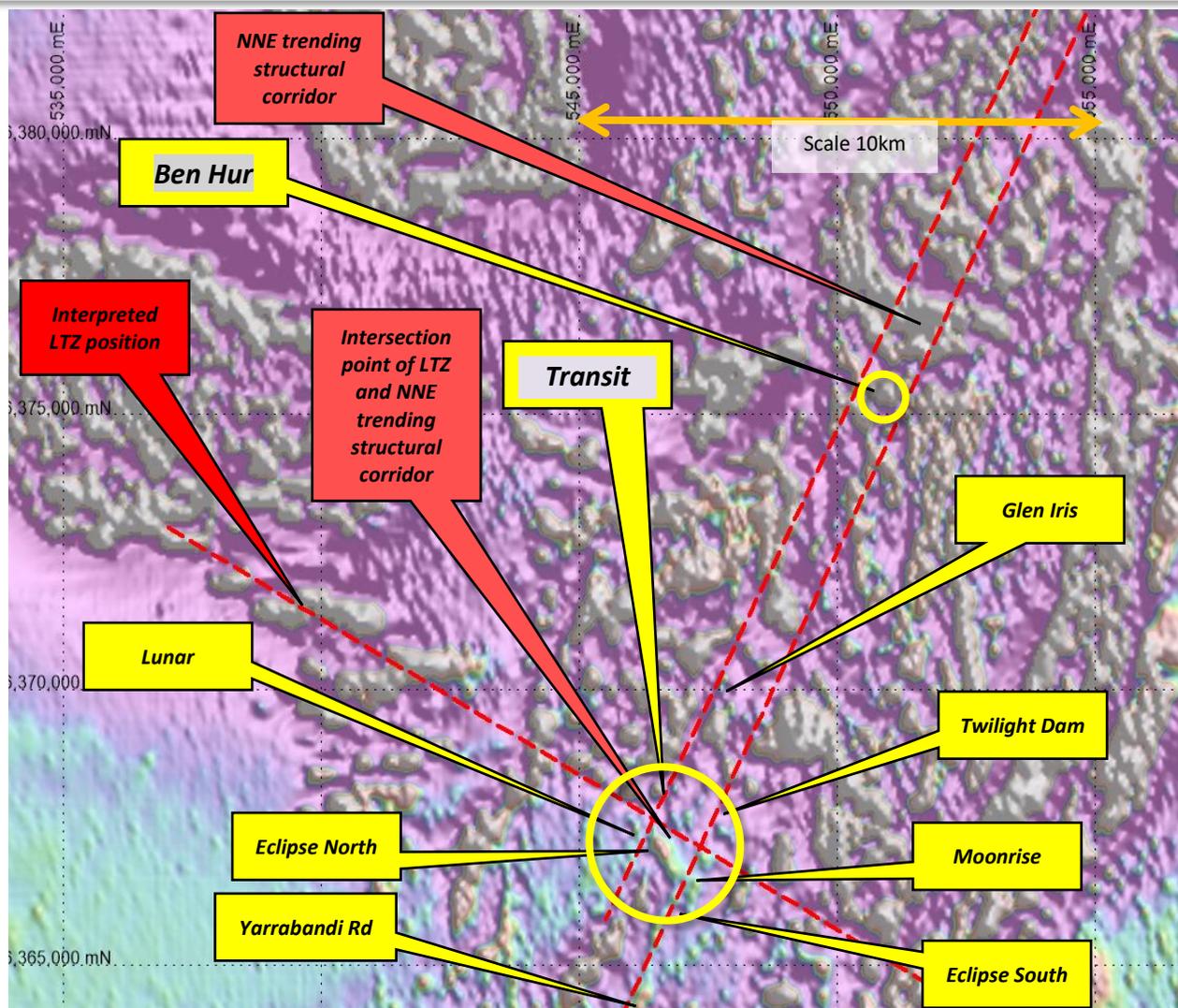


Figure 5: Transit gold Anomaly location – on a backdrop of magnetic image and interpreted structures



Relationship of interpreted structures to major prospects on 1VD magnetic image

- ❑ Interpreted NNE trending 15km structural corridor
- ❑ Many prospects associated with the Eclipse Trend occur directly on these interpreted structures
- ❑ The major mineralised zone occurs where the LTZ regional structure crosses the NNE trending structural corridor
- ❑ Eclipse North could represent a possible dilational jog

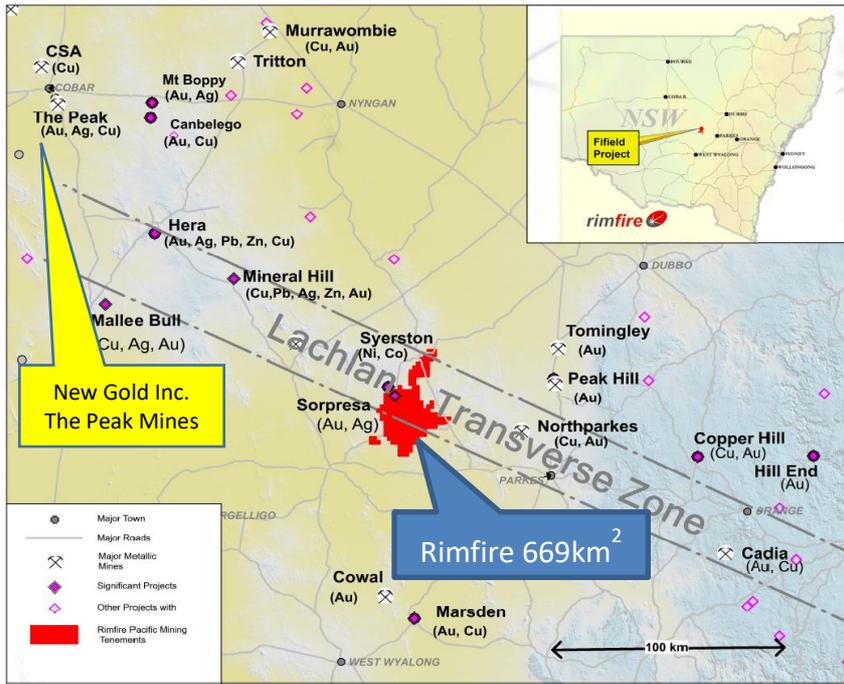


COMPETENT PERSON DECLARATION AND ABOUT RIMFIRE

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

In 2010 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 promise. More recently a copper signature has been established to the East. The gold is predominantly native gold at Sorpresa.

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



Deposit size selected NSW deposits (combined production and 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	3.8		
Browns Creek	ANL	0.99	13	
Copper Hill	Golden Cross Res.	1.6	611	
Mineral Hill	KBL Mining	0.59	66	
Mt Boppy	Black Oak Minerals	0.60		
Peak Hill	Alkane Resources	0.55	8	
The Peak Gold Mine	New Gold Inc.	2.4	133	
Tritton	Straits Resources	0.01	218	
Hill End	Hill End Gold Ltd	0.66		
Hera	Aurelia Resources	0.28	4	
Tomingley	Alkane Resources	0.96		
Syerston	CleanTeq			56 Kt Ni, 10Kt Co, 10 Kt Sc

Source: Production data Geological Survey of NSW on July 2015 and Resources data extracted from NSW data warehouse

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 extension drilling.

The Company announced a JORC 2012 Compliant Inferred & Indicated Maiden resource for Sorpresa in December 2014, which comprises 6.4Mt for 7.9Moz of silver and 125kOz of gold (at 0.5g/t Au & 25g/t Ag cutoff).

The Company has now established multiple project areas of importance involving hard rock Gold (Au), Silver (Ag), Copper (Cu) and Platinum (Pt) within a >6km radius of the Sorpresa discovery covering an extensive prospective 35km² area at Fifield, which is part of the contiguous 669km² tenement position held.

Earn-in by New Gold Inc.

On 28th 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 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 1: 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
		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.