



Friday, 4<sup>th</sup> December 2015  
Company Announcement Office  
Australian Securities Exchange

## **New results include 9m @ 18.15g/t gold at Sorpresa, Fifield NSW RC Drilling continues at Trench 31 area within the Oxide Zone**

Rimfire Pacific Mining NL (ASX:RIM) ("Rimfire" or "The Company") is pleased to report a series of very positive gold and silver results from its ongoing RC drilling program (6 holes for 252m) at the Trench 31 area within the known Sorpresa gold and silver mineralised system at Fifield NSW. Additional RC drilling is ongoing at Trench 31 area.

### **Highlights of recent RC Drilling at Sorpresa Trench 31 Area**

- **Hole Fi 0689 with 9m @ 18.15g/t Au & 100g/t Ag from 18m is the 3<sup>rd</sup> best hole ever returned**
  - Located 50m from Hole Fi 0160, which returned 14m @ 21.9g/t Au & 6m @ 94 g/t Ag from 34m reported in 2012, it gives encouragement for continued high grades to emerge from this work
- **The Sorpresa Gold and Silver drilling continues to provide consistent high grade results in the known mineralised zone at Trench 31 area at shallow depths (typically 0~40m).**
  - There appears to be a strong corridor, broadly North-South, with high grade Au and Ag, not previously understood until the last few months of drilling
- **Highest individual assay results in this reporting for 1 or 2m intervals (>20g/t Au) included:**
  - Fi 0689 with 1m @ 69.0g/t Au; 1m @ 38.6g/t Au
  - Fi 0687 with 2m @ 14.85g/t Au; Fi 0690 with 1m @ 24.1g/t Au
  - Fi 0689 also return 1m @ 448g/t Ag, the highest assay for silver at Trench 31 to date

The RC drilling is part of an ongoing assessment of the structural controls and orientation of high grade lens areas within Sorpresa. The Company continues to encounter a significant proportion of high grade results in the program, providing further encouragement for economic feasibility assessment. This latest drilling supports previously reported drilling in October and November 2015 (which had a combined 1,975m of drilling).

### **RC Drilling Highlights for Sorpresa Gold and Silver Lens Assessment (Trench 31 Area)**

- **Best Gold and Silver grade intersections (in ranked order, for >10 gm-metre Au) included:**

Hole (location)	Main Intersection(s)	Including Intersection(s)
Fi 0689 (Trench31)	9m @ 18.15g/t Au & 100g/t Ag from 18m and 1m @ 0.78 g/t Au from 35m	1m @ 16.75g/t Au & 140g/t Ag from 18m 1m @ 6.45g/t Au & 448g/t Ag from 19m 1m @ 69.00g/t Au & 254g/t Ag from 20m 1m @ 15.35g/t Au & 23g/t Ag from 21m 1m @ 38.60g/t Au & 10g/t Ag from 24m 1m @ 11.40g/t Au & 5g/t Ag from 25m
Fi 0687 (Trench31)	7m @ 6.80g/t Au & 9g/t Ag from 20m	2m @ 14.85g/t Au & 16g/t Ag from 20m
Fi 0690 (Trench31)	8m @ 4.62g/t Au & 4g/t Ag from 18m	1m @ 6.69g/t Au & 9g/t Ag from 23m and 1m @ 24.10g/t Au & 9g/t Ag from 24m
Fi 0686 (Trench31)	2m @ 2.05g/t Au & 138g/t Ag from 16m and 5m @ 3.64g/t Au & 6g/t Ag from 24m	1m @ 1.53g/t Au & 226g/t Ag from 16m and 1m @ 4.35g/t Au & 4g/t Ag from 24m and 1m @ 8.79g/t Au & 4g/t Ag from 25m
Fi 0688 (Trench31)	1m @ 1.62g/t Au from 19m and 4m @ 3.64g/t Au & 4g/t Ag from 22m	1m @ 7.45g/t Au & 9g/t Ag from 22m

(See Figures 1 & 2, and Table 2 for complete assay details)

- ❑ The RC drilling continues to improve the knowledge of the orientation and controls operating on the higher grade gold and silver, with new results reinforcing the robustness of these zones.
- ❑ The Company will keep assessing the Sorpresa mineralisation in the oxide zone aiming to increase grades, ounces and the commercial context, attempting to move towards viable mining.
- ❑ This recent drilling (and subsequent work to follow) will contribute to parts of the resource at Sorpresa moving to measured status in due course with model upgrades.

CEO and Managing Director, John Kaminsky commented:



“The results in the last few months at Trench 31 area, including these most recent results, provides good evidence of continuity within the higher grade gold lenses in the oxide zone (0~60m) at Sorpresa.

“Our third best drill hole at Fifield, in Fi 0689, with **9m @ 18.15g/t Au & 100g/t Ag from 18m** shows Sorpresa still has many positive surprises in store. We have now hit high grades across a wide spatial setting on the 1.5km strike Sorpresa system.

“This recent drilling, is telling us to look for more high grade results in other locations, using a similar strategy of close spaced drilling.

“The frequency of the higher grade results (>10g/t Au) including results above 30g/t Au in numerous places, gives more impetus to the commercial assessment for potential prioritised development at Sorpresa.

“This assists both delineation and extension discovery strategies for Sorpresa, including projections into previously undrilled areas outside the existing resource boundary. There is a priority to focus our efforts on increasing the gold resource that is suited to shallow open-cut mining, with ideas emerging from the recent work for new shallow extensions.

“The knowledge being gained adds to the Company’s capacity to seek further upside within the current Sorpresa resource for gold and silver, whilst looking to turn the current Sorpresa resource into a profitable mining operation. ***If you take a look at Figure 2 (page 7), the shapes and corridors are starting to emerge for a potential mining operation at Trench 31.*** More locations are planned for drilling at Trench 31 and Roadside accordingly.

#### Annual General Meeting, Rights Issue and New Website

“The Company conducted its Annual General Meeting 27<sup>th</sup> November in Melbourne, providing shareholders an opportunity to further understand the Company, its project areas, exploration strategies and engage with guest presenters on key trends within the industry. The Company, Board and management were favourably benchmarked within the industry and received strong endorsement from shareholders with all resolutions comfortably passed.

“The [non-renounceable rights issue \(NRRI\)](#) of 1 new share at 2.0 cents, plus a free option at 3.5 cents (expiry May 2017), for every 7 existing shares held, was completed during the week raising \$1.043M in the first instance.

“***We thank new and existing shareholders who have participated in the capital raising*** as the Company looks to continue with the following:

- ✓ Sorpresa resource, further definition, discovery growth and economic assessment towards mining feasibility
  - Continue the definition and understanding of the high grade lens areas with further drilling
  - Seek to extend the discovery growth into new adjacent areas, as only 10% of the known geology is tested
- ✓ Continue discussions with potential commercial partners for the Company’s project areas, aiming to:
  - Assist accelerated outcomes in discovery growth through additional committed expenditure
  - Look at development opportunities for the Sorpresa resource
- ✓ Maintain a discovery growth focus on the regional opportunities for gold, silver, copper and platinum

“The Company has launched its new website, providing more information for shareholders and stakeholders. Over time the site will be further streamlined for its presentation and content. We encourage shareholders to sign-up to receive future distributions of ASX news bulletins.

“The Company strategy continues to pursue the Sorpresa resource definition, discovery growth and economic potential in parallel with the regional discovery advancement primarily within a 6km radius of Sorpresa.”

For context, given the related nature of the programs at Trench 31, recent historic RC drilling is also provided.

### **Previous Recent Drilling Highlights at Sorpresa Trench 31 (Reported November 2015)**

RC drilling program (20 holes for 833m) at the Trench 31 area [previously reported 20<sup>th</sup> November 2015](#) with greater than 10 gram-metres summarized as follows:

Hole (location)	Main Intersection(s)	Including Intersection(s)
Fi 0680 (Trench31)	3m @ 0.58g/t Au from 13m <u>and</u> 13m @ 8.46g/t Au from 17m	1m @ 9.06g/t Au from 20m <u>and</u> 2m @ 31.35g/t Au from 21m <u>and</u> 2m @ 9.69g/t Au from 25m
Fi 0685 (Trench31)	2m @ 0.59g/t Au from 4m <u>and</u> 3m @ 18.93g/t Au & 47g/t Ag from 13m	1m @ 54.20g/t Au & 121g/t Ag from 14m
Fi 0675 (Trench31)	1m @ 0.67g/t Au from 16m <u>and</u> 4m @ 0.62g/t Au from 22m <u>and</u> 8m @ 5.36g/t Au from 26m	1m @ 11.75g/t Au from 28m <u>and</u> 2m @ 9.20g/t Au & 17g/t Ag from 30m
Fi 0672 (Trench31)	4m @ 9.73g/t Au from 6m <u>and</u> 1m @ 0.66g/t Au from 26m	1m @ 36.10g/t Au from 8m
Fi 0684 (Trench31)	4m @ 6.18g/t Au from 10m	1m @ 21.50g/t Au from 11m
Fi 0679 (Trench31)	8m @ 2.49g/t Au from 16m <u>and</u> 3m @ 2.47g/t Au from 26m	2m @ 6.53g/t Au from 18m
Fi 0676 (Trench31)	2m @ 0.58g/t Au from 6m <u>and</u> 3m @ 1.83g/t Au & 16g/t Ag from 30m <u>and</u> 3m @ 4.44g/t Au from 37m	1m @ 4.12g/t Au & 32g/t Ag from 30m <u>and</u> 2m @ 6.08g/t Au & 10g/t Ag from 38m
Fi 0677 (Trench31)	2m @ 0.48g/t Au & 9g/t Ag from 45m <u>and</u> 1m @ 8.93g/t Au & 14g/t Ag from 47m	

### **Previous Recent Drilling Highlights at Sorpresa Trench 31 (Reported October 2015)**

RC drilling program (28 holes for 1,142m) at the Trench 31 area [previously reported 20<sup>th</sup> October 2015](#) with greater than 10 gram-metres summarized as follows:

Hole (location)	Main Intersection(s)	Including Intersection(s)
Fi 0662 (Trench31)	3m @ 20.42g/t Au & 26g/t Ag from 20m <u>and</u> 1m @ 5.47g/t Au & 53g/t Ag from 36m <u>and</u> 7m @ 0.50g/t Au & 5g/t Ag from 38m <u>and</u> 4m @ 5.34g/t Au & 18g/t Ag from 45m	1m @ 39.6g/t Au & 58g/t Ag from 21m <u>and</u> - 1m @ 1.55g/t Au & 4g/t Ag from 40m <u>and</u> 1m @ 16.75g/t Au & 27g/t Ag from 46m
Fi 0548 (Trench31)	2m @ 28.65g/t Au & 53g/t Ag from 39m	1m @ 53.30g/t Au & 74g/t Ag from 39m
Fi 0658 (Trench31)	2m @ 26.94g/t Au & 36g/t Ag from 37m	1m @ 50.00g/t Au & 55g/t Ag from 37m
Fi 0663 (Trench31)	10m @ 2.29g/t Au & 12g/t Ag from 21m <u>and</u> 7m @ 3.37g/t Au & 14g/t Ag from 35m	1m @ 7.96g/t Au & 66g/t Ag from 21m <u>and</u> 1m @ 11.55g/t Au & 24g/t Ag from 36m
Fi 0659 (Trench31)	5m @ 8.73g/t Au & 22g/t Ag from 47m <u>and</u> 1m @ 0.85g/t Au & 17g/t Ag from 53m	1m @ 33.70g/t Au & 31g/t Ag from 47m
Fi 0547 (Trench31)	3m @ 8.08g/t Au & 11g/t Ag from 15m	2m @ 11.25g/t Au & 14g/t Ag from 15m
Fi 0660 (Trench31)	3m @ 3.92g/t Au & 47g/t Ag from 54m	1m @ 5.52g/t Au & 73g/t Ag from 54m

## **Geological interpretation for the recent drilling at Sorpresa**

The recent drilling indicates that the gold (with silver) is following a variety of structures, not just a select set of structures that were active in the mineralising era.



Rimfire Rig drilling at Trench 31

This implies a strong gold pulse at this location, with gold using whatever structural plumbing that was available. The geological reasons behind such a centred gold pulse are important in both peripheral and more distant area selection going forward. The footwall topography looks to be an important factor.

The gold wraps around a central high in the footwall topography. This central high could have an important but indirect connection to the gold distribution. This high is also a surface topographic high and could reflect silicification or slight metamorphism from a cupola below, with abnormal hardness areas possibly focusing structures. An alternative is that the rising hot water fluids may have moved towards the highs in the structural plumbing system.

A prominent east-west fault, referred to as the *magnetic step*, features within the Trench 31 area and extends 6km. The gold in this fault appears to penetrate into the footwall occasionally. This characteristic is seen along strike where gold follows the *magnetic step*, but is not in the Sorpresa carbonaceous receptive horizon.

This all implies that the *magnetic step* was part of the conduit for rising hot, gold bearing water. This east-west fault orientation is likely to have parallel faults. This will influence the search for additional gold. The *magnetic step* is obvious on the footwall topography so can be tracked reasonably. Some of the gold areas seen at Trench 31 sit on the actual footwall contact.

## **Additional Summary comments on drilling at Trench 31**

The Trench 31 area (within the overall Sorpresa resource) is yielding impressive intersections and coherent gold rich zones which are helping better define the resource geometry at this location. This is important in assisting the establishment of potential commercial implications for parts of Sorpresa.

The drilling programs are successfully achieving a number of outcomes:

- ✓ Providing a better understanding of the 3D gold lens shapes. This required drilling at 5 to 10m spacing along lines that are 10 to 20m apart in the potentially higher grade parts of the resource and more accurate 3D shapes are now emerging.
- ✓ The drill delineation of high grade gold has the potential to increase the resource size, if that high grade was under represented in the original wider spaced drilling (as appears to be the case).
- ✓ The new high grade gold shapes allow more precision in projecting the gold into any surrounding un-drilled ground. This is important for potential discovery growth, particularly to the west, south and east of Trench31 area.

The delineation of high grade gold and silver is focused to advance the Sorpresa resource into a feasible mining operation.

## **The Overall Sorpresa Resource**

Currently the Sorpresa Deposit has a combined strike length of greater than 1.5km, and 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 (predominantly) 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.

In addition to the results provided in this report, the Company has continued a broad spectrum of work and a brief update on these Company activities is provided below.

**A summary of other activities either completed or currently underway at Fifield include:**

- ✓ Regional creek and soil sampling plus mapping programs - *ongoing*
- ✓ Examination of new Tenement area EL8401 for concept and target development - *ongoing*
- ✓ Ongoing definition of high grade lens areas for Au/Ag at Sorpresa - *RC drilling underway Trench 31*
- ✓ Additional metallurgical testing within the Sorpresa resource, to assist economic studies - *Under interpretation*
- ✓ Rehabilitation of previously drilled areas - *Underway*

The Company intends to maintain manageable work programs that continue to advance the opportunities at Fifield, within the financial constraints currently facing the industry.



**JOHN KAMINSKY**  
**CEO and Managing Director**

Figure 1: Fifield Prospect and Concept Map with location of the Sorpresa Resource and New RC Drilling reported in December 2015 and Regional program

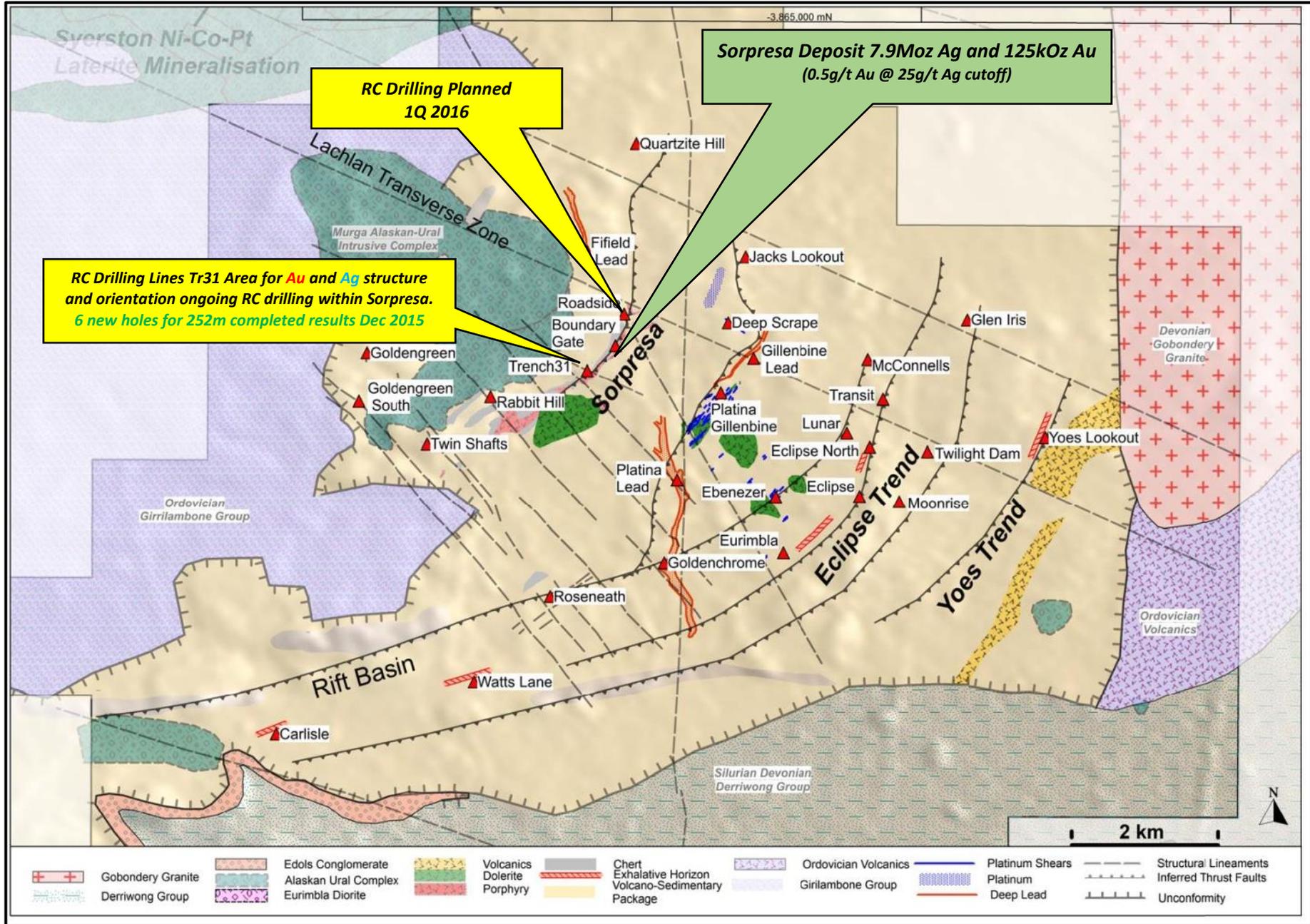


Figure 2: RC drilling at Sorpresa – Trench 31 Area Oxide – Gold in Gram-Metre Representation with some recent highlights >50 gram-metre shown

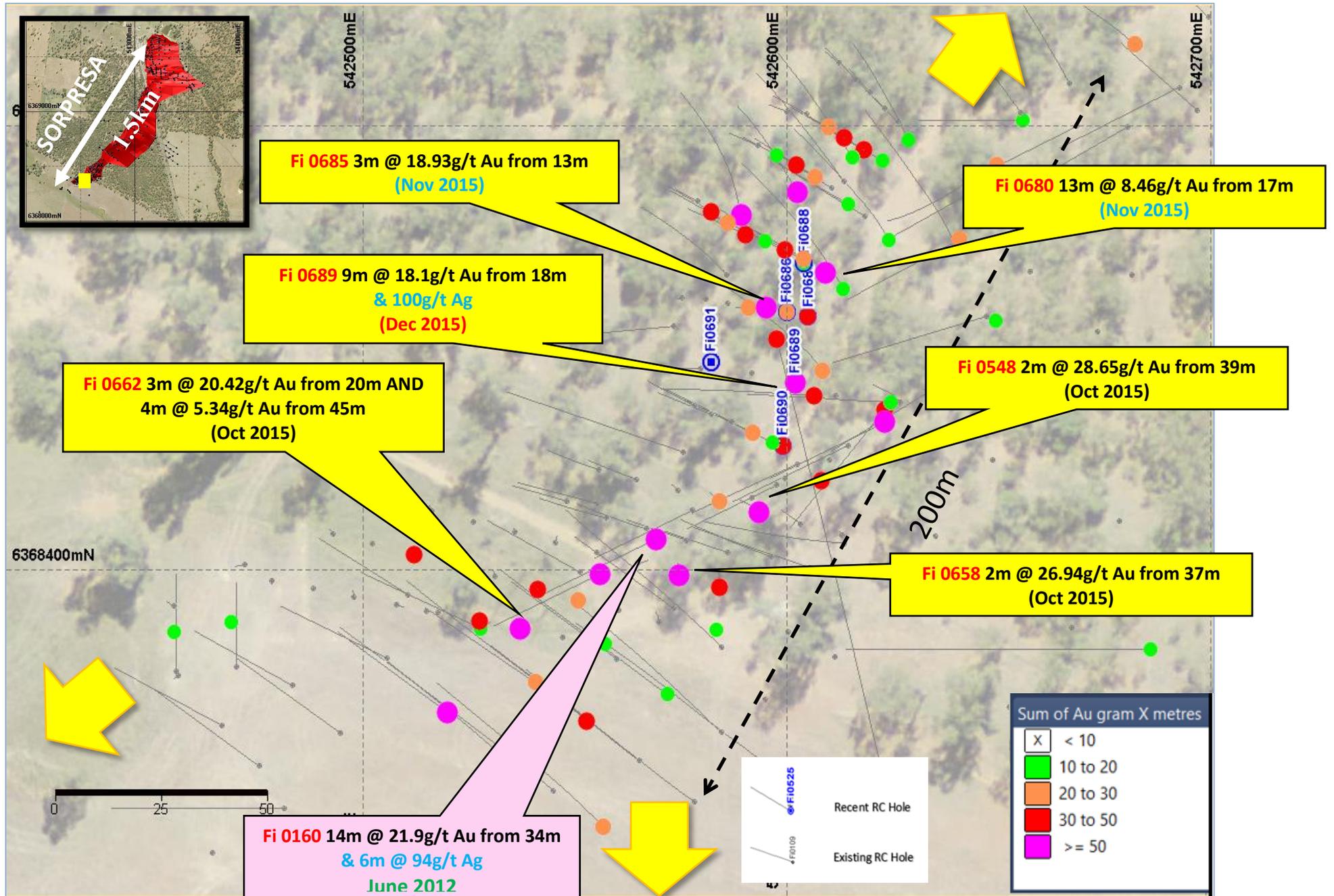
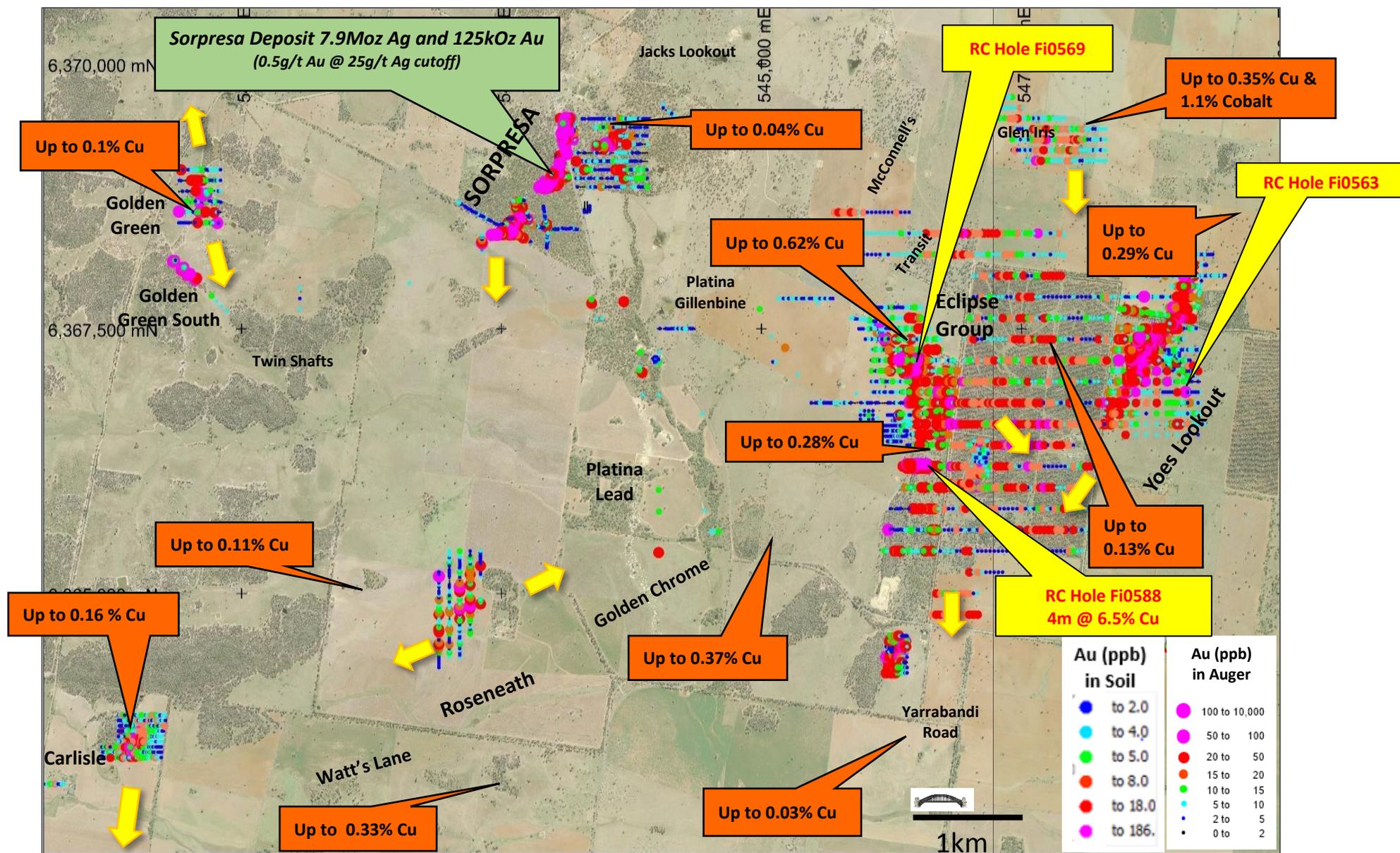


Figure 3: Wider Sorpresa area Map, shows the underlying gold signature, with best Copper Rock Chips overlaid. RC drilling (May~July 2015) has confirmed Copper (Chalcopyrite)



The Eclipse Trend is in a structurally complex area which is associated with a strong geochemical corridor which extends from Eclipse South for approx 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.

**Table 2: Assay Results from recent RC drilling at Sorpresa – Trench 31 Area Oxide**

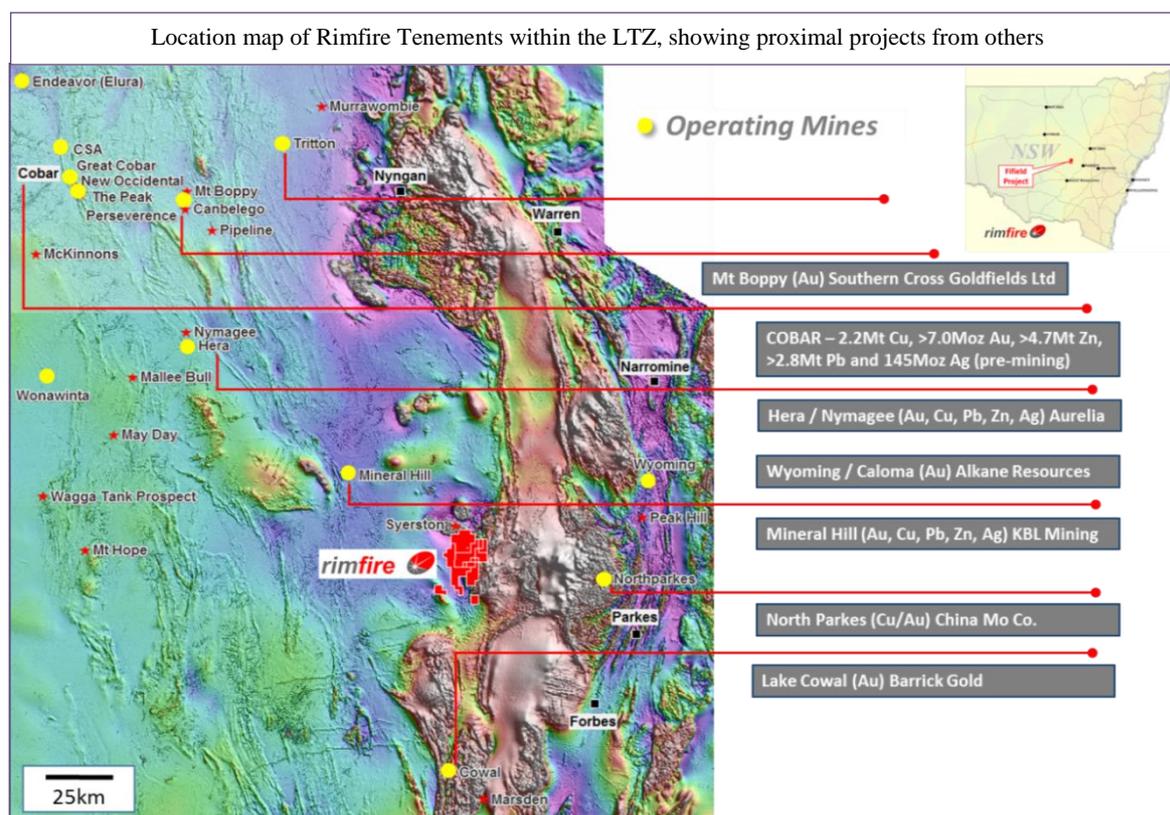
Hole ID	Easting (m GDA94)	Northing (m GDA94)	Survey Base	RL (mAHD)	Dip (°)	GDA Azimuth (°)	Depth (m)	Drilling Type	Prospect	From (m)	To (m)	Down hole Length (m)	Au (g/t)	Ag (g/t)
Fi0686	542600	6368458	GPS	292	-90	0	36	RC	Trench 31	16	18	2	2.05	138
									and	24	29	5	3.64	6
									incl.	25	26	1	8.79	4
									and	29	30	1	0.25	4
Fi0687	542605	6368457	GPS	292	-90	0	38	RC	Trench 31	4	16	12	0.13	Nil
									and	20	27	7	6.80	9
									incl.	20	22	2	14.85	16
									and	27	30	3	0.35	4
Fi0688	542604	6368469	GPS	292	-90	0	33	RC	Trench 31	2	14	12	0.27	Nil
									and	14	17	3	0.67	5
									and	19	20	1	1.62	1
									and	22	26	4	2.29	4
									incl.	22	23	1	7.45	10
									and	26	27	1	0.32	2
Fi0689	542602	6368442	GPS	292	-90	0	57	RC	Trench 31	18	27	9	18.15	100
									incl.	18	19	1	16.75	140
									incl.	19	20	1	6.45	448
									incl.	20	21	1	69.00	254
									incl.	21	22	1	15.35	23
									incl.	24	25	1	38.60	10
									incl.	25	26	1	11.40	5
									and	27	29	2	0.20	3
									and	35	36	1	0.78	1
Fi0690	542599	6368428	GPS	292	-90	0	52	RC	Trench 31	12	18	6	0.15	2
									and	18	26	8	4.62	4
									incl.	23	24	1	6.69	9
									incl.	24	25	1	24.10	9
Fi0691	542582	6368447	GPS	292	-90	0	36	RC	Trench 31	0	3	3	0.31	nil
									and	3	5	2	2.20	1

Note: Intersections calculated on >0.1 g/t Au with <2m internal dilution. Samples taken as 1m composites

## **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. More recently a copper signature has been established to the East. The gold is predominantly native gold at Sorpresa.



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>13m @ 8.46g/t Au</b>	Trench 31
<b>9m @ 18.1g/t Au plus 3m @ 280g/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:

[Rimfire CEO Presentation - AGM 27 November 2015 – John Kaminsky](#)

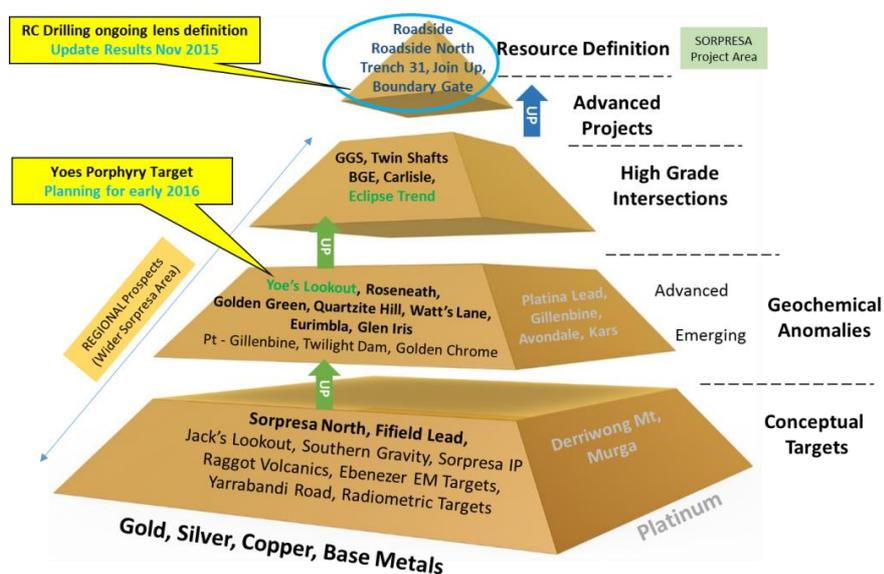
[Benchmarking - AGM 27 November 2015 – Richard Schodde](#)

[Resources Industry Presentation trends in Investment – AGM 27 November 2015 – Hedley Widdup](#)

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 **30 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.*

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

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

**Table 3: 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 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 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 4** Dates and Hyperlinks for previously referred to results in this report

ASX November 9 <sup>th</sup> 2007	<a href="#">Golden Green Gold Prospect Returns Encouraging Assay</a>
ASX July 25 <sup>th</sup> 2008	<a href="#">Quarterly Report For the period April 1<sup>st</sup> to June 30<sup>th</sup> 2008</a>
ASX March 30 <sup>th</sup> 2012	<a href="#">Coherent Gold geochemistry at Yoes Lookout Confirmed – Fifield NSW</a>
ASX September 17 <sup>th</sup> 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>
ASX 26 <sup>th</sup> August 2015	<a href="#">Sorpresa Drilling Continues best intersection of 14m @ 5.24g/t gold &amp; 156g/t silver from 21m</a>
ASX 20 <sup>th</sup> October 2015	<a href="#">Sorpresa Drilling - Best Intersection of 3m @ 20.42g/t Au AND 4m @ 5.34g/t Au</a>
ASX 20 <sup>th</sup> November 2015	<a href="#">Sorpresa Drilling gives 13m @ 8.46g/t gold (incl. 2m @ 31.35g/t) at shallow depths</a>

**Table 5: JORC Code Reporting Criteria**

**Section 1 Sampling Techniques and Data**

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Sampling techniques</b>	<p>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</p>	<p>RC Samples are collected at 1m intervals from the cyclone in plastic bags. RAB Samples are collected at 1m intervals from the cyclone in plastic bags. 1 metre intervals are sampled from all Auger holes within in situ weathered basement geology. Nominal 2 kg samples are collected at the drill rig. Rock Chips samples are a mix of float, sub crop &amp; outcrop (identified in results table).</p>
	<p>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</p>	<p>Industry standard QAQC protocols with insertion of certified reference samples, blank samples and field duplicates are included every 25, 51 and 52nd sample respectively. Previously duplicates were every 50</p>
	<p>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</p>	<p>RC Hole collars are surveyed using a Garmin GPS, and Trimble DGPS. Downhole surveying in RC hole is conducted every 20m open hole, and where required every 50m in-rod using stainless steel rods. All other drill and sample locations are surveyed using Garmin GPS.</p>
<b>Drilling techniques</b>	<p>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</p>	<p>Reverse Circulation conducted using face sampling hammer (119mm diameter). RAB drilling conducted using blade bit (100mm diameter). Auger drilling conducted by trailer mounted hydraulic driven auger rig with nominal hole diameter of 100mm.</p>

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Drill sample recovery</b>	· Method of recording and assessing core and chip sample recoveries and results assessed.	Poor sample recoveries are noted during logging with percentage estimates. These are compared to results.
	· Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC samples are visually checked for recovery, moisture and contamination. A cyclone and riffle splitter (for RC) are used to provide a uniform sample and these are routinely cleaned. The hole is blown out at the beginning of each rod to remove excess water, plus auto-blow downs, to maintain dry sample. Auger and RAB samples are visually checked for recovery and up hole contamination. Auger and RAB drilling not conducted below the water table.
	· Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	In RC drilling occasional poor sample recovery and also wet samples occur however close examination and comparison to results showed that there is no identifiable bias in the results associated with these samples.
<b>Logging</b>	· Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Geological logging of drill chips records colour, grainsize, lithology, alteration, mineralisation and veining including percentage estimates along with moisture content. Drill samples are sieved, logged and placed into chip trays.
	· Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Geological logging of drill chips is qualitative by nature, drill chip trays are retained for future reference.
	· The total length and percentage of the relevant intersections logged.	All metres drilled are logged
<b>Sub-sampling techniques and sample preparation</b>	· If core, whether cut or sawn and whether quarter, half or all core taken.	No core reported in this release

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Sub-sampling techniques and sample preparation continued.</b>	· If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Reported RC results have been riffle split. Lower priority RC intervals are speared samples and if found to be anomalous will be subsequently riffle split and re-assayed. Wet samples are not put through riffle splitter but homogenized and subsampled using small spear. Sample returned from 1 metre RAB interval is homogenized and speared and composited and maximum composite interval within significant intersection is provided with result. Sample returned from 1 metre auger interval is homogenized in collection tray and speared. All RAB and Auger samples were dry. Rock Chips are sawn in half with half submitted for analysis.
	· For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sub-samples obtained from riffle splitting are submitted as 1m intervals or composited to 2m (equal weights) to produce a bulk 2kg sample, subsamples of occasional wet metres are composited similarly. Lower priority zones are speared and composited on 4m intervals. The homogenization and spearing method is typical for sampling RAB and auger returns and QAQC results identify that the methods used are appropriate to the style of mineralisation.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Industry standard QAQC protocols with insertion of certified reference samples, blank samples and field duplicates are included every 50, 51 and 52nd sample respectively. No wet samples are put through the riffle splitter which is checked between samples and cleaned (when necessary) between samples. Equal weights (estimated from equal volumes) are collected for composited intervals.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	QAQC results of field duplicate analysis identify that the methods used are appropriate to the style of mineralisation.
	· Whether sample sizes are appropriate to the grain size of the material being sampled.	QAQC results of field duplicate analysis identify that the methods used are appropriate to the style of mineralisation.

<i>Criteria</i>	<i>JORC Code explanation</i>	<i>Commentary</i>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<p>Reported RC samples are dispatched to ALS Laboratories with Au determined by Au_AA26.</p> <p>RAB and Auger samples are dispatched to ALS Laboratories with Au determined by fire assay methods Au-AA22 (or PGM-ICP24) which returns Au to 2ppb (or 1 ppb) respectively, PGM-ICP24 includes Pt to 5 ppb and Pd to 1 ppb on a 50g charge. Selected auger samples were also submitted for full suite multi-element analysis are via Four Acid Digest method ME-MS61.</p> <p>Rock chip samples are submitted to ALS Laboratories for Au via Fire Assay method Au-AA22 to 2 ppb and full suite multi-element analysis are via Four Acid Digest method ME-MS61.</p> <p>Fire Assay analysis for gold and Four Acid digest for multielement analysis are considered as total techniques in the absence of coarse metal. Screen Fire Assay for gold is considered as total technique when coarse gold is present.</p>
	<ul style="list-style-type: none"> <li>For geophysical tools, spectrometers, <b>handheld XRF instruments (fpXRF)</b>, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> </ul>	<p>All significant results reported from NATA accredited laboratory.</p> <p><b>Handheld XRF (fpXRF) (Olympus Delta50) is used</b> to determine sample character and type applied to 1m riffle split or composite. All data is collected using a 30 seconds reading time (this is sometimes modified to 15secs, if stable readings are achievable) for each of the 3 beams in soil mode. XRF analysis is typically applied to a single point on the sample bag of interest. Results may be cross checked with additional XRF readings, including further subsamples. The known limitations of XRF, particularly element strengths and weaknesses, are considered. XRF is a scoping and order of magnitude tool, the Company is an expert user of XRF. Trends and comparisons in XRF readings are examined. Laboratory assays may be sought for further validation. XRF results are considered as guidance for subsequent laboratory assay</p>
	<ul style="list-style-type: none"> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<p>Reviews of internal QAQC results has shown that the field sampling, riffle splitting compositing methods used are appropriate to the mineralisation being tested.</p> <p>External laboratory analysis of "umpire" samples confirm results from the primary laboratory.</p>

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Verification of sampling and assaying</b>	· The verification of significant intersections by either independent or alternative company personnel.	All reported intersections are independently reviewed by 2 company personnel
	· The use of twinned holes.	Hole Twinning when used, is reported.
	· Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary field data is captured electronically using established templates. Assay data from laboratory is merged and loaded into Access based database after passing QAQC checks. Database audit of loaded batches is conducted on a monthly basis.
	· Discuss any adjustment to assay data.	"<" values are converted into "- " values and for geochemical analysis results returning less than detection are ascribed to half the detection limit.
<b>Location of data points</b>	· Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Drill collars are located using handheld Garmin GPS and are RC collars are picked up by a Trimble Differential GPS. Downhole digital multi-shot surveys are conducted every 20m, open hole where practical, or in stainless steel rods every 50m.
	Specification of the grid system used.	GDA94 zone55
	· Quality and adequacy of topographic control.	Collar elevation data from digital terrain model derived from detailed ground gravity survey DGPS data used as an interim measure prior to DGPS pick up of collar location. Other elevation data sourced from handheld GPS.
<b>Data spacing and distribution</b>	· Data spacing for reporting of Exploration Results.	RC Exploration was on nominal 80 X 100m grid down to 40 X 40m grid and then down to 20 X 20m grid, or as described. RAB exploration conducted on traverses with coverage on 60 ° dipping holes. Auger exploration currently on a nominal 100 X 20m grid or as described. Rock Chip samples not on a defined grid pattern.

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Data spacing and distribution continued.</b>	· Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The nominal RC exploration grid is deemed adequate to identify mineralisation envelopes which are infilled as appropriate. The RAB hole spacing and nominal auger exploration grid are deemed most suitable to identify mineralisation at a scale of interest to the company. This is adequate to establish continuity in this environment however closer spaced drilling may be warranted in certain locations for further definition.
	· Whether sample compositing has been applied.	Compositing conducted at 2 and 4 meter intervals in RAB and RC samples. Equal weights from each 1 meter interval are used to ensure that the composite adequately represents the intervals sampled. The equal weights are estimated from equal volume measure used when subsampling. Auger samples are taken on 1 metre intervals.
<b>Orientation of data in relation to geological structure</b>	· Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Current observations do not suggest a bias in sampling from the drilling orientation.
	· If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The drilling orientation is designed to intercept the mineralisation orthogonally where known.
<b>Sample security</b>	· The measures taken to ensure sample security.	Sample identification is independent of hole identification. Samples are stored in a secure on- site location, under supervision and transported to ALS Orange NSW via Rimfire personnel or licensed couriers.
<b>Audits or reviews</b>	· The results of any audits or reviews of sampling techniques and data.	Internal reviews of QAQC data has shown that the field sampling, riffle splitting and compositing methods used are appropriate to the mineralisation being tested.

## Section 2 Reporting of Exploration Results

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Mineral tenement and land tenure status</b>	· Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Reported results all from 100% Rimfire Pacific Mining NL tenements at Fifield NSW, which may include EL5534, EL6241, EL7058, EL7959, EL5565, MC(L)305, MC(L)306.  All samples were taken on Private Freehold and / or Common Land (prescribed for mining). No native title exists. The land is used primarily for grazing and cropping.
	· The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	The tenement is in good standing, and all work is conducted under specific approvals from NSW Trade and Investment, Mineral Resources.
<b>Exploration done by other parties</b>	· Acknowledgment and appraisal of exploration by other parties.	Recent systematic exploration (1980 onwards) has been conducted by Ausplat Minerals NL in JV with Golden Shamrock Mines Ltd and Mount Gipps Ltd, Titan Resources and also Helix Resources and Black Range Minerals NL. Prior to this Exploration for various metals in the Fifield area has been conducted by a number of companies since the late 1960's including Anaconda, CRA Exploration Pty Ltd, Platina Developments NL, Mines Search Pty Ltd, Broken Hill Proprietary Company Ltd, Mt Hope Minerals and Shell.
<b>Geology</b>	· Deposit type, geological setting and style of mineralisation.	The mineralisation currently being pursued at Sorpresa appears to have many similarities with typical carbonate base metal epithermal gold style, in a Siluro Devonian back arc basin setting. Other mineralisation styles include sediment and greenstone hosted orogenic gold and VMS.
<b>Drill hole Information</b>	· A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	Plans showing location of drill holes and also location of significant results and interpreted trends are provided in the figures of report.
	· easting and northing of the drill hole collar	Any new significant RC results are provided in tables within the report.
	· elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	Any new significant RAB results are provided in tables in within the report.

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Drill hole Information Continued.</b>	dip and azimuth of the hole	Any new significant rock chip results are provided in tables within the report.
	down hole length and interception depth	Any new significant Auger results are provided in figures within the report.
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Information is provided in significant results tables.
<b>Data aggregation methods</b>	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	No averaging or cut-off values are applied to auger or rock chip results. Only significant RAB results >0.1g/t Au are reported using thickness weighted average for intervals with < or = 2m internal dilution. For RC results thickness weighted averages are reported for all intervals. Reported intervals are calculated using $\geq 0.1\text{g/t Au}$ and or $\geq 10\text{g/t Ag}$ cut off and $\leq 2\text{m}$ Internal Dilution.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	High grade intervals within in larger intersections are reported as included intervals and noted in results table. Aggregation utilises thickness weighted mean calculations.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Metal equivalents are not reported.
<b>Relationship between mineralisation widths and intercept lengths</b>	These relationships are particularly important in the reporting of Exploration Results.	Drill holes are designed to intersect the plane of mineralisation (where this is known) at $90^\circ$ so that reported intersections represent true thickness.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known	All intersections are subsequently presented as downhole lengths. If down hole length varies significantly from known true width then appropriate notes are provided.

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	Refer to Figures
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	This information is provided in results Table and comments in the report.
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	There is currently no other substantive exploration data that is meaningful and material to report, beyond that reported already, in this or previous reports.
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	Further work is discussed in the document in relation to the exploration results.
	<ul style="list-style-type: none"> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Refer to Figures