



## QUARTERLY EXPLORATION AND ACTIVITIES REPORT

(For the period 1<sup>st</sup> April 2015 to 30<sup>th</sup> June 2015)

### Copper-Gold Zones Intersected in Eclipse-Yoes Drilling Includes High Grades Drilling at Sorpresa continues to return results

Rimfire Pacific Mining NL (ASX:RIM) ("Rimfire" or "the Company") is pleased to provide a summary of activities completed during another active quarter at Fifiel, NSW (Figure1). The high grade sulphide rich Cu/Au intersections announced in recent RC drilling at Eclipse South (ASX 22<sup>nd</sup> July 2015) validates the Company's strategy of operating a regional prospect portfolio of discovery opportunities, in parallel to the growth and economic assessment of the existing Sorpresa resource.

#### Highlights Significant Assay Results - RC drilling during the June Quarter

##### Eclipse Trend intersections including:

Hole	Main Interval	Including Interval
Fi 0588 <sup>1</sup> (Eclipse Sth)	4m @ 6.5%Cu & 2.3 g/t Au from 119m	incl. 2m @ 10.95% Cu & 3.87 g/t Au from 120m
Fi 0569 (Eclipse Nth)	10m @ 0.12g/t Au & 0.13% Cu from 0m AND 2m @ 0.98g/t Au & 0.35% Cu from 18m AND 20m @ 0.43g/t Au & 0.10% Cu from 28m	Incl. 1m @ 1.71g/t Au & 0.40% Cu from 19m Incl. 1m @ 3.50g/t Au & 0.29% Cu from 43m
Fi 0570 (Eclipse Nth)	6m @ 0.12g/t Au & 0.10% Cu from 12m AND 14m @ 0.21g/t Au & 0.14% Cu from 28m	Incl. 2m @ 0.55g/t Au & 0.21% Cu from 34m Incl. 2m @ 0.44g/t Au & 0.28% Cu from 38m
Fi 0574 (Eclipse Nth)	2m @ 0.80% Cu from 22m AND 2m @ 0.10% Cu from 50m AND 2m @ 0.16% Cu from 62m	1m @ 0.93% Cu from 22m

##### Gold Intersections at Sorpresa. Trench 31. lens delineation including:

Hole	Main Interval	Including Interval
Fi 0496	8m @ 3.64g/t Au from 0m	Incl. 2m @ 7.96g/t Au from 2m
Fi 0497	12m @ 3.85g/t Au from 0m	Incl. 4m @ 10.67g/t Au from 6m
Fi 0498	18m @ 2.27g/t Au from 0m	Incl. 2m @ 9.51g/t Au from 6m
Fi 0507	14m @ 2.76g/t Au from 4m	Incl. 2m @ 12.25g/t Au from 6m
Fi 0513	8m @ 4.27g/t Au from 2m	Incl. 4m @ 8.28g/t Au from 6m
Fi 0514	14m @ 2.30g/t Au from 2m	Incl. 2m @ 12.55g/t Au from 10m
Fi 0515	12m @ 3.10g/t Au from 6m	Incl. 2m @ 10.65g/t Au from 14m
Fi 0516	14m @ 1.46g/t Au from 6m	Incl. 2m @ 7.14g/t Au from 16m
Fi 0517	14m @ 2.40g/t Au from 8m	Incl. 2m @ 12.33g/t Au from 18m

<sup>1</sup> Results were pending and recently released post end of June Quarter

- ❑ **RC drilling at Yeos Lookout Magnetic Cu target produced encouraging results;**
  - ❑ 18m @ **781ppm Cu** from 68m AND 4m @ 0.14 g/t Au from 62m in Fi 0560
  - ❑ 30m @ **741ppm Cu** from 58m including 6m @ **1400ppm Cu** from 72m in Fi 0562
  - ❑ 30m @ **1100ppm Cu** from 102m, including 4m @ **2700ppm Cu** in Fi 0563



*Drill Rig Operational at Yoes Gold and Copper Prospect*

During the reporting period significant RC drill intersections testing beneath anomalous surface geochemistry have outlined multiple near surface zones of Cu/Au mineralisation within the Fifield region (Figure 1). The Company believes these results indicate broad kilometre scale regional copper and gold anomalism and importantly, potential for further ore grade intersections.

The Company is now planning a range of activities in the coming quarters. A key goal is to examine the role of geophysics to see if this will assist in determining the extent and orientation of the mineralised zones encountered in RC drilling, so that further strategically directed drilling can be completed.

#### ❑ **Planned activities in the next quarter:**

- ✓ **Down hole EM on copper sulphide zone at Eclipse South**
- ✓ **Examination of the potential for regional geophysics 3DIP/ EM to define drill targets**
- ✓ **Soil sampling over extensions to Eclipse Trend and over regional geological areas of interest**
- ✓ **Ongoing definition of near surface high grade Au/Ag zone at Sorpresa, including Roadside area**
- ✓ **Additional regional geochemical targets to be tested**
- ✓ **Receipt and interpretation of petrology work conducted at Yoes**
- ✓ **Metallurgical test results are due from the Sorpresa resource, which will assist economic studies**
- ✓ **Approx. 3,000m of contractor RC Drilling is expected, using the last of the NSW Grant funds**

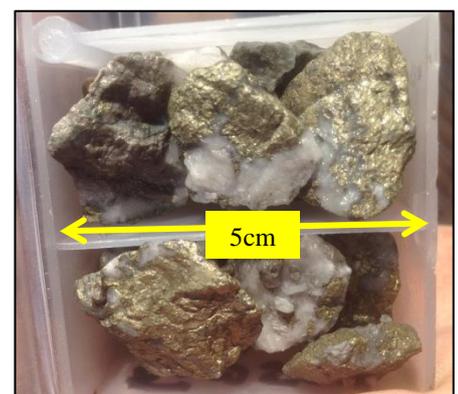
#### ❑ **Additional Corporate Highlights**

- ✓ **New Exploration licence application submitted for additional 200km<sup>2</sup> area east of Yoes**
- ✓ **The drilling completed this quarter has been part funded (\$ for \$) by draw down on the \$175,000 New Frontiers Drilling grant**
- ✓ **The Company is preparing its next AusIndustry R & D Incentive application, for upto \$0.75m**
- ✓ **Cash at end of quarter is \$1.3m**
- ✓ **The Company was invited to speak at a resources investment conference, hosted by NSW Govt**

#### **CEO, John Kaminsky commented:**

“The RC drilling conducted in the quarter has now demonstrated the important copper-gold potential east of Sorpresa. ***The Eclipse and Yoes area is an approximate 4km<sup>2</sup> gold and copper anomaly*** in the surface, but this is now being supported by Copper results in the RC drilling. Figure 2.

The post quarter result for **Fi 0588 4M @ 6.5% Cu, plus 2.3g/t Au** was an outstanding result. We have decided to expand our exploration licence holdings with a recent application for another 200km<sup>2</sup>, heading further east. ***The confirmed introduction of copper to the Fifield district is a key milestone for the quarter.***



*Eclipse South – Chalcopyrite in Hole Fi 0588*

## **Sorpresa work**

“Shallow RC drill program examining the structural controls and the mineralisation distribution trends within Sorpresa, at Trench 31 and Roadside is ongoing. Closer spaced drilling is revealing new structure and geology, not previously identified within Sorpresa. This knowledge adds to our capacity to look for upside within the current Sorpresa resource.

“It was very pleasing to see intersections of good width and grade starting at the surface, such as **Fi 0497 with 12m @ 3.85g/t Au, incl. 4m @ 10.67g/t Au from 6m**. The gold results from this program add to our confidence that we can establish a reliable surface position on the higher grade lenses at Sorpresa.

“Metallurgical testing is currently underway on material from the higher grade lenses at Sorpresa, both in the oxide and primary zones. This will certainly provide economic parameters to the Sorpresa system.

“The knowledge being gained adds to the Company’s capacity to seek further upside within the current Sorpresa resource for gold and silver. More locations are planned for drilling at Trench 31 and Roadside accordingly.

“It is possible that the Sorpresa resource is a peripheral mineralisation event to a much larger mineralising system operating at Fifield. We will be pursuing a number of key concepts over the coming months with this in mind.”

“The Company remains active in an otherwise very difficult economic climate for Junior explorers. The dual strategy of parallel assessment of Sorpresa and the regional opportunities is paying off. This emerging direction with copper-gold has gained attention. Rimfire has made these advances with minimal funds, lean management and great persistence.

“The Co-operative drilling grant (\$175,000) from the NSW Government has certainly helped reduce drilling costs, and we look forward to its continued draw down, assisting our cashflow in the next quarter.

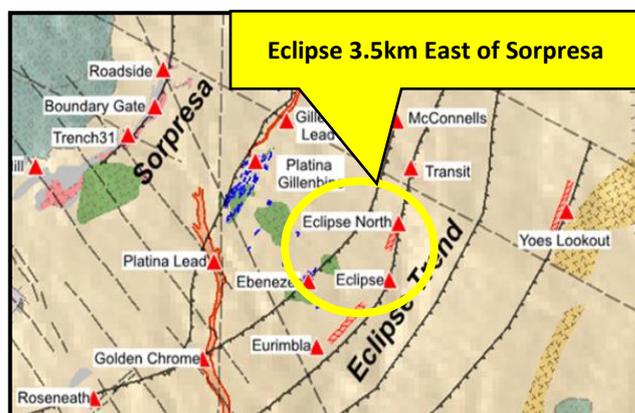
“A consistent newsflow is expected from the Company in the next quarters. We look forward to reporting further results at Sorpresa and Eclipse in particular, as we continue to build the prospective nature of the Fifield district.”

## **Regional RC Drilling**

### **Eclipse Trend**

The drilling completed on the Eclipse Trend, approximately 3.5km east of Sorpresa, was designed to test below anomalous gold and base metal geochemistry previously defined in soil sampling and auger drilling. A total of 27 RC holes for 2132m (Fi 568-594) was completed by an external contractor (Table 1), on shallow drill traverses in 3 locations along 2.2km of strike (Figure 5).

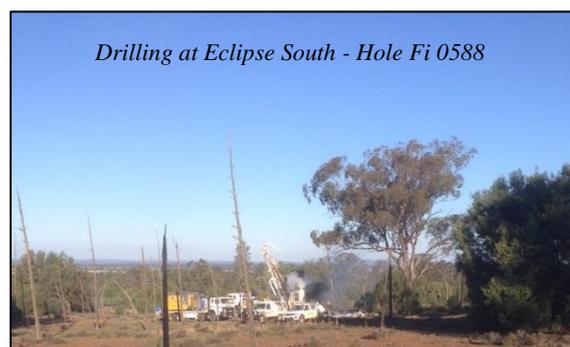
**The Eclipse South** drilling comprised 10 holes for 970m (Fi0581- Fi0590) and intersected a significant zone of strong chalcopyrite mineralisation (with associated Au, Ag, Bi) in RC hole Fi 0588 and returned assay values of 4m @ 2.3 g/t Au & **6.5%Cu** from 119m(Figure 5).



The quartz/copper zone is in a geologically complex structural location but from initial interpretations could be a structurally hosted vertical quartz rich Cu/Au pipe (Cobar type) and further exploration and interpretation is required to put this interval into context with the surrounding anomalism.

The Company recognises the importance of this intercept as a validation of its regional exploration program away from the Sorpresa Resource and is excited by the results, including high grades, of both the gold and copper grades and to have achieved this outcome on first pass drilling.

In order to test the geophysical characteristics of this sulphide zone the Company is undertaking down the hole Electro-Magnetic surveying (dhEM) which will measure the conductivity at regular intervals down hole and in particular will be looking to gain a response across the high grade copper sulphide zone.



The measured response using dhEM is directly related to the connectivity of the sulphides and if the sulphide zone is part of a much more extensive body or strongly veined mineralised system then a response would be expected.

However if the sulphide zone is less massive and the sulphides are more disseminated as occurs in the Eclipse North and Yeo's mineralised horizons then alternate geophysical applications like surface 3D Induced Polarisation may be more effective at defining chargeability and resistive zones often associated with sulphide mineralisation.

**The Eclipse North and Moonrise** magnetic and geochemical anomalies which form part of the Eclipse trend were also RC drilled on broad spaced drill traverses comprising shallow RC holes (Table 2) for total of 17holes for 614m (Fi 564-580). This drilling targeted Cu-Au auger geochemical anomalies with coincident epithermal quartz-carbonate-sulphide vein float and malachite bearing gossan, with Au/Cu values (up to 18.7g/t Au & 0.53% Cu). Aeromagnetic interpretation also indicates this anomalism occurs at the intersection of regional N-S & N-W structural corridors.

The drilling intersected a volcano-sedimentary package consisting of interbedded, volcanoclastic siltstones, sandstones, polymictic volcanic's, with minor jasper and chert horizons. The package is intruded by dolerite and quartz-feldspar porphyry sills and dykes.

A significant zone of hydrothermal alteration, veining and brecciation, mineralised by pervasive chlorite-sericite-carbonate-silica-feldspar-barite-sulphide alteration, with significant disseminated and veined pyrite ±chalcopyrite, appears to be increasing in intensity with depth to the north-east possibly towards an unexplained magnetic high anomaly.

Significant low level Au-Cu anomalism was defined in the drilling with Fi0569 returning values highlighted below:

- 8m @ 0.28g/t Au & **0.14% Cu** from 14m, (Incl. 1m @ 1.77g/t Au & **0.40% Cu**)
- 20m @ 0.43g/t Au & **0.10% Cu** from 28m, ( Incl. 1m @ 3.5g/t Au & **0.29% Cu**)

**Table 1: Summary of RC Drill holes completed by contractor**

RC Drill Program Status (Contractor Drilling)			
Area	Number of Holes	Total Metres	Assay Status
Eclipse North (1)	10	614	Reported June
Eclipse North (2)	4	316	Reported July
Moonrise	3	232	Reported July
Eclipse South	10	970	Reported July
<b>Eclipse Trend Total</b>	<b>27</b>	<b>2132</b>	
Carlisle	4	382	Reported June
Yoes (1) & (2) incl. Mag. target	13	1114	Reported May
Yoes (3) 700m north	5	332	Reported July
Sorpresa East	1	236	Pending
Sorpresa South (IP)	1	280	Pending
<b>Grand Total</b>	<b>38</b>	<b>4476</b>	

### Comments on Copper Potential at Fifield

The drilling completed during the reporting period was successful in defining shallow (< 80m) zones of Cu-Au anomalism from surface with significant zones of hydrothermal alteration, brecciation and epithermal style quartz-carbonate-sulphide veining. The Company believes there is potential for additional high grade Cu/Au intersections, as indicated by Fi 0588. The veining, brecciation and hydrothermal alteration may represent the upper or outer parts of a much larger Cu-Au system concealed at depth.

Geophysics (3D IP &/or EM) and deeper RC drilling (100m-300m deep holes) will be required to test developing concepts and will be considered in due course. The potential remains to discover high grade Au-Cu shoots along strike and at shallow depths where the mineralisation remains open.

## Geophysics

A 3DIP survey or EM survey may be appropriate, depending on whether the mineralisation model could be seen to be a large disseminated body (high chargeability) or a massive sulphide body (high conductivity) from Eclipse South to Eclipse North, to map zones of sulphide accumulation before deeper drilling (100-300m deep holes).

Given the chalcopyrite encountered in hole Fi 0588 drilled at Eclipse South the mineralisation model may be a massive sulphide (chalcopyrite) body. Accordingly a trial down-hole EM survey is being deployed to see if the mineralisation has an EM response (conductive).

## Possible Mineralisation Models for Copper

Petrology is required to fully characterise the lithology, alteration & mineralisation seen at Eclipse and Yoes. Potential remains for a wide variety of mineralisation styles at this early stage, including epithermal Cu-Au vein zones, massive chalcopyrite epigenetic lodes or syngenetic horizons, breccia hosted Cu-Au & skarn style Cu, and other styles also.

## Yeo's Lookout

The Yeo's Lookout trend comprises a predominately north east trending gold anomaly which extends for 1.7km and an adjacent, mainly copper anomaly which is thought to be associated with a more north trending, magnetic high as indicated by geophysics.

Two phases of drilling were completed with the initial program of 13 RC holes (Fi 0551- Fi 0563) for 1114m targeting two areas consisting of :

**Reconnaissance:** 7 holes for 420m (Fi 0551- Fi 0557 ) to examine NE trending corridor (1.7km strike) of gold in soil geochemistry over ferruginous hematite/magnetite/quartz sediments interacting with a NE trending regional structure and as yet undefined buried magnetic high features. Significant drilling results include:

- 2m @ 0.96g/t Au from 36m in Fi 0555
- 4m @ 0.29g/t Au from 12m in Fi 0552

**The partial testing of a north trending feature with a strong magnetic high signature** to the east of the gold trend, , 6 holes for 694m (Fi 558 -Fi 563 ), looking to validate the potential for copper and gold, as indicated in surface geochemistry. Significant RC drill intersections include

- 30m@ **1052ppm Cu** from 102m in Fi0563 and
- 30m @ **741 ppm Cu** from 58m and 4m@ 0.3g/t Au from 156m in Fi 0562

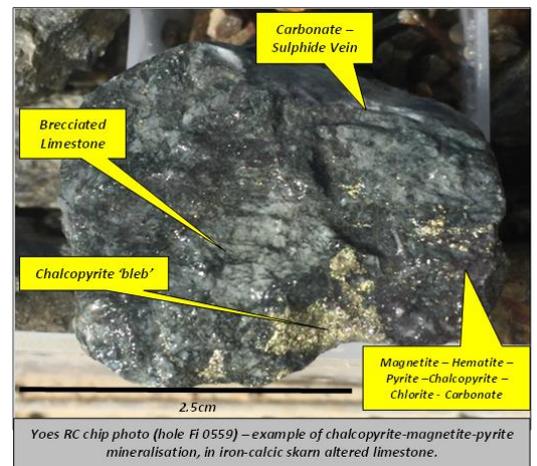
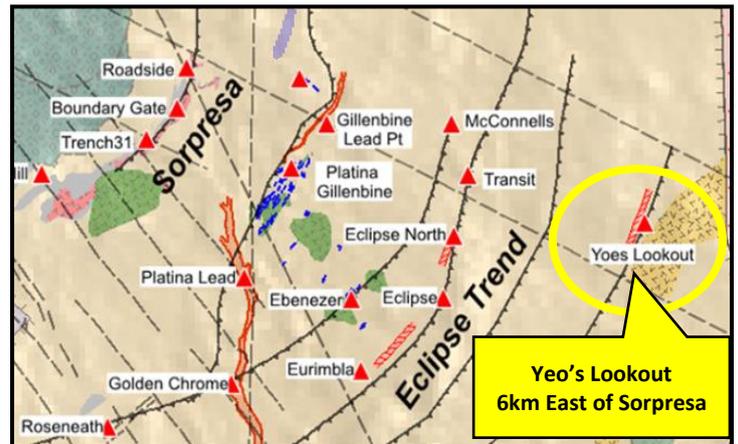
Of the 6 holes drilled, 5 intersected the mineralised skarn and the Cu/Au mineralisation is strongly associated with the skarn style of hydrothermal alteration possibly linked to the deeper magnetic body which may represent andesitic to Mafic/ultramafic volcanics. The skarn style material which is host to carbonate-chalcopyrite-pyrite veins, comprises a highly magnetic, iron-calcic skarn style (chalcopyrite - magnetite - pyrite -hematite - carbonate - chlorite - pyroxene - amphibole) horizon

The second phase of RC drilling was a single line of 5 RC holes for 332m (Fi0595-Fi 599) which was completed along strike of previously defined gold in auger geochemistry, and tested the northern extension of this anomalous zone which is highlighted by peak Au in auger values of 1620ppb Au.

This position also appears to be at the intersection point of a major N-S and NE-SW trending structure and separates ferruginous sediments in the west from more andesitic-mafic volcanic and sediments to the east.

The drilling intersected fine grained and strongly altered siliceous chlorite, carbonate andesitic volcanic with finely disseminated pyrite and minor quartz veining. Significant gold intersections include :

- 1 m@ 4.19 from 18m in Fi 0596



- 4m@ 0.83 from 1m in Fi 0597

The Yeo's Lookout demonstrates widespread Cu and Au anomalism on an extensive scale and ongoing exploration in this area will be guided by petrology studies and surface geophysical methods aimed at targeting the source of the disseminated and vein sulphides at depth.

### **Sorpresa RC Drilling and Results Reported in the quarter**

As part of the ongoing assessment of the higher grade near surface oxide components of the Sorpresa gold and silver mineralised system at Fifield NSW a multi phase program of shallow, close spaced RC drilling has been undertaken over the Trench 31 mineralised zone.

A total of 24 RC holes for 594m (Fi 0494 –Fi 0517) was completed with the drilling programs designed to investigate the structural controls and orientation of the high grade near surface shoots within Trench 31 and other known mineralisation areas of the Sorpresa system.

Trench 31 has significant near surface oxide mineralisation which may be amenable to development and forms a part of the ongoing commercial determination of the resource. The outcomes of these programs are:

- ❑ **The results compare favorably with surrounding intersections at Sorpresa, confirming the robustness of the Sorpresa mineralisation. The drilling was conducted at 5m spacings, on 4 lines across approx. 50m of interpreted strike.**
- ❑ **Trench 31 has demonstrated excellent grade and widths starting near surface and improves the understanding of the orientation and controls operating on the gold system.**
- ❑ **The Company will continue assessing the better parts of the Sorpresa mineralisation in the shallow oxide zone aiming to increase grades and ounces.**
- ❑ **This program (and subsequent work to follow) will contribute to parts of the resource at Sorpresa moving from inferred and indicated to measured status in due course. Commercial options to assess potential exploitation of parts of the mineralisation will be examined.**
- ❑ **Metallurgical studies are underway to test the amenability of the oxide and sulphide ore types to processing will incorporate gravity, leaching and flotation as a means to recovering the Au and Ag.**

With the establishment of the maiden resource at Sorpresa, a more detailed assessment of these higher grade areas in the shallow oxide zone within Sorpresa is justified to help determine the economic potential. The Company is also currently undertaking a review of further metallurgy in this regard.

From a discovery perspective, the Company is also looking at the potential to grow the Sorpresa style mineralisation with targets identified outside the known resource.

### **Sorpresa Extensions Discovery RC Drill program**

Currently the Sorpresa Deposit comprises 6.4Mt for 7.9Moz of silver and 125kOz of gold (at 0.5g/t Au & 25g/t Ag cutoff) as an Inferred and Indicated Mineral Resource, equating to approx. 250,000oz gold equivalent.

The Company believes that potential upside exists at Sorpresa by defining additional resources in under explored areas along strike to the south and at depth, down dip to the east and also in gap areas between mineralised domains.

A table of some of the better results is shown on page 1, highlights.

The Company completed two deeper RC holes Fi 0600 (230m) and Fi 0601 (290m):

- ❑ A stratigraphic drill hole (Fi 0600) located 200m east of the known Roadside area. This was looking to determine if the gold-silver mineralised plane continued. The drilling appears to have successfully intersected the plane, but indications show the mineralisation is weaker with assays due shortly.
- ❑ Drill hole Fi 0601 targeted a pipe-like geophysical feature 700m to the south, shown in the gravity and IP. The hole was looking to establish an additional gold-silver sulphide connection to the main Sorpresa resource. Visual observation indicates no gold or silver is present, assay results are due shortly.

Both of these holes were collared at significant distances from the main known Sorpresa mineralisation.

**Additional information on the IP anomaly:**

A single hole (Fi 0601) was completed for a total of 290m targeting a pipe like geophysical target 700m to the south of the Sorpresa mineralisation. This IP target was potentially similar in response to Sorpresa and the hole was targeted at the intersection of an IP chargeability anomaly, thought to represent potentially disseminated pyrite within the fractured roof zone of a deeper mafic unit and an interpreted NW trending structure.

The hole intersected 20m of weakly pyritic shale from 241- 261m which was the interpreted intersection point and is thought to be the source of the chargeability. Higher in the hole a large 70m wide zone of porphyritic quartz diorite was intersected along with a broad band of fine grained chloritic altered andesitic volcanoclastic siltstones with trace amounts of pyrite. Despite the lack of hydrothermal alteration and sulphides the IP target remains valid and further geophysics is required to assist in the drill targeting.

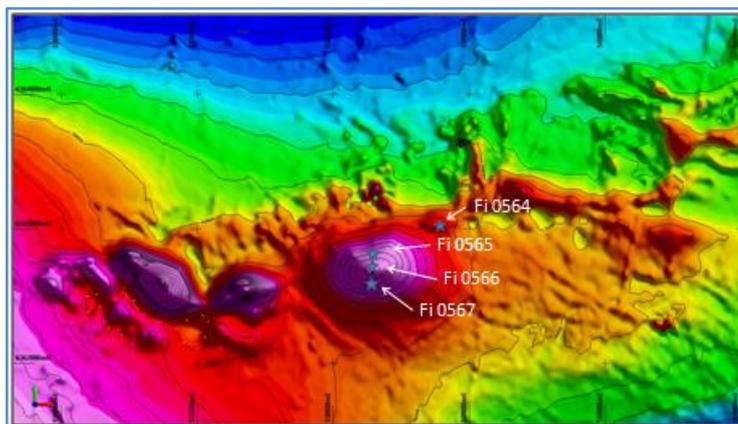
**Additional Regional RC drilling programs**

**Carlisle Prospect**

The Carlisle prospect is a concealed diffuse magnetic high anomaly with peripheral silica, magnetite, hematite alteration, pyritisation and trace native Cu which the Company believes may be a prospective Tritton style Cu-Au target.

The magnetic anomaly is under a cover sequence of Devonian sediments within a NE-SW trending regional corridor containing numerous float and sub-crop material which has a Cu/Au signature. A program of 6 vertical RC holes was designed to penetrate beneath the overlying cover rocks and test the margin and central peak of the magnetic anomaly.

**Figure: 7 Carlisle Prospect - RC Drill Locations on Magnetic Anomaly**



However, the cover sequence proved to be considerably thicker than anticipated and drilling was hampered by an unexpected influx of water and the host rock to the magnetic feature was not resolved.

Encouragingly, the drilling of two RC holes on the periphery of the magnetic high anomaly intersected intense chlorite (+/-carbonate-hematite-epidote-pyrite) altered, non-magnetic basement sediments, which is consistent with the mineralising model.

The model is based upon 3D inversion modelling of high resolution aeromagnetic and radiometric survey

which has revealed a compelling structural interpretation underlying the high grade gold rock chips invoking a regional curvilinear 'fertile' thrust fault.

Second order faults from the main thrust fault also display surface gold results up to 1.1g/t Au and trace native copper in sub-crop. This structural model revealed in magnetic inversion modelling shows similarities to the current Sorpresa structural understanding, and rift basin stratigraphy, some 6.8kms to the NE.

***Only 4 holes (Fi0564 - Fi0567) were completed for 382m and as such this magnetic target has yet to adequately tested and will likely require a deeper diamond drill hole.***

**KARS Platinum and Gold Prospect 20km South of Sorpresa**

At Kars, 20km to the south of Sorpresa, the Company undertook RC drilling in an 8 hole program for 276m. Drilling conditions were difficult due to the hard nature of the ground and restricted access. The reconnaissance program was part of the renewal requirement of the exploration licence, which the Company regards as prospective for platinum and gold.

Assays were returned, with two holes providing intersections of anomalous platinum.

Fi 0487	4m @ 0.24g/t Pt from 20m plus 7m @ 0.16g/t Pt from 44m
Fi 0490	4m @ 0.28g/t Pt from 4m

### ***Regional Programs***

The Company strategy continues to focus on building its regional discovery inventory within a 6km radius of Sorpresa over the next 12 months. Priorities are emerging from a combination of ongoing geochemical sampling at the regional scale, also as extensions to current anomalous trends, and developing promising geophysical targets.

### ***Looking forward***

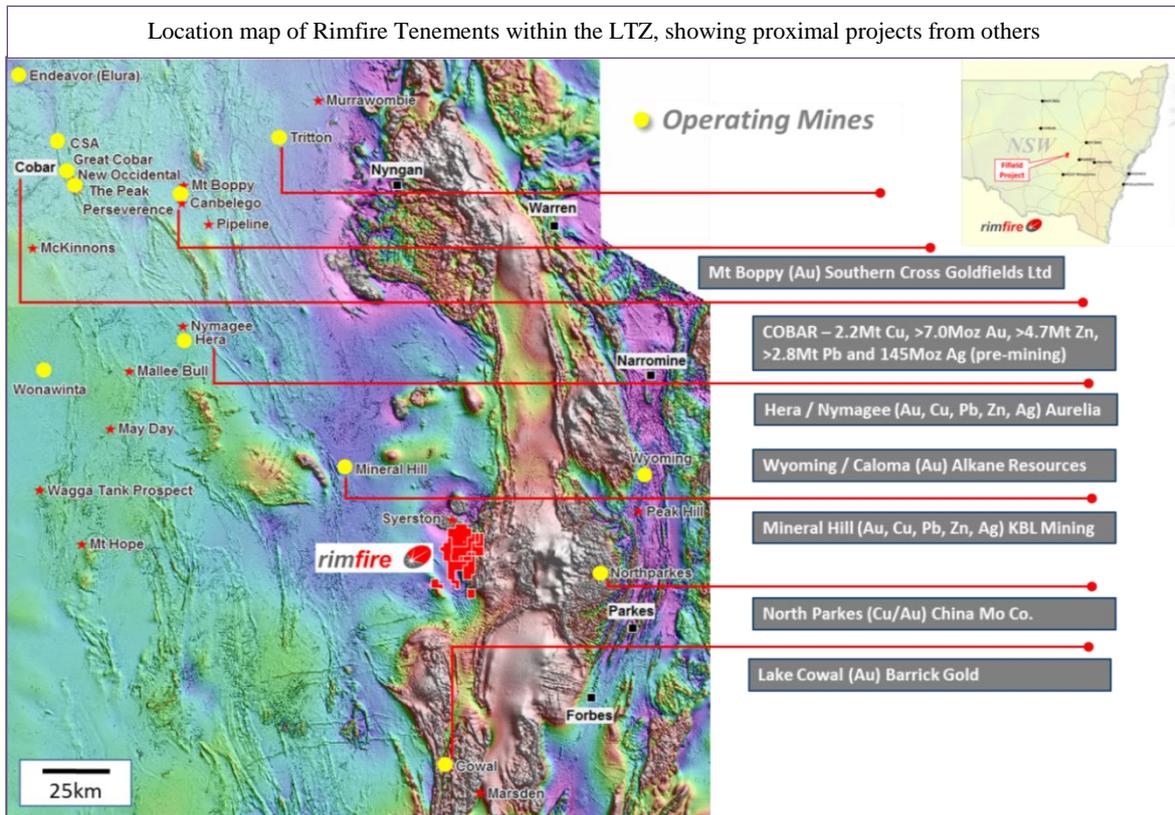
“During the next quarter the Company will be commencing important work programs, as follows:

- ✓ Down hole EM on Eclipse South high grade Cu /Au sulphide zone
- ✓ Design of suitable regional scale geophysics (EM/ 3D IP/gravity) to focus the exploration
- ✓ Targeted soil and auger sampling over geologically interesting areas
- ✓ Consider reclassification and a discovery expansion review of the Sorpresa Au and Ag resource
- ✓ RC drill assessment of the higher grade lens areas within Sorpresa,
- ✓ Laboratory metallurgical testwork examining Au/Ag recovery processes in oxide and primary ore types
- ✓ Possible further drill testing of geophysical features at Carlisle and South Sorpresa
- ✓ An additional 3000m of contractor based RC drilling

## **ABOUT RIMFIRE PACIFIC MINING AND COMPETENT PERSON DECLARATION**

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. The gold is predominantly native gold.



The best gold and silver intersections achieved from the period mid-2012 to the current date on the Sorpresa Project area with locations shown include (*note Table 4: Dates and Hyperlinks for previously referred to results in this report*):

<b>14m @ 21.9g/t Au plus 6m @ 93g/t Ag</b>	Trench 31
<b>14m @ 24.4g/t Au plus 26m @ 155g/t Ag</b>	Roadside
<b>10m @ 535g/t Ag plus 1.0g/t Au</b>	Roadside
<b>20m @ 230g/t Ag</b>	Roadside North
<b>1m @ 114g/t Au plus 1m @ 33g/t Ag</b>	Boundary Gate East (BGE)
<b>16m @ 5.32g/t Au plus 20m @ 81g/t Ag</b>	Roadside
<b>4m @ 21.9g/t Au</b>	Join Up
<b>26m @ 90g/t Ag plus 26m @ 0.37g/t Au</b>	Roadside

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 35km<sup>2</sup> area at Fifield, which is part of the contiguous 313km<sup>2</sup> tenement position held.

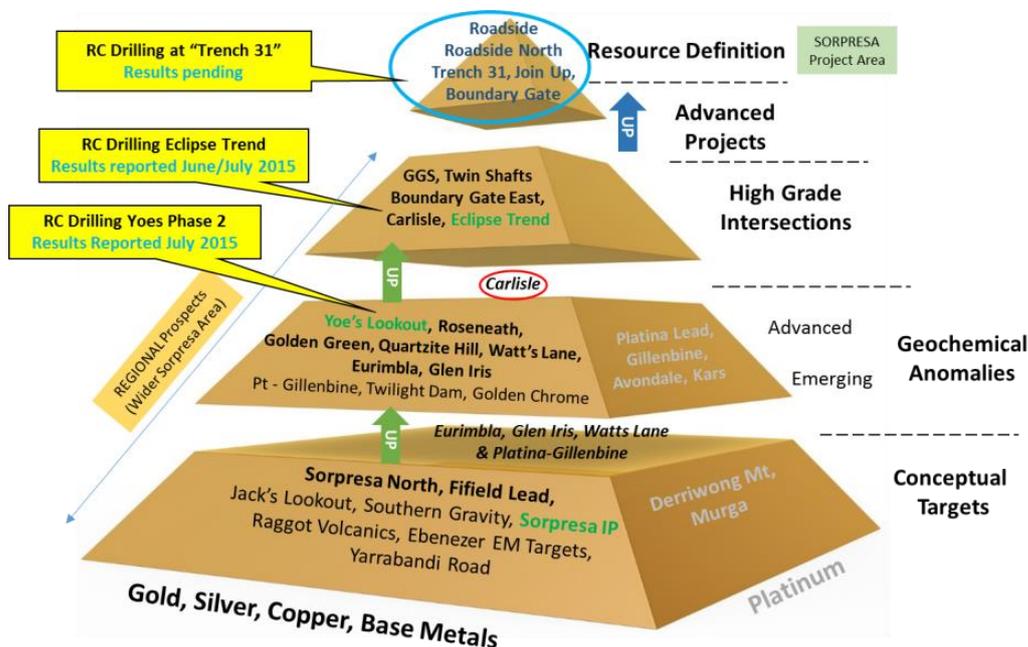
The latest presentations on the Company are at hyperlinks:

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](#).

**Regional Prospects within 6km Radius of Sorpresa Project Area at Fifield**

Prioritized current prospects and targets within 6kms of Sorpresa are being systematically assessed. Rimfire interprets a rift basin setting at Fifield, Back Arc to the World Class Macquarie Arc, and traversed by the crustal scale Lachlan Transverse Zone (LTZ) and cross cut by other major crustal structures, which is host to multiple styles of significant mineralisation, with combined multimillion ounce gold equivalent potential. To date more than **25 targets** are revealed at Fifield.

The prospect pyramid below ranks these prospects which are grouped into 7 manageable “Target Domains”, for gold and base metals, in terms of their logistical, spatial, deposit style and exploration stage;



Rimfire Prospect Pyramid illustrated at increasing stages of advancement from Conceptual targets, Emerging and Advanced Geochemical Anomalies, Prospects with High Grade intersections, and Advanced Targets, and a Resource at Sorpresa.

- Sorpresa (Carbonate Base Metal Epithermal Au/Ag)** - Roadside North, Roadside, Original Sorpresa
- Sorpresa (Carbonate Base Metal Epithermal Au)** - Join-Up, Boundary Gate, Boundary Gate East, Trench 31
- Eclipse Trend (Au-VMS / Epithermal)** - McConnell's, Transit, Eclipse North, Eclipse, Eurimbla, Golden Chrome, Roseneath, Watt's Lane, Carlisle.
- Yoes Lookout (Skarn and Structurally controlled Greenstone and Sediment hosted Au, possible Porphyry Cu-Au target style)**
- Orogenics (Structurally controlled Greenstone and Sediment hosted Au)**- Golden Green, Golden Green South, Twin Shafts, Rabbit Hill, Golden Green East.
- Sorpresa Extensions** – Sorpresa North, Quartzite Hill, Fifield Lead, Southern Gravity, Red Mist
- Conceptual** – Jack's Lookout, Gravity Gradient, Raggatt Volcanics, Glen Iris,

Work programs are at various stages of development on the prospects.

**Table 2: Ranked Prospect Portfolio at Fifield NSW**

Table of Comparison of more Advanced Prospects within 6km Radius of Sorpresa Projects								
Location	Rock Chip g/t Au	Typical Soil ppb Au	Typical Auger ppb Au	Anomaly Length	RC Drill (best to date)	Open	Other	Historic Workings
Sorpresa Resource	8.8	10~50	20~1,000	1.5km	14 @ 24.4 g/t Au 26m @ 155g/t Ag	yes	IP/Gravity	Minor
Yoes Lookout	3.4	10~300	20~1,000	1.7km	Au, Cu anomalous	yes	Magnetic Feature, Cu	No
Eclipse Trend	18.7	N/A	20~700	2.2km	4m @ 6.5% Cu 4m @ 2.3g/t Au	yes	Ag, Cu	Minor
Golden Green Group	8.1	N/A	10~100	0.5km	2m @ 9.11g/t Au	yes	Mafic host?	Yes
Roseneath	3.7	8~300	15~80	0.8km	N/A	yes	Sorpresa Style?	No
Carlisle	23.0	9~50	N/A	0.35km	7m @ 1.47g/t Au	yes	Magnetic Feature	Minor

### **Company Strategy**

The Company has committed to pursue a **prospect portfolio strategy** of developing the regional prospects at Fifield to suitable stages, in parallel with the Sorpresa project area to achieve outcomes as follows:

- Enhance and highlight the Fifield district's appeal to deliver more discoveries within 6km radius of Sorpresa
- Metals being pursued include Gold, Silver, Copper and Platinum
- Ensure the Company has the opportunity to make the best discoveries possible in its prospect portfolio
- Continue discovery growth at Sorpresa, looking for important contributions in the next phases of drilling
- Grow the maiden resource at Sorpresa (23 Dec 2014), currently published as inferred and indicated comprising **6.4Mt for 7.9Moz of silver and 125kOz of gold (at 0.5g/t Au & 25g/t Ag cutoff)**
- Examine economic potential, as appropriate to the stage of the project area

### **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 40 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 extracted from the reports entitled and listed in the table below created on the dates shown and 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** Dates and Hyperlinks for previously referred to results in this report

ASX November 9th 2007	<a href="#">Golden Green Gold Prospect Returns Encouraging Assay</a>
ASX July 25th 2008	<a href="#">Quarterly Report For the period April 1st to June 30th 2008</a>
ASX March 30th 2012	<a href="#">Coherent Gold geochemistry at Yoes Lookout Confirmed – Fifield NSW</a>
ASX September 17th 2012	<a href="#">First Gold Sections Created at Sorpresa Project, Fifield NSW</a>
ASX June 13 <sup>th</sup> 2012	<a href="#">High Grade Gold Intersection Sorpresa Project – Fifield NSW</a>
ASX July 26 <sup>th</sup> 2012	<a href="#">Successful Intersections at Sorpresa Gold Project</a>
ASX October 10 <sup>th</sup> 2012	<a href="#">Highest Gold and Silver Grades seen to date at Sorpresa Project</a>
ASX December 18 <sup>th</sup> 2012	<a href="#">Sorpresa Project Produces More Encouraging Results</a>
ASX March 27 <sup>th</sup> 2013	<a href="#">Additional Assays at Sorpresa Gold Project</a>
ASX June 13 <sup>th</sup> 2013	<a href="#">Further Positive RC Drilling Results at Sorpresa Project</a>
ASX July 17 <sup>th</sup> 2013	<a href="#">Diamond Drilling Reveals Bonanza Grade of 1m @ 114g/t Au</a>
ASX October 21 <sup>st</sup> 2013	<a href="#">Results Confirm Extensions of Gold and Silver at Sorpresa Project</a>
ASX December 20 <sup>th</sup> 2013	<a href="#">High Grade Silver extensions continue at Roadside</a>
ASX February 14 <sup>th</sup> 2014	<a href="#">Gold Intersections Confirm New Intersections at Sorpresa</a>
ASX May 16 <sup>th</sup> May 2014	<a href="#">4,000m RC Drilling Program at Sorpresa Project - Regional Intersection 2m @ 9.11g/t Gold</a>
ASX May 30 <sup>th</sup> May 2014	<a href="#">Drilling Update and 3D Exploration Model for Sorpresa Project - 2m @ 7.49g/t Gold intersected</a>
ASX July 23 <sup>rd</sup> 2014	<a href="#">Encouraging Regional Rock Chip Results up to 13.7g/t Gold, Fifield NSW</a>
ASX August 18 <sup>th</sup> 2014	<a href="#">New High Grade Rock Chip Results up to 23g/t Au at Fifield NSW</a>
ASX August 26 <sup>th</sup> 2014	<a href="#">Sorpresa Gold and Silver Mineralisation Extended at Fifield, NSW</a>
ASX November 28 <sup>th</sup> 2014	<a href="#">Encouraging Gold Results Intersected in New Shallow Oxide Position at Sorpresa</a>
ASX December 8 <sup>th</sup> 2014	<a href="#">High Grades Intersected in Sorpresa Resource Definition Drilling</a>
ASX December 23 <sup>rd</sup> 2014	<a href="#">Sorpresa Maiden Resource Fifield NSW - 6.4Mt for 125kOz of gold and 7.9Moz of silver</a>
ASX January 30 <sup>th</sup> 2015	<a href="#">December Quarter Exploration Report</a>
ASX February 20 <sup>th</sup> 2015	<a href="#">Sorpresa RC Drilling Assays Finalised, New RC Drilling underway to extend mineralisation</a>
ASX February 23 <sup>rd</sup> 2015	<a href="#">Gold Intersections confirmed from Surface at Carlisle, Fifield NSW</a>
ASX 23 <sup>rd</sup> March 2015	<a href="#">Encouraging Results including 2m @ 10.09g/t Gold Intersected at Sorpresa</a>
ASX 13 <sup>th</sup> April 2015	<a href="#">Skarn style mineralisation intersected with Copper Anomalism at Yoes Lookout Prospect</a>
ASX 20 <sup>th</sup> May 2015	<a href="#">Yoes Area Assays confirm Copper Anomalism with Gold Present</a>
ASX 16 <sup>th</sup> June 2015	<a href="#">RC Drill Assays Confirm Copper Anomalism and Gold at Eclipse Trend</a>
ASX 23 <sup>rd</sup> July 2015	<a href="#">4m @ 6.5% Cu and 2.3g/t Au Massive Chalcopyrite at Eclipse</a>

### **COMMODITY PRICING FOR THE JUNE 2015 QUARTER**

As at 28<sup>th</sup> July 2015, the metal prices had retreated again on the previous quarter ([www.kitco.com](http://www.kitco.com)). The prices for metals in New York based on closing Ask in USD were as follows:

Gold	USD\$1089
Platinum	USD\$992
Silver	USD\$14.83

## **CORPORATE ACTIVITIES**

### **Tenement Position**

An Application for additional tenement area (200km<sup>2</sup>) to the east of the Yeo's Cu Target was submitted to the Department for approval.

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

The Company believes that its financial position continues to be well monitored and maintained. As at June 2015 the Company had approximately **\$1.3M in cash**.

The Company is preparing its Ausindustry R & D application for an amount of upto \$750,000, with targeted date approx. Oct~Nov 2015.

### **Available draw down of \$175,000 Drilling Grant**

The Company also has at its disposal approx. \$68,000 remaining for the previously awarded **NSW Department of Trade & Investment** as a Co-operative Drilling Grant, under the “**New Frontiers**” program initiative. The program is a “dollar for dollar” matching program, where the Company undertakes the equivalent drilling expenditure to the grant value received.

The drilling funds will be used to make further progress of the wider Sorpresa Project area, and will be deployed over the next 2 months. The 3362m of drilling complete to date represents draw down on the drilling grant.



**JOHN KAMINSKY**  
CEO and Managing Director

Figure 1: Fifield Prospect and Concept Map with location of the Sorpresa Resource and RC Drilling completed June quarter 2015

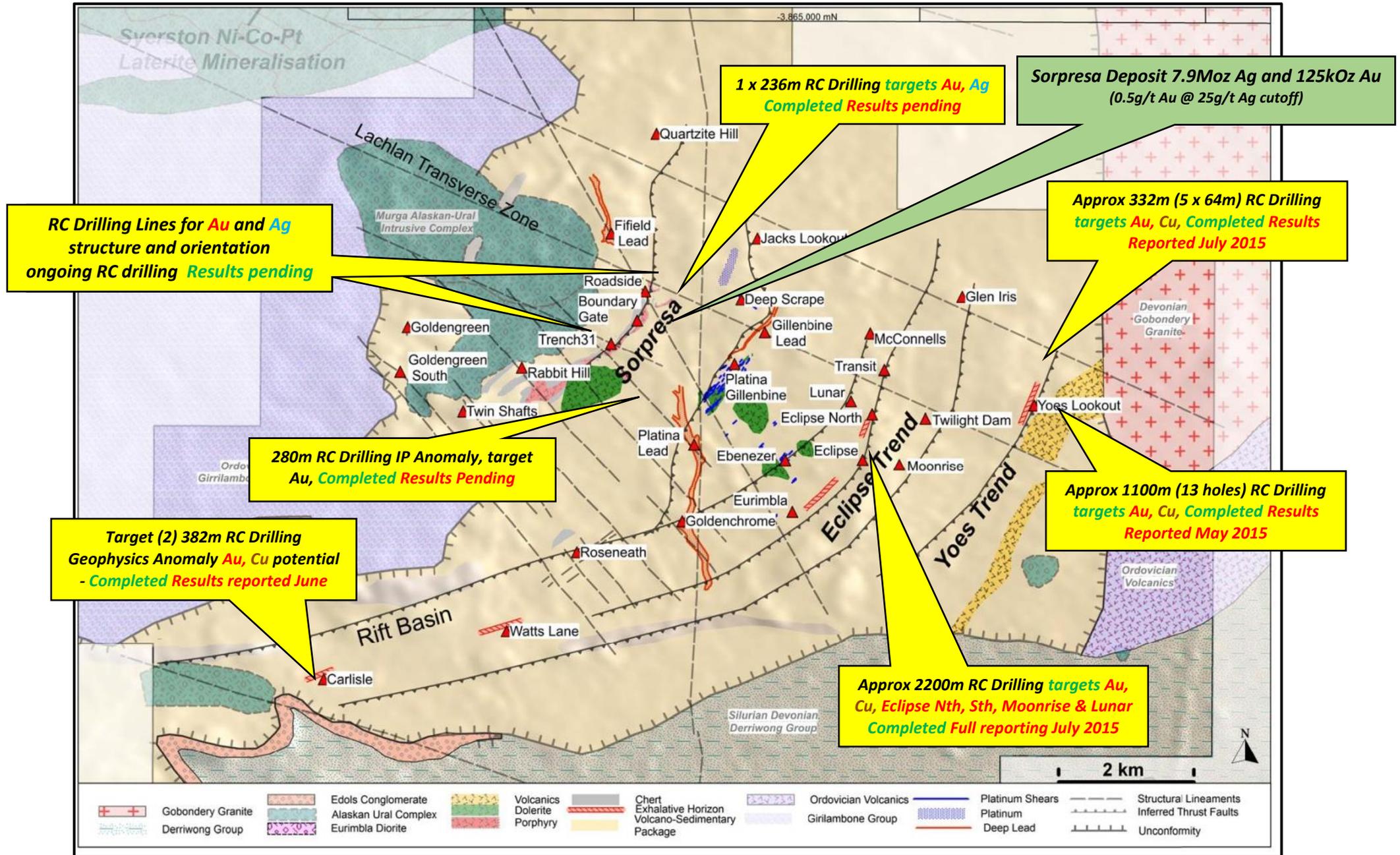
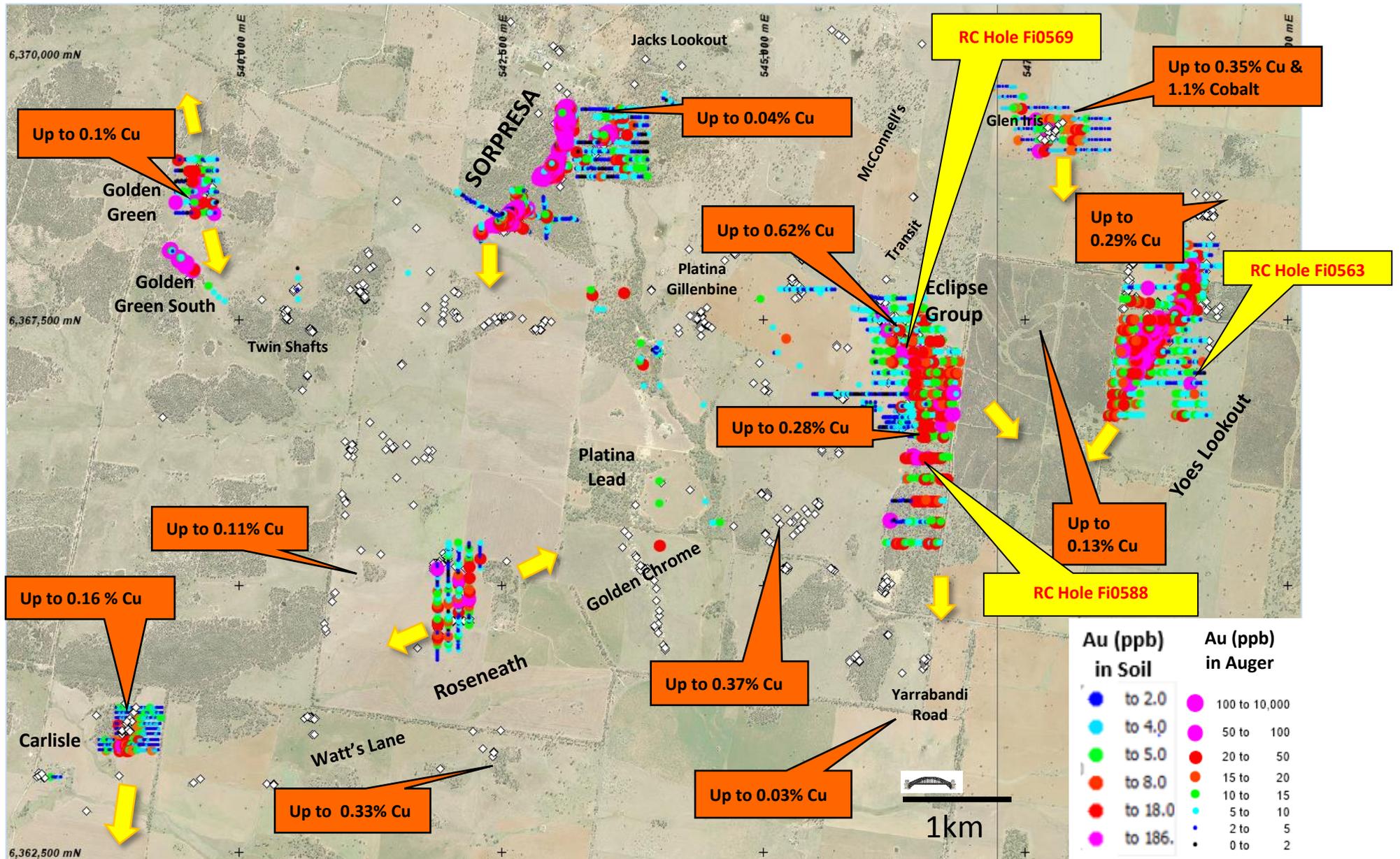


Figure 2: Wider Sorpresa area Map, showing the underlying gold signature, with best Copper Rock Chips overlaid. Recent RC drilling has confirmed Copper (Chalcopyrite)



The Eclipse Trend is in a structurally complex area which is associated with a strong geochemical corridor which extends from Eclipse South for 2.2km through the Eclipse North drilling area and is open along strike to the north and south. Recent 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. Ongoing surface geochemistry and ground geophysics (EM / 3D IP) will assist in focussing the exploration effort in this corridor as part of a larger regional exploration strategy.

Figure 3 *Plan view, RC drill holes at Yoes Magnetic Prospect, best intersections on magnetic target and 1VD RTP aeromagnetic image, with Cu in auger*

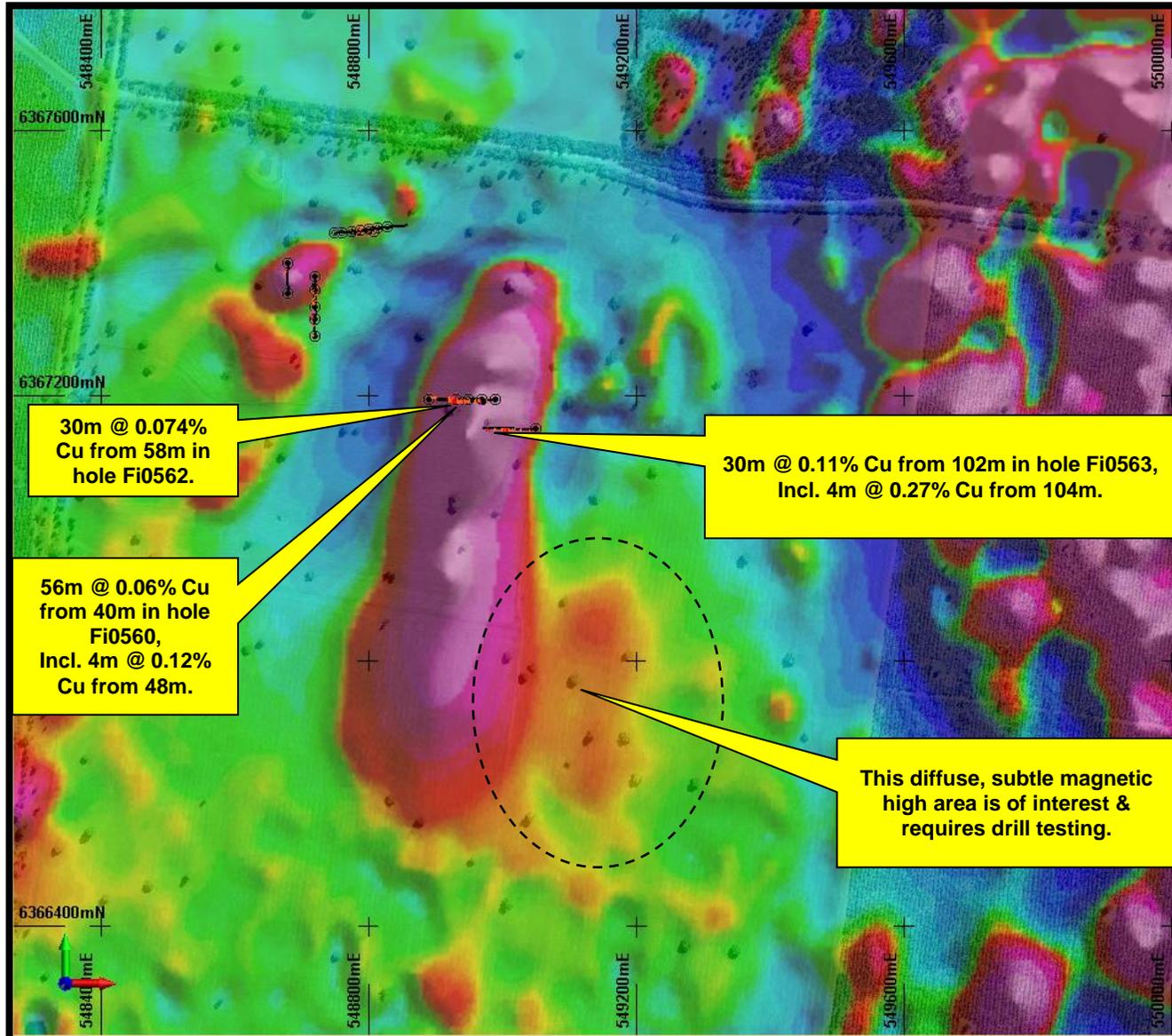
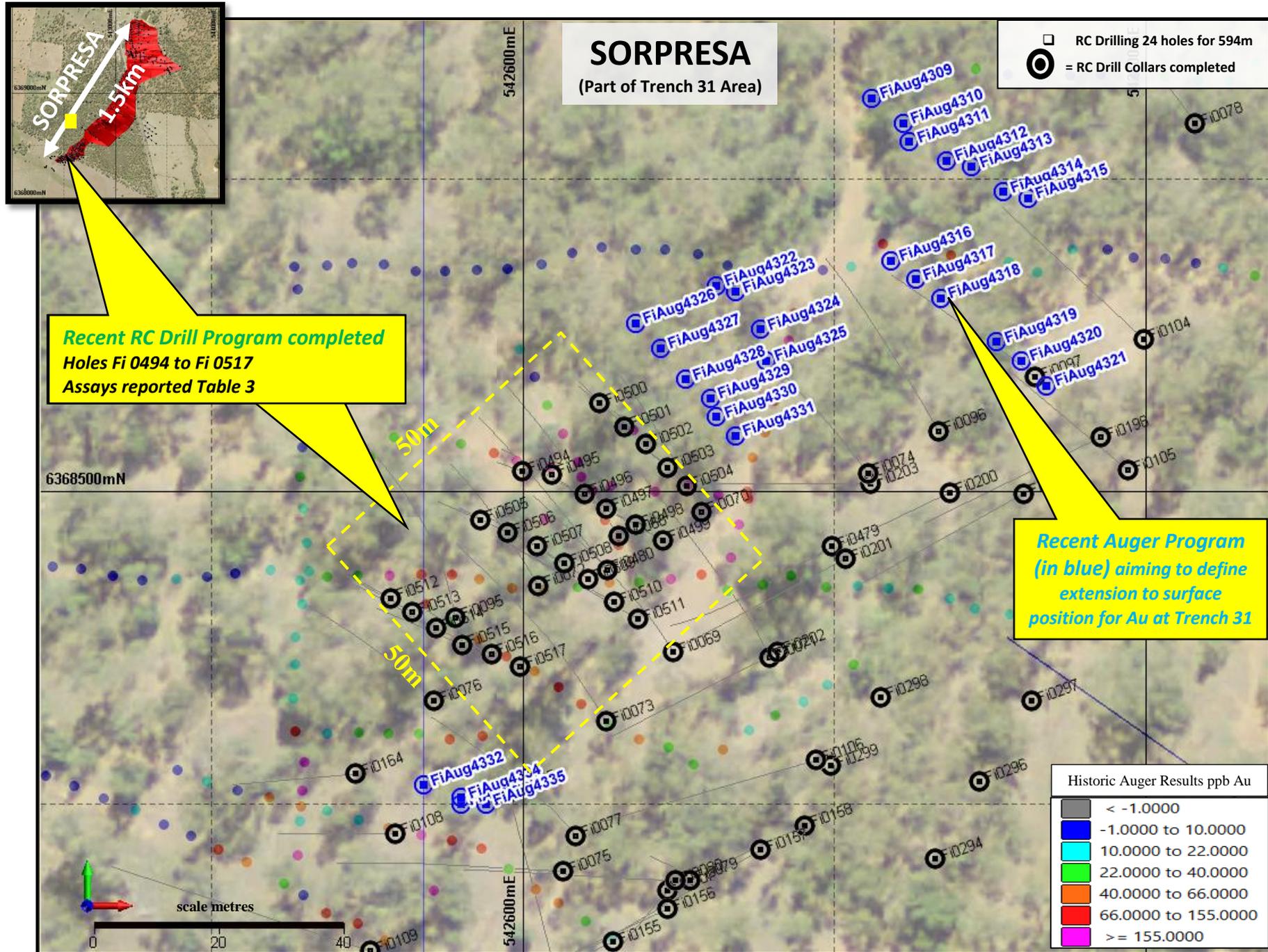


Figure 4: Sorpresa Plan View, the location of the RC drill results at Trench 31. (New Auger Drill program also shown)



**Figure 5: Eclipse Trend drilling locations with selected results, including post quarter**

