



QUARTERLY EXPLORATION AND ACTIVITIES REPORT

(For the period 1st July 2016 to 30th September 2016)

Regional work- Includes New Ben Hur Copper-gold Prospect Area Capital Raisings and Partnership Agreements Completed with New Gold Inc.

Highlights - Corporate and other activities (including post quarter period)

- ❑ A successful Share Purchase Plan (SPP) and placement were completed August and September strengthening the Company financial position, raising a combined A\$2.508m (at 2.1 cents per share) before costs.
- ❑ Discussions and agreements were completed in the post quarter period ([28th October 2016 ASX Announcement Hyperlink](#)) with New Gold Inc. (TSX:NGD) (NYSE MKT:NGD), a CAD\$2.7 billion market capitalized Canadian based operating gold company establishing a project partnership with Rimfire and its Fifield tenements, as a farmin-in joint venture. This also included a subscription agreement (placement) of A\$0.5m (at 2.1cents per share)

Highlights - Key Field Programs

- ❑ **The new copper-gold prospect, "Ben Hur", mapped and sampled, yielding high rockchip values**
 - This included **14.35% Cu, 3.63g/t Au**, in veins, and accompanied Silver & Bismuth
 - The mapped area is approx. 0.65km x 0.45km and open, with Geological interpretation pending
 - A noted large magnetic trend (15km), NE-SW from Ben Hur to the Eclipse area appears to contain the majority of Cu rockchip results in the district
 - A new ELA 5368 (32 units) has been applied for, taking account of the regional magnetic trend extension
- ❑ **Drilling conducted at "Fortuna" gold prospect (size 1.2km x 0.4km) shows dynamic potential**
 - 5 stratigraphic (scout) drill holes were completed to average depths of 80m
 - The program goals were to aid understanding of structure and geology that underlies the surface gold geochemistry, guiding the next stages of exploration.
 - Preliminary drilling observations indicate a dynamic geological and structural setting, conducive to gold mineralisation potential, with some similarities to Sorpresa (located 3km to the south)
 - Once interpretation is completed further exploration will be planned
- ❑ **RC drilling at Roadside continued to outline the lens boundaries on the surface position**
 - **7m @ 3.87 g/t Au & 171 g/t Ag from 27m** was the best result this round in limited drilling
 - An auger geochemistry program has commenced to the west, seeking shallow extensions of the system
- ❑ **Auger drilling on Transit prospect geochemistry anomaly confirms the presence of gold**
 - Previous soil geochemistry gave an approx. 200m x 200m Au anomaly at greater than 25ppb gold
 - A small auger geochemistry program has confirmed gold values up to ~1g/t Au
 - An additional soil program was conducted to better define the gold anomaly for follow on drilling

CEO and Managing Director, John Kaminsky commented:



"In the post quarter period, the Company completed a series of agreements with New Gold Inc. We are very pleased that New Gold, has recognised the great potential at our Fifield leases and is keen to examine our project areas, providing financial and technical resources to accelerate the discovery work on our numerous prospects.

"The newly established partnership with New Gold Inc., combined with the Company's own capital raising initiatives in the quarter, through the SPP and placement raising \$2.5million, puts the Company in a strong financial position heading into 2017.

“This provides a new and exciting direction for the Company. The key outline of the transaction is summarised:

- ❑ Immediate A\$0.5 million equity investment in Rimfire shares at 2.1 cents.
- ❑ Subject to New Gold securing FIRB approval and Ministerial consents, minimum spend on the Fifield tenements by New Gold of A\$2 million within the first year, with no withdrawal right.
- ❑ 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).
- ❑ 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). 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.

“It is the Board’s view that the Company has now established a strong partnership foundation to pursue the multimillion ounces gold equivalent potential within the project areas at Fifield.”

Field activities Comments

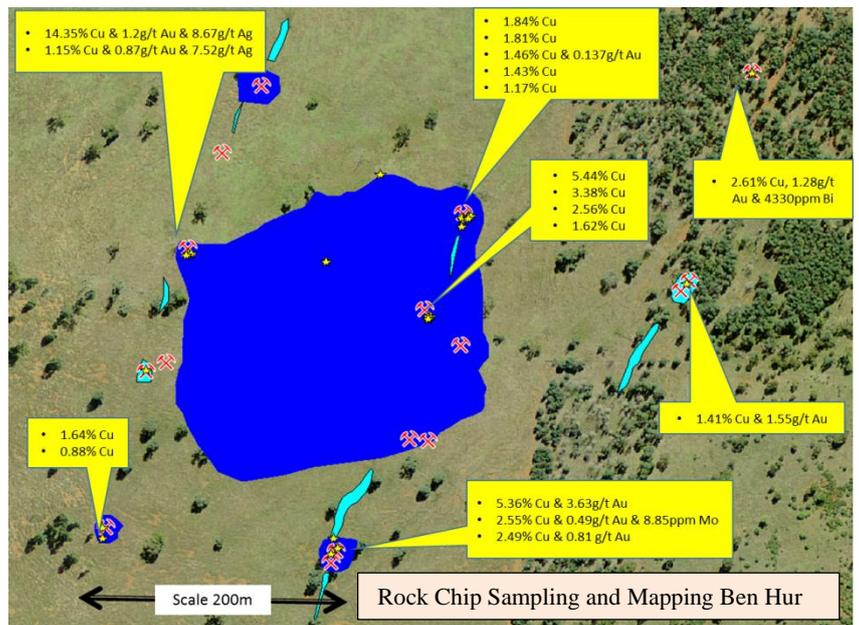
“Weather was a disruptive factor during the quarter, with field access heavily restricted. We have advanced our regional work, and continued with some limited additional assays from the Roadside area within Sorpresa.

Ben Hur Gold and Copper Prospect

“Work was progressed on the **new Ben Hur Copper-Gold area**. Some high value copper results on rock chips (**up to 14% Cu**) with associated gold, silver and bismuth were very pleasing to see, and we are now trying to determine the significance of these results and the larger geological context.

“Ben Hur is located on a large magnetic feature (~15km length) in the regional magnetics. The same feature also strikes into the known copper areas at Eclipse, to the SE.

“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.



Ground Magnetics Ben Hur

“This includes the previous drilling at Eclipse South (Fi0588, in 2015) encountering a Cu-Au (**incl. 4m @ 6.5% Cu**)+/-Bi-Ag vein, similar to those seen at Ben Hur.

“When regional rock chip geochemistry is examined (Appendix 1), significant **Cu results are seen to be associated with the identified NNE trending structural corridor**, with only few notable results outside of this zone.

“We have now commenced ground magnetics at Ben Hur, and taken an application for a new exploration area NE along strike to cover the trend extension beyond our current ground holding.

“Once we have pieced together more information, we will plan our next steps, which could involve soil and auger drill sampling, or move straight to some scout percussion holes, once permitting is in place.

“It is still early, but it does highlight again that Copper 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](#).

Fortuna Prospect progressing

“Drilling at Fortuna has now completed the 5th hole in the series of planned stratigraphic holes. The Fortuna Prospect represents a large surface gold anomaly, with the very limited exposed geology showing veined gossanous black silica, very similar to Sorpresa.

This area has never been previously drilled, and lacks detailed geophysics information, so these drill holes provide greater understanding.

“We have a small window on the mineralising system and its associated geology now, so this drilling will be assessed and assists the next stage of exploration.



Field Inspection Transit Gold Prospect

Transit Prospect Gold Anomaly

“Transit prospect is beginning to demonstrate quite a reasonable gold anomaly in the surface (~25ppb Au), through wide spaced soil lines, and a small auger drill program. The auger line has confirmed gold in the subsurface (~1g/t) and the next stage work plans are additional soil and auger sampling, prior to likely RC drilling.

Roadside area progress at Sorpresa

“At Roadside, the drilling focused on the surface position heading west, which are very shallow intervals (0~20m) and then the southern line extension, which heads deeper. The only data point we have further west, is our strongest soil sample result at Sorpresa, namely 144ppb Au (in 2010), 150m away.

“We will be checking the possibility of a continuation of the high grade shoot to the west, with an auger drilling program, which is now partly deployed. Follow up RC drilling at some point will occur on any encouraging results.

“The Company looks forward to providing updates of the progress on the work conducted at Fifield through the partnership with New Gold Inc., in the coming quarters.”

COMMODITY PRICING FOR THE SEPTEMBER 2016 QUARTER

As at 28th October 2016, precious metal prices retreated in the quarter, but remained above values at the start of the year. Prices quoted www.kitco.com, in New York based on closing Ask in USD).

	Price 27 Jan 2016	Price 28 October 2016
Gold	USD\$1115/oz	USD\$1276/oz
Silver	USD\$14.35/oz	USD\$17.83/oz
Platinum	USD875/oz	USD\$982/oz

CORPORATE ACTIVITIES

Cash, Funding, Facilities and Investments

As at 30th September 2016 the Company had \$2.603m in cash.

The Company raised approx. \$2.503m (at 2.1cents per share) in a combined placement and SPP in August and September.

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

Capital structure

As at 18th October 2016 the capital structure of the Company was:

Fully Paid Ordinary Shares	918,091,963
Options, expiry May 15 th 2017, exercisable at 3.5 cents	52,385,951



JOHN KAMINSKY
CEO and Managing Director

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

Location maps	Pages 5~10
Context for results and Competent Authority Declaration	Pages 11~12

Figure 1: 1st VD Magnetic Corridor at Fifield – Including Ben Hur Copper Prospect

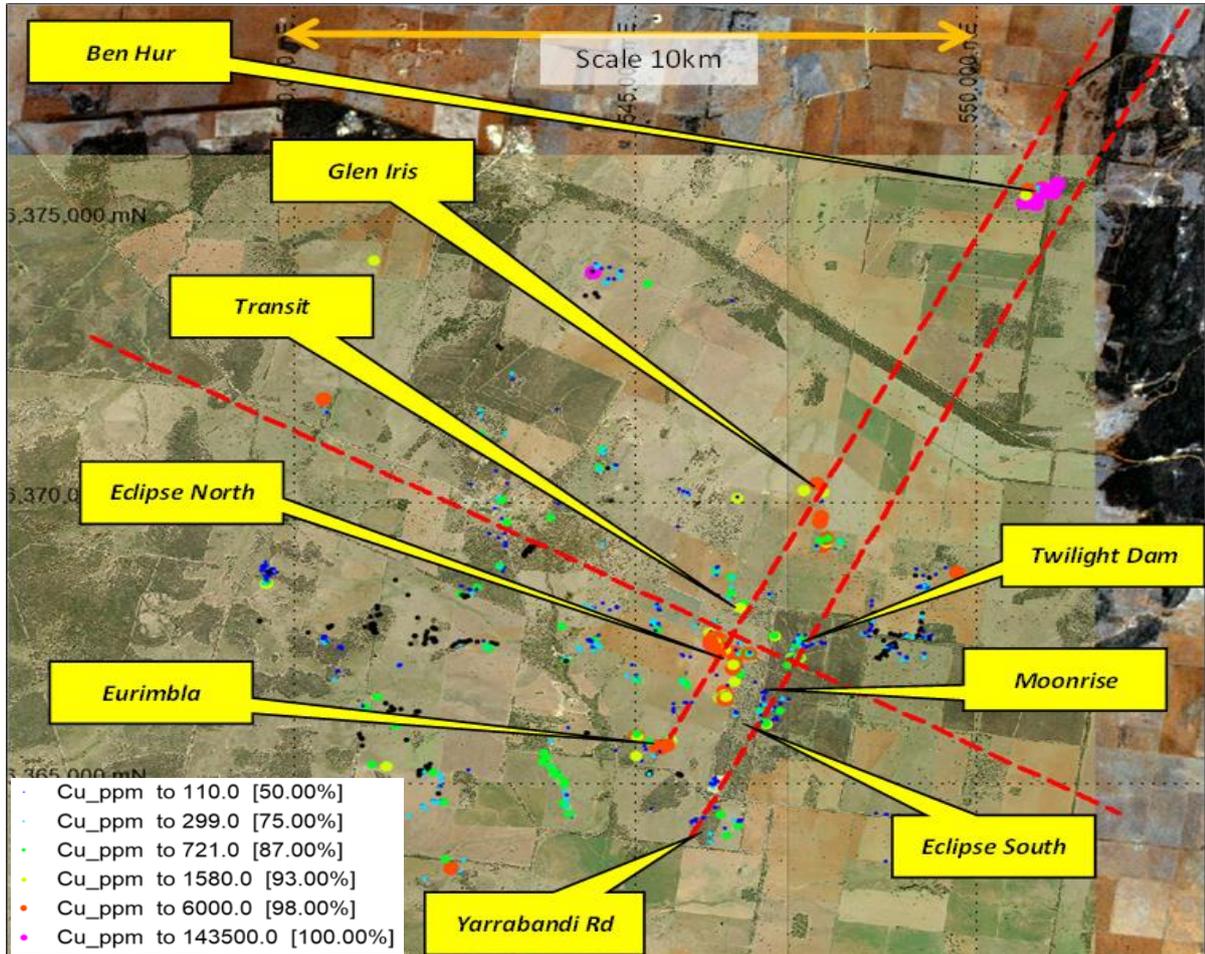
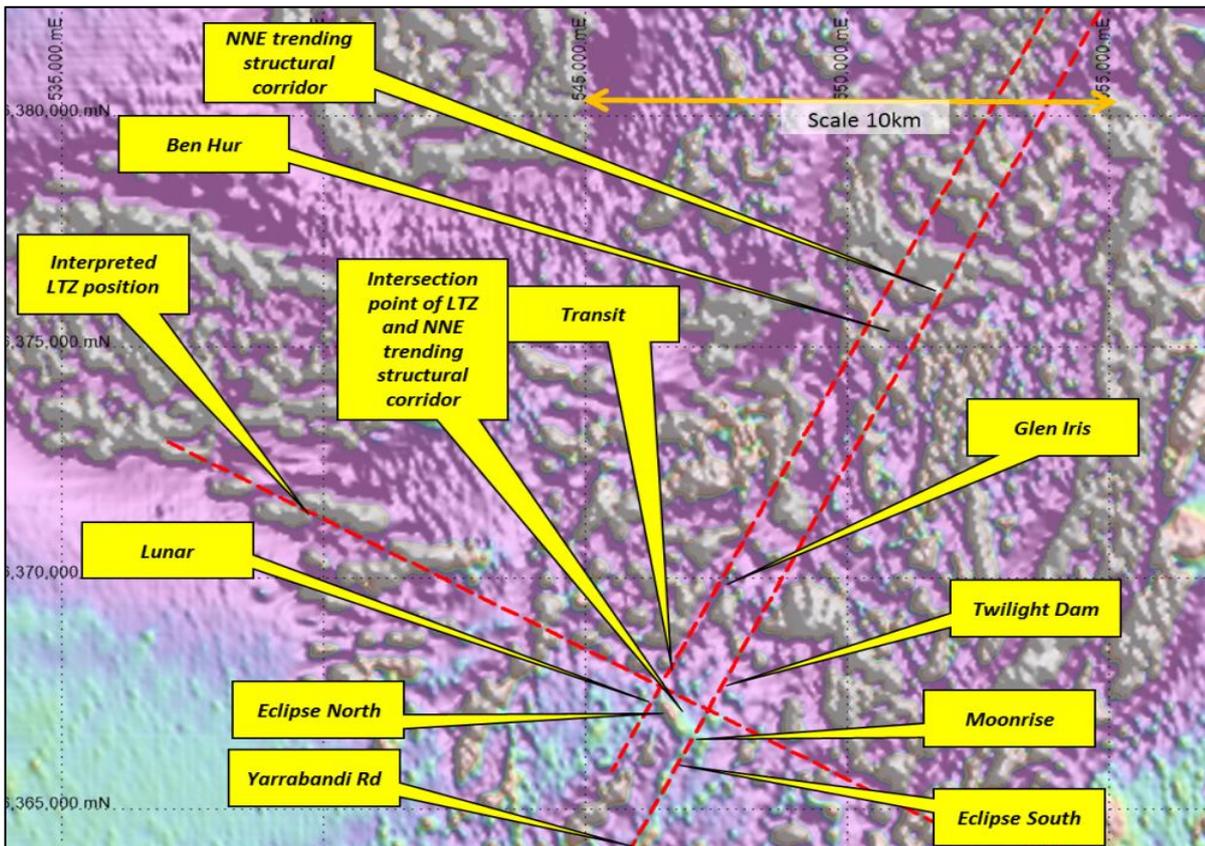


Figure 2: Geological & Structural Setting for Sorpresa Corridor – Discovery Growth & Gold Targets

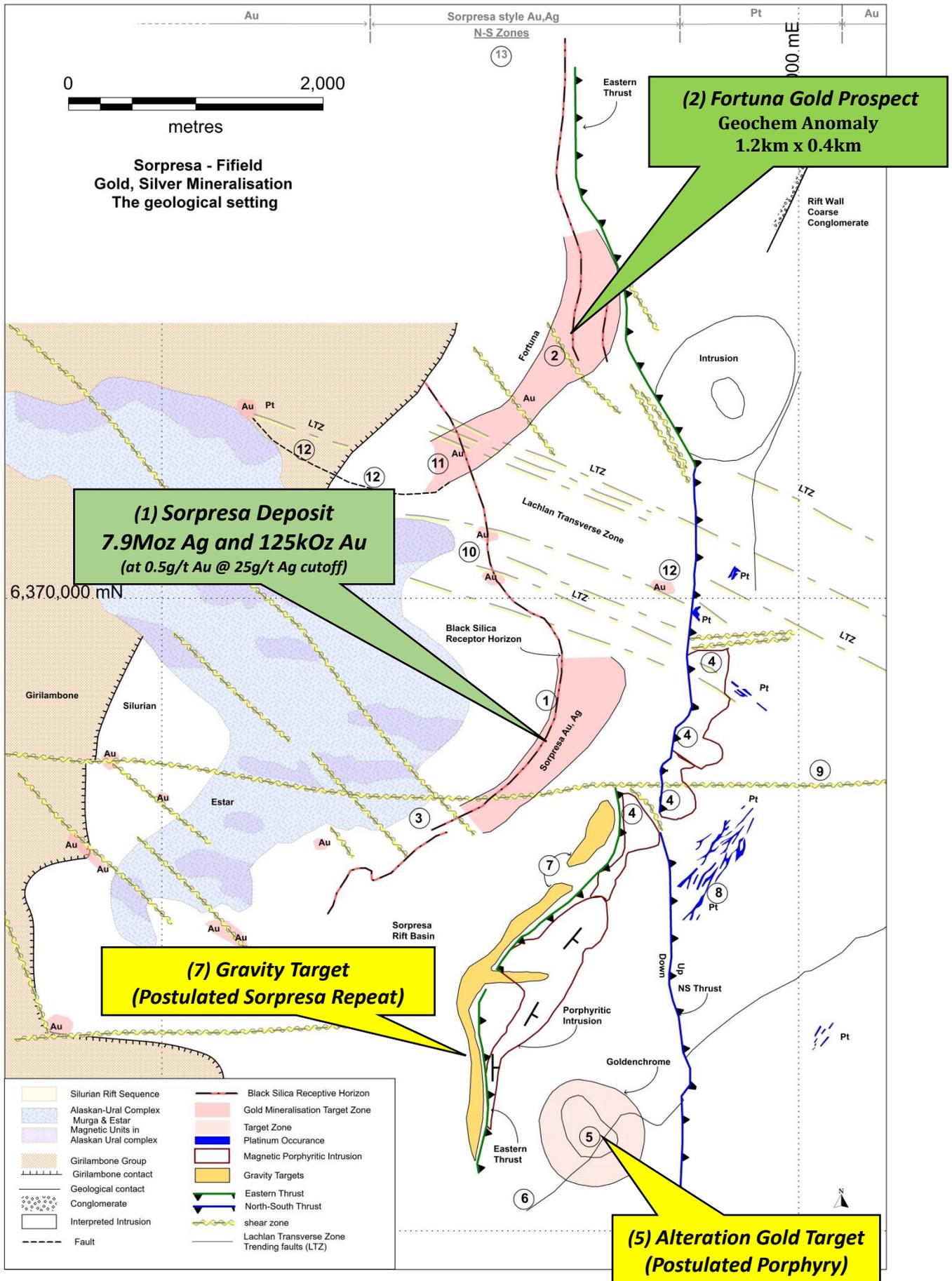


Figure 3: Regional Prospect Map – Locations of Ben Hur, Fortuna and Transit anomalies

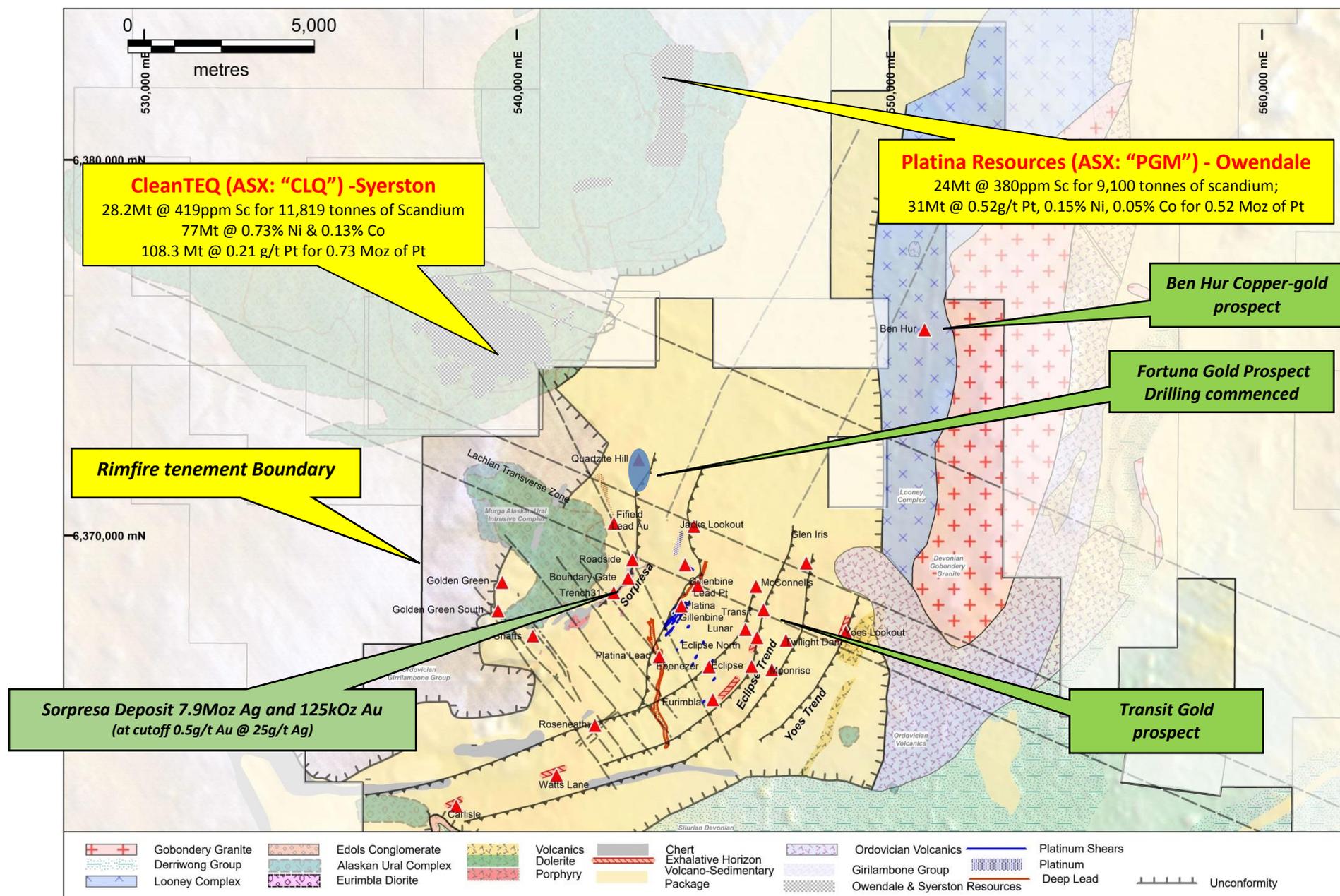


Figure 5: Auger Geochemistry at Sorpresa – West of High Grade Lens at Roadside

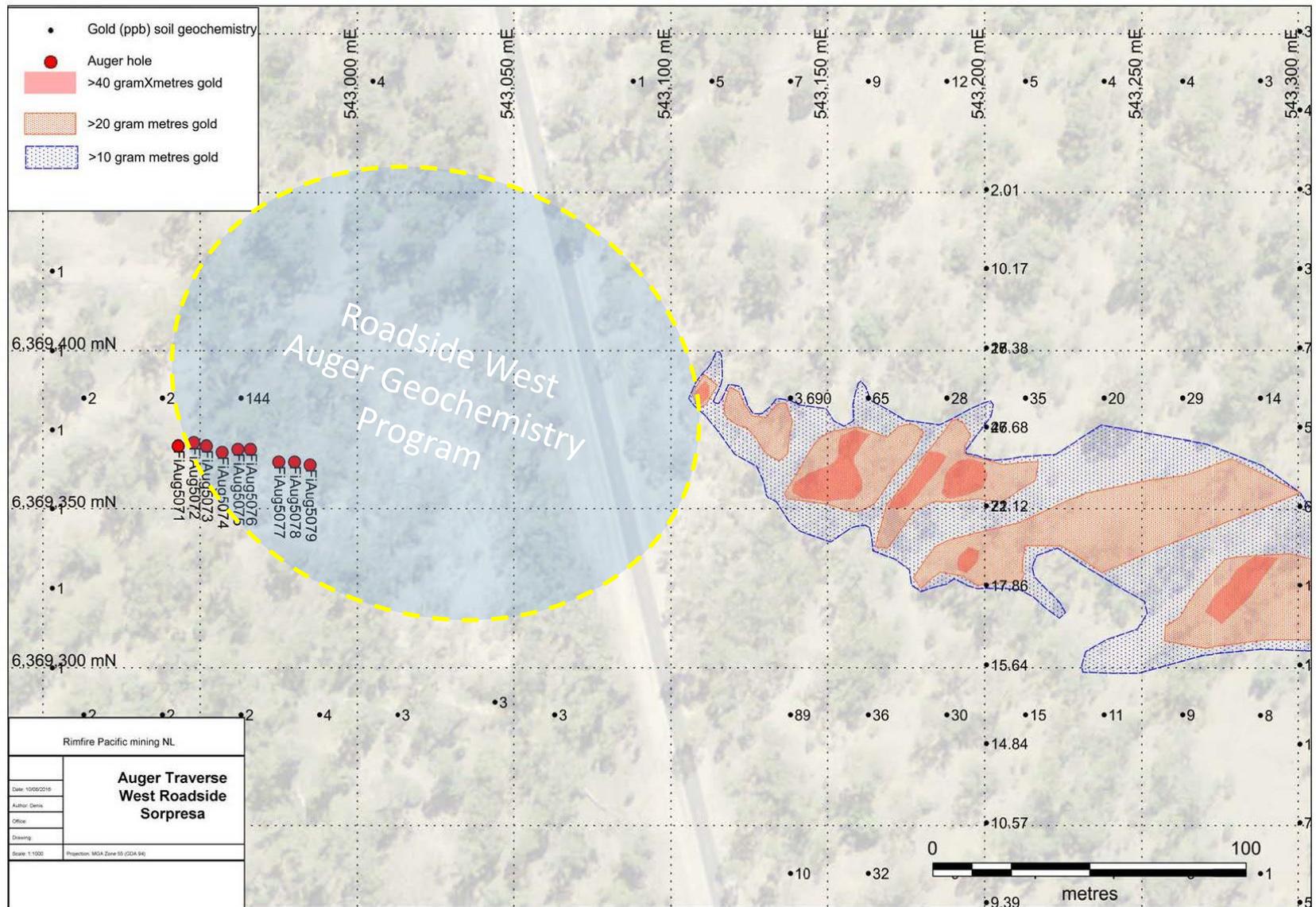
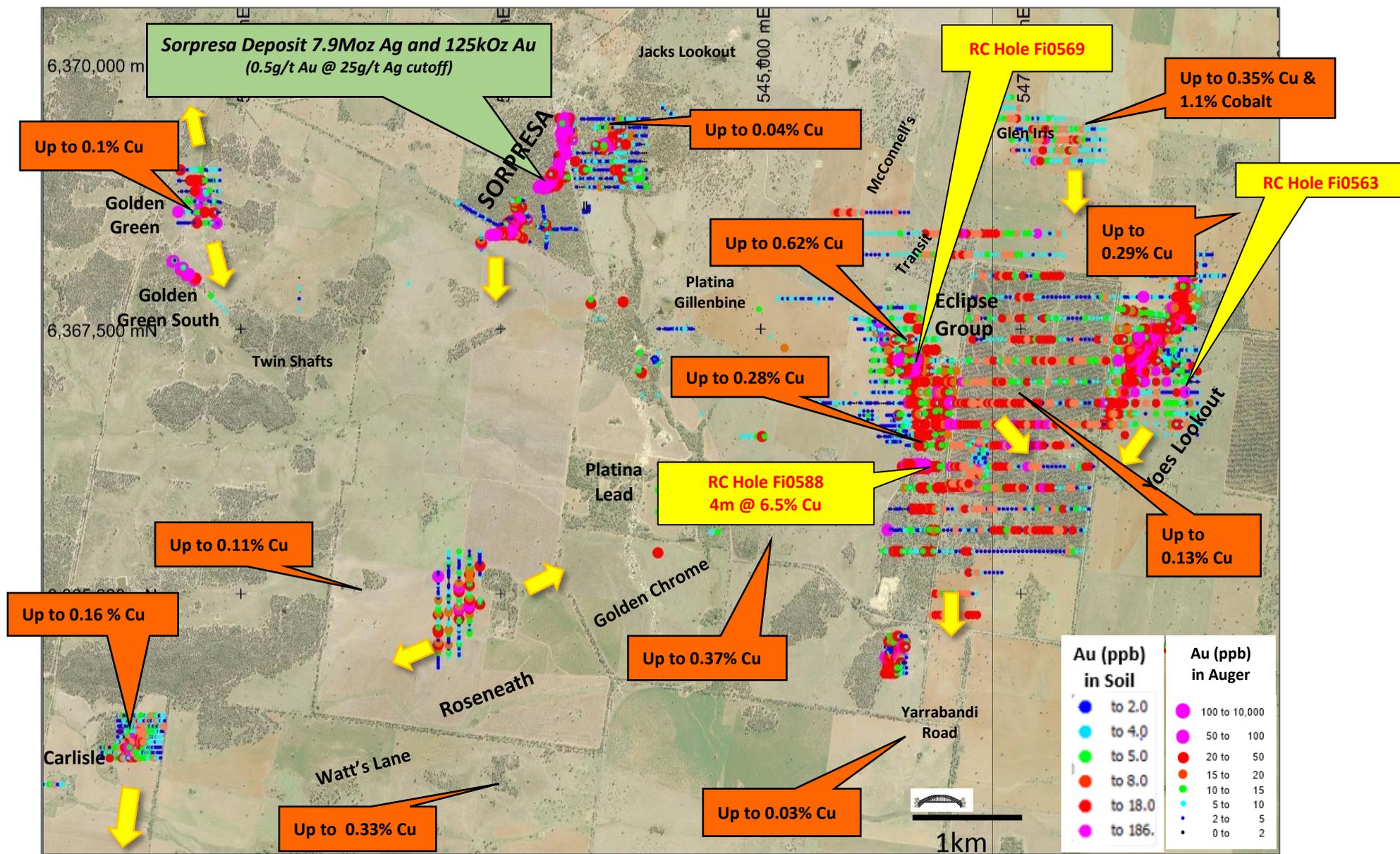


Figure 6: Wider Sorpresa area Map, shows the underlying gold signature, with best Copper Rock Chips overlaid. RC drilling (May~July 2015) has confirmed Copper (Chalcopyrite

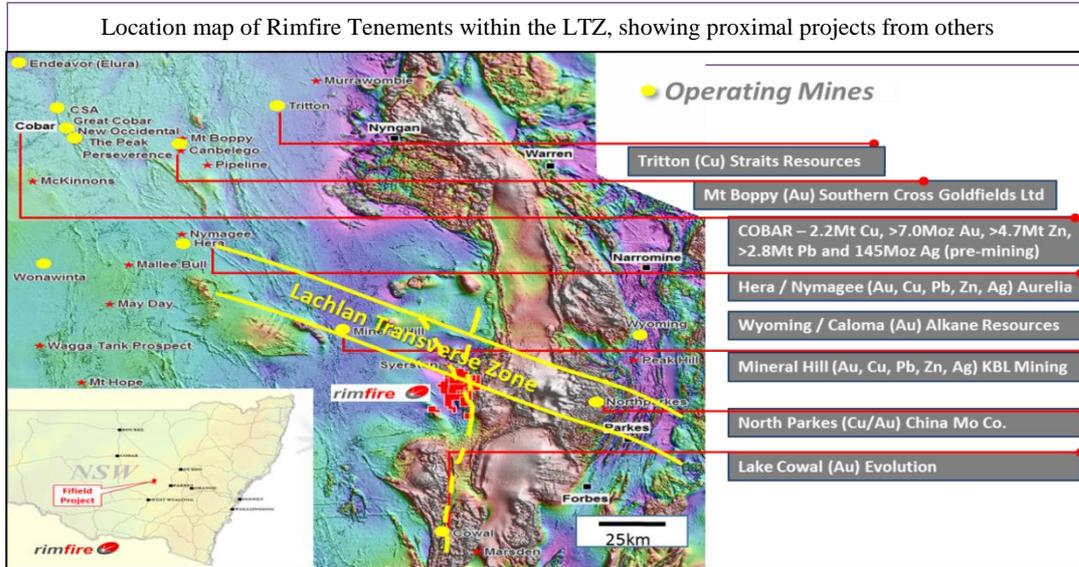


The Eclipse Trend is in a structurally complex area which is associated with a strong geochemical corridor which extends from the South for 3.0km through the Eclipse North drilling area and is open along strike to the north and south. Significant high grade Cu and Au drill intersections in both areas has indicated the potential for ore grade mineralisation relatively close to surface, open down dip and along strike.

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.



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 566km² tenement position held.

The latest presentations on the Company are at hyperlinks:

[Rimfire CEO Presentation – Mines and Money Hong Kong April 2016 – John Kaminsky](#)

[Benchmarking – AGM 27 November 2015 – Richard Schodde](#)

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 hyperlinks: (1) [Roadside Drilling West End Discussion](#) ; (2) [Roadside Drilling South Direction](#)

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.