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Monday, 13th April 2015
Company Announcement Office
Australian Securities Exchange

# RC drilling completed at Yoes Gold-Copper Targets

## Skarn style mineralisation intersected with Copper Anomalism present

Rimfire Pacific Mining NL (ASX:RIM) ("Rimfire" or "The Company") is pleased to report the completion of a first pass RC drilling program, of 13 holes (1,114m) to probe two separate targets, 1) gold (Au), and 2) gold-copper at Yoes Lookout location, 6km due east of the Sorpresa discovery area, (Figure 2) at Fifield NSW.

The drilling program intersected important skarn style geology with indications of copper (Cu) in field observations using fp XRF analyser. ***Visible chalcopyrite*** mineralisation was present and copper anomalism over a best interval of 63m width was noted. Assay results and a more detailed interpretation are expected within the next 4 weeks or so.

## Highlights at Yoes Lookout RC Drilling (assays pending)

- **A 13 hole (1114m) RC Drilling first pass program was completed on 2 targets, and the focus was:**
  - Reconnaissance (7 holes) to examine an area of the known surface gold geochemistry anomaly (1.7km strike)
  - The partial testing of a magnetic signature to the east , looking to validate the potential for copper and gold, as indicated in surface geochemistry (6 holes)

- **A new skarn style hydrothermal alteration system anomalous in Cu is present at the magnetic target**
  - Field observation include coarse chalcopyrite mineralisation (see photo page 3) in cross cutting carbonate veins and chalcopyrite as disseminated 'blebs' in the skarn
  - 5 of 6 holes intersected the mineralised skarn style material
  - The best interval was hole Fi 0560 (100m EOH) with magnetite-pyrite-chalcopyrite in **63m thick zone** of iron-calcic skarn intersected from 37m to 100m, **Cu up to 0.3% (1m) with typical range 200~1000ppm on fpXRF**

## Additional Drilling and Other Work Programs – Planned (Refer to Figure 2)

A brief update on work progress is provided, for drilling work that is soon to be undertaken on a range of targets which are focused on gold and base metal potential at Fifield NSW. Figure 2 shows locations for the work programs.

- **Up to 2,000m reconnaissance RC Drilling program at Eclipse Trend is planned for May:**
  - Partial testing of the gold and base metal geochemistry established in bedrock along the known 2.2km anomaly
  - Reconnaissance over portions of the surface gold geochemistry anomaly

- **RC Drilling of the higher grade gold lens areas within the Sorpresa oxide position**.
  - Shallow RC Drilling is ongoing at Trench 31. Visible gold is present
  - The program looks to further develop an understanding of the structural orientation of the gold system
  - Planned new Auger drilling will define areas for additional RC drilling

- **RC Drilling (up to 1,000m) is planned for early May commencement on geophysics targets:**
  - **A "pipe like IP/Gravity anomaly" at Sorpresa South** targeting gold and silver
  - **A "Tritton style" mineralisation target at Carlisle** (Magnetic feature) for gold and copper

**CEO, John Kaminsky commented:**

"The program conducted at Yoes has now demonstrated the increased copper-gold potential of this location with some exciting skarn style geology hosting copper sulphides (chalcopyrite).

"When we consider the very large scale of the surface gold expression at Yoes, being approximately 1.7km in length and 200m width to date, then the small 1100m RC drill program has increased the prospectivity of this area with minimal cash outlay.

"It is too early to make definitive conclusions on our observations at Yoes, particularly without assay data and more mineralogy, however, in general, the **Skarn style association is an important development. This has never been seen previously at Fifield.**

**"**In general, Skarn geology (of which there are many different types) has the potential to host economic mineralisation, or be a pathfinder to or associated with nearby mineralisation. This geology needs to be carefully interpreted. Nevertheless, this new information is a "positive step up" in the district mineralisation potential. Rimfire had originally identified the Yoes area as prospective for porphyry copper-gold systems, and this concept remains on the radar with these latest findings. We have now ticked a few important boxes at Yoes and its surrounds.

*Drill Rig Operational at Yoes Gold and Copper Prospect*

"The Company is likely to continue some follow up drilling at Yoes as part of its May drilling program.

"In addition to the work recently done at Yoes we have new RC drilling programs commencing in May, on a range of other regional targets. There should be considerable interest in these programs, which will probe the geophysics at Carlisle (magnetics) and a pipe like IP/Gravity feature about 700m south of the known extent of Sorpresa. These programs have the capacity to create a quantum shift in the value for the Company.

"To the east of Sorpresa, we will also gain insights into the Eclipse Trend area, with up to 2000m of RC drilling in May. Here we are looking to see the connection to the observed mineralisation zonation across the Sorpresa-Eclipse-Yoes areas which occurs over a 6km distance.

"***The area bounded between Eclipse and Yoes is an approximate 4km² gold anomaly*** in the surface, as defined by auger drilling, rockchips and soil geochemistry. We believe this to be one of the largest gold anomalies in Australia, certainly as a greenfields site, that essentially has negligible RC drilling.

"This is exciting at one level, and somewhat daunting at the same time, given the challenge is to adequately test this large prospective ground, in the cheapest and quickest way. The Co-operative drilling grant ($175,000) from the NSW Government certainly helps defray the costs to some extent, and we look forward to its continued draw down, assisting our cashflow.

"Additionally, the shallow RC drill program examining the structural controls and the mineralisation distribution trends at Trench 31 is ongoing. Closer spaced drilling is revealing new structure and geology, not previously identified within Sorpresa, ***including vertical structures in the footwall to the mineralisation, some hosting quartz veins with visible gold present.*** This knowledge adds to our capacity to look for upside within the current Sorpresa resource. We look forward to receiving assay results and making our interpretations accordingly. At the same time the focus on geophysics features adjacent to Sorpresa, to the south, continues to provide discovery opportunity.

"The Company remains active in an otherwise very difficult economic climate for explorers. The work programs are well considered and have a capacity to shift the value of the Company. We look forward to reporting a series of results over the next 2 months, as we aim to expand our discovery inventory in the regional prospects, in parallel with the work at Sorpresa."

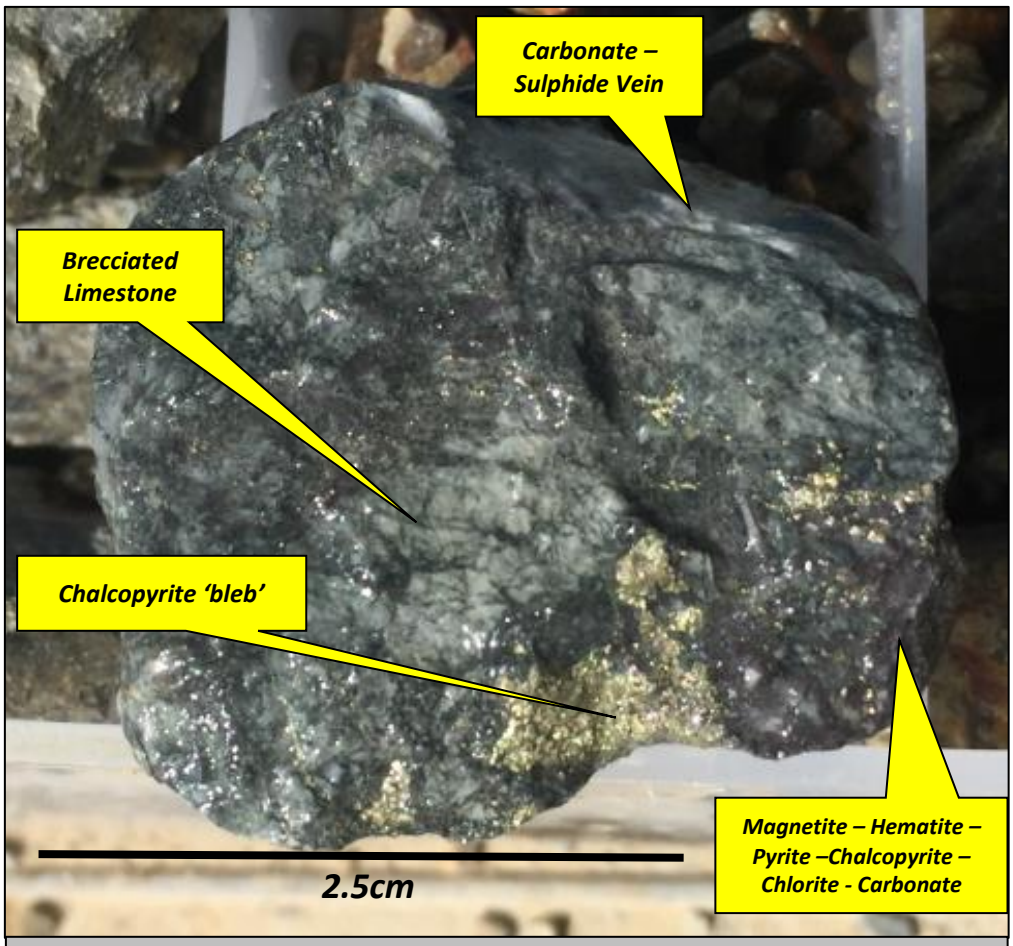
**Yoes Lookout RC Drilling Comments on Target (2) – Magnetic Feature**

The drill program (6 holes) for target (2) focused on the magnetic feature at Yoes and has successfully defined a new skarn style hydrothermal alteration system anomalous in Cu, based on fpXRF. Assays for Au and Cu are awaited.

- The cross section shown in Figure 3 gives a quick plot of the skarn style zones with magnetite-sulphide suggesting a moderate dip to the east &/or possible anticline setting. The cpy-py-mt zone is open in two directions on section and along strike to the north & south
- Ideas and concepts are being considered to assist targeting higher grade Cu (+Au) along strike
- The magnetic model used prior to drilling is not yet fully resolved to the skarn position, particularly at greater depth. This will require some additional geophysical modelling consideration, nevertheless, the context and presence of Cu anomalism with a prospective Au association is established and considered positive

- Petrology will be undertaken to attempt to determine genetic association of the Skarn type body to its originating parent magma/mineralisation style. This could act as an important vector to the type of zonation and mineralisation to be expected in the system, and possible guidance on scale and distance associations to the skarn material.

***Figure 1:***




***Yoes RC chip photo (hole Fi 0559) – example of chalcopyrite-magnetite-pyrite mineralisation, in iron-calcic skarn altered limestone.***

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

*Figure 2:* *Fifield Prospect and Concept Map* ***with Current or planned work programs within approx. 6km Sorpresa project***

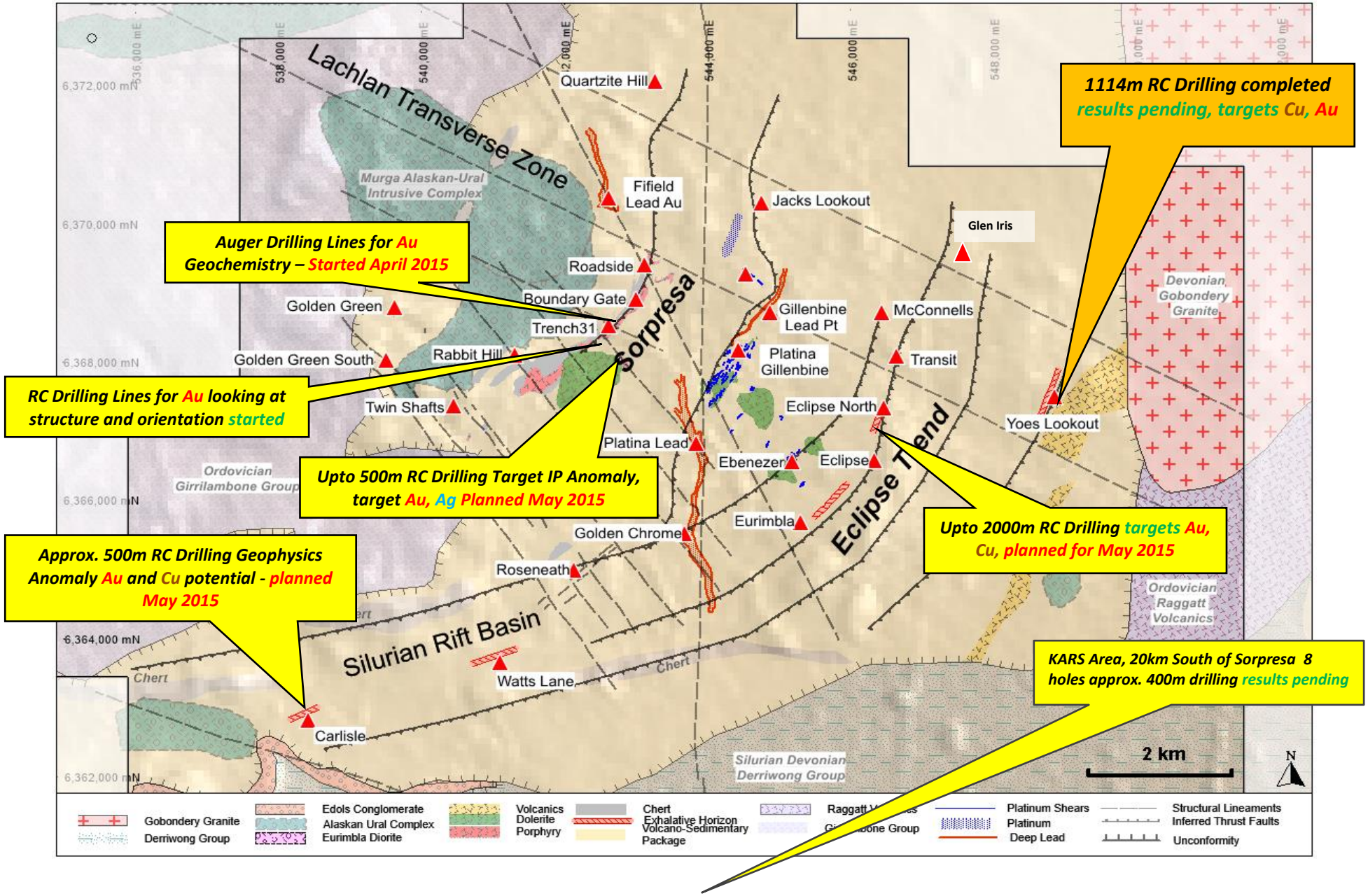
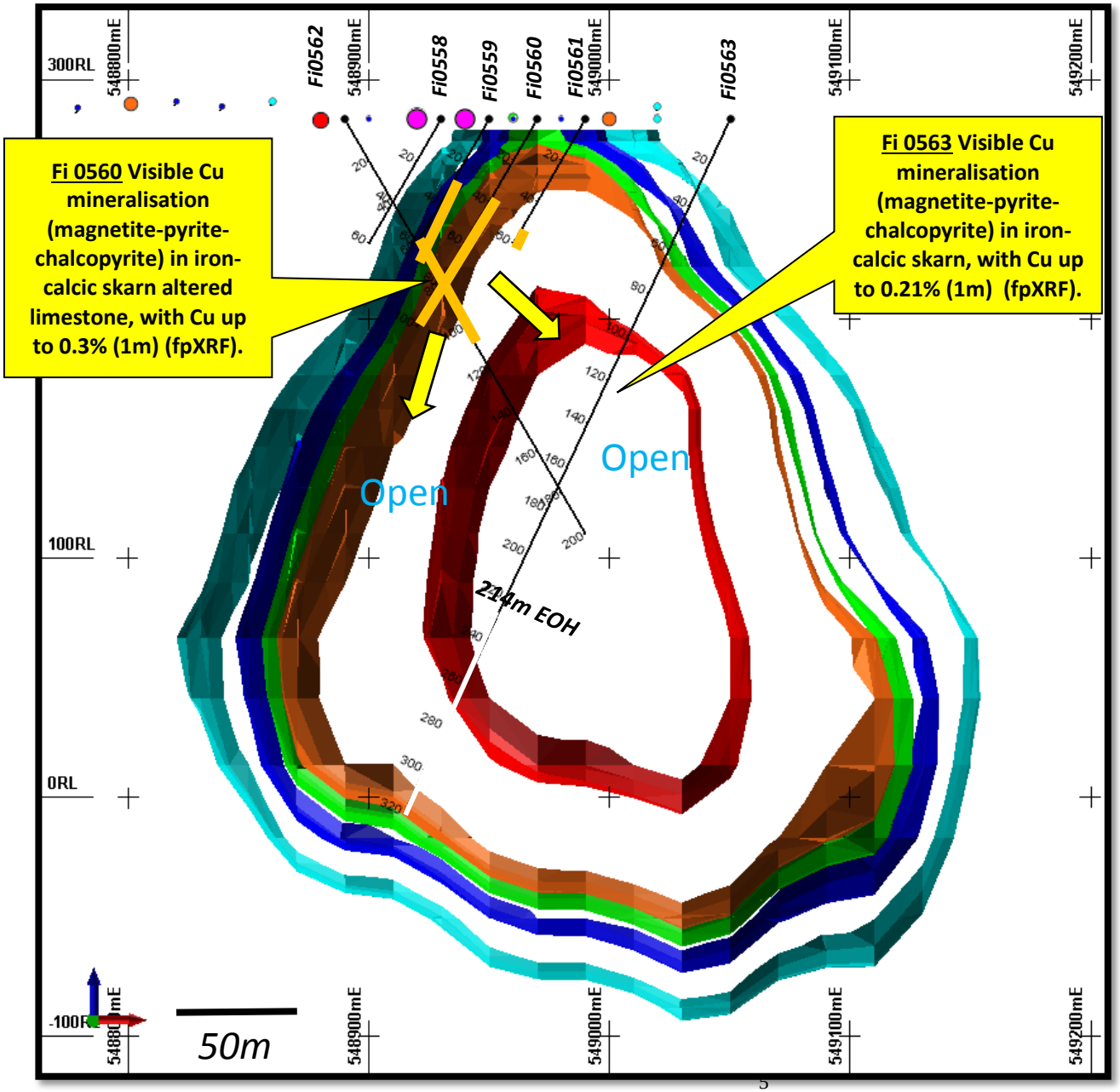


*Figure 3:* *Cross Section, RC drill holes at Yoes Prospect showing visible Cu intervals (in orange) and Cu in Auger drilling at surface, 3D magnetic isosurfaces*




***Field Observations during drilling***

***Fi0558*** *– 60m EOH*
*'no visible skarn seen'*

***Fi0559*** *– 60m EOH*
*'magnetite-pyrite-chalcopyrite in iron-calcic skarn intersected between 31m to 60m EOH'*

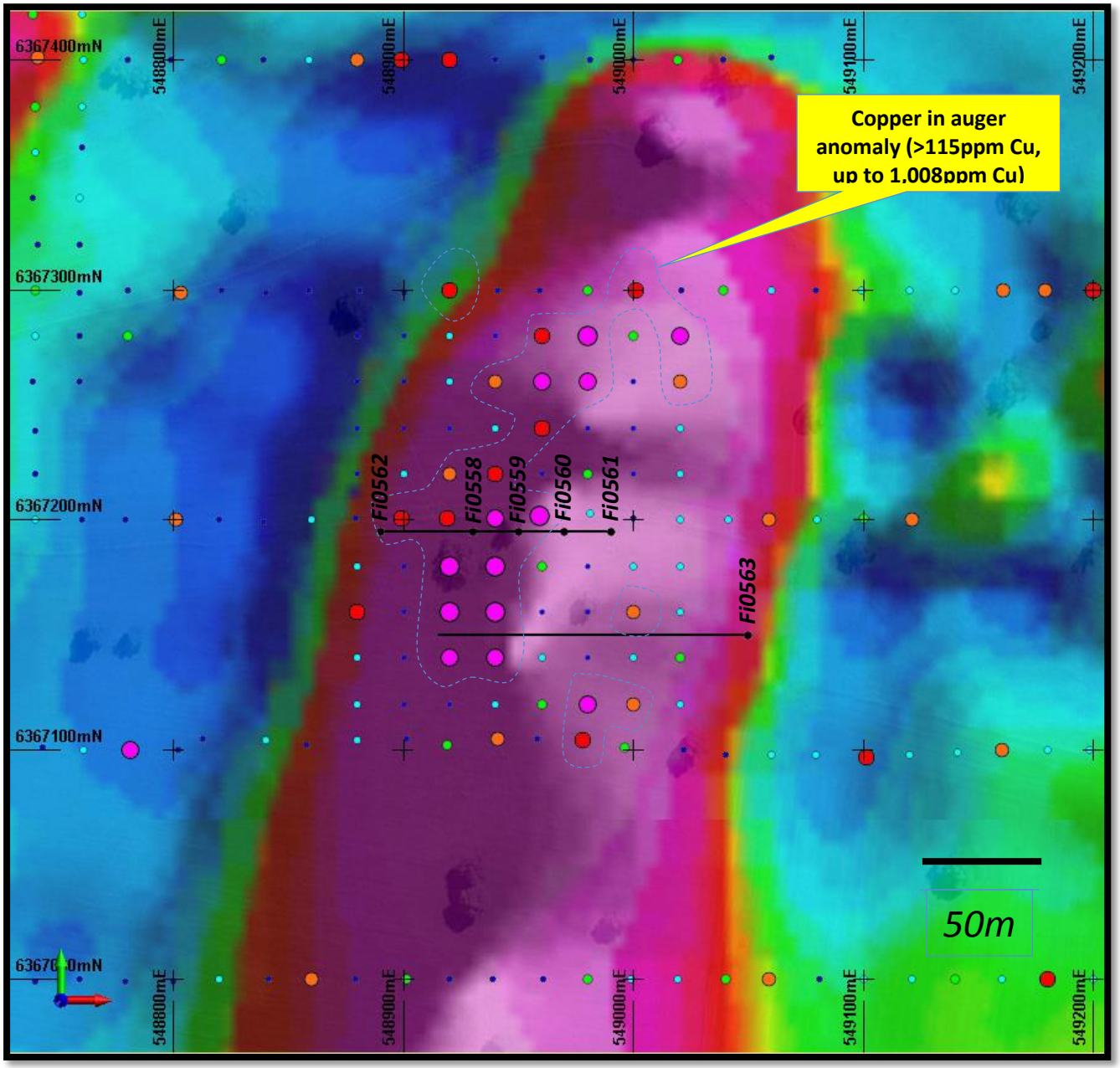
***Fi0560*** *– 100m EOH*
*'magnetite-pyrite-chalcopyrite in* ***63m thick zone*** *of iron-calcic skarn intersected between 37m to 100m EOH' Cu up to 0.3% on fpXRF.*

***Fi0561*** *– 60m EOH*
***'minor thin (<5m thick) intervals*** *of magnetite-pyrite-chalcopyrite iron-calcic skarn intersected in a limestone from 38 – 60m EOH'*

***Fi0562*** *– 200m EOH*
***'52m thick magnetite skarn zone b/w 57-109m, with 29m of visible chalcopyrite between 57-86m.' Cu up to 0.17% on the fpXRF.***

***Fi0563*** *– 214m EOH*
***'41m thick magnetite skarn zone b/w 97-138m with variable visible chalcopyrite & Cu up to 0.21% (~8m >~0.1% Cu) on the fpXRF.***

*Figure 4:* *Plan view, RC drill holes at Yoes Prospect* ***and 1VD RTP aeromagnetic image, with Cu in auger***

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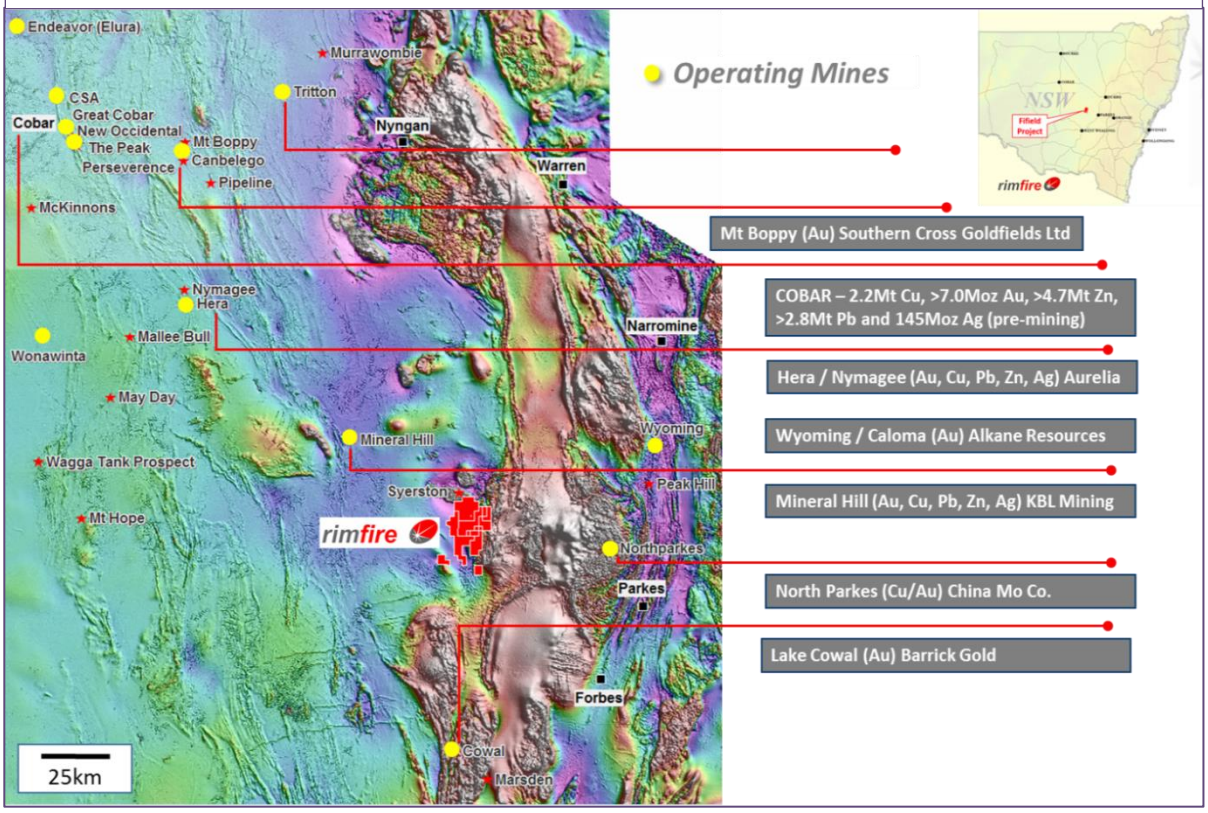
## ABOUT RIMFIRE PACIFIC MINING AND COMPETENT PERSON DECLARATION

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.

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




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 2:* ***Dates and Hyperlinks for previously referred to results in this report)***:

| | |
|---|---|
| **14m @ 21.9g/t Au plus 6m @ 93g/t Ag** | Trench 31 |
| **14m @ 24.4g/t Au plus 26m @ 155g/t Ag** | Roadside |
| **10m @ 535g/t Ag plus 1.0g/t Au** | Roadside |
| **20m @ 230g/t Ag** | Roadside North |
| **1m @ 114g/t Au plus 1m @ 33g/t Ag** | Boundary Gate East (BGE) |
| **16m @ 5.32g/t Au plus 20m @ 81g/t Ag** | Roadside |
| **4m @ 21.9g/t Au** | Join Up |
| **26m @ 90g/t Ag plus 26m @ 0.37g/t Au** | 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), Platinum (Pt) and Base Metal within a 6km radius of the Sorpresa discovery covering an extensive prospective 35km$^2$ area at Fifield, which is part of the contiguous 313km$^2$ tenement position held.

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

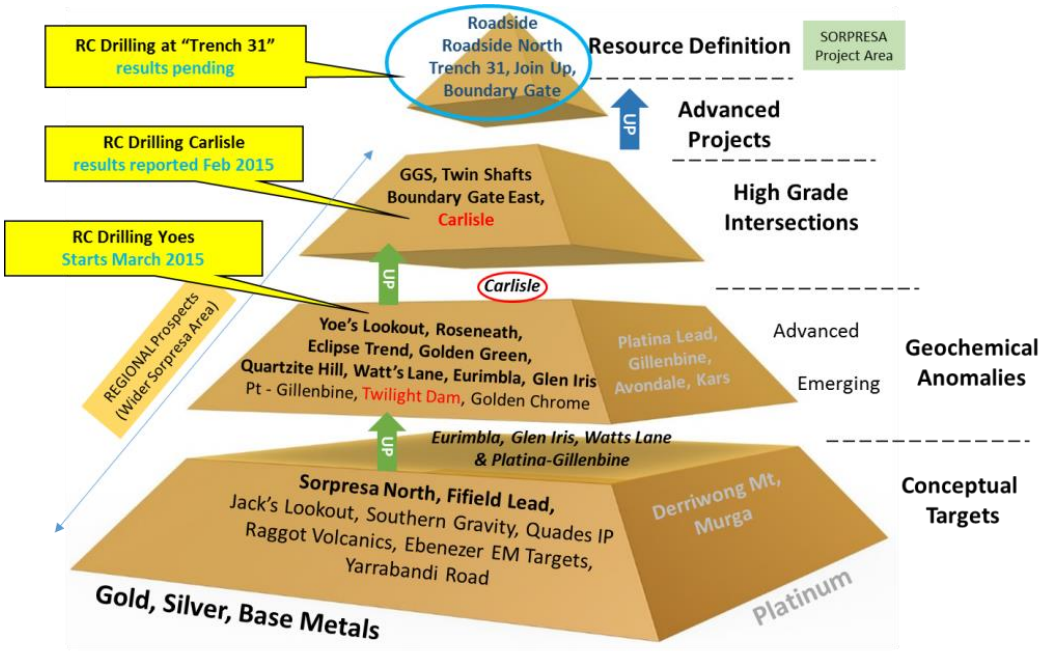
***Rimfire Exploration Presentation - AGM 14 November 2014***
***Exploration Industry Presentation and Rimfire Benchmarking - AGM 14 November 2014***

**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) is host to multiple styles of significant mineralisation, with combined multimillion ounce gold equivalent potential. To date more than **25 targets are revealed**.

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-VMS / Epithermal)** - McConnell's, Transit, Eclipse North, Eclipse, Eurimbla, Golden Chrome, Roseneath, Watt's Lane, Carlisle.
4. **Yoes Lookout (Skarn and Structurally controlled Greenstone and Sediment hosted Au, possible Porpyhry 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 1: 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 Au g/t** | **Open** | **Other** | **Historic Workings** |
| Sorpresa | 8.8 | 10~50 | 20~1,000 | 1.5km | 14 @ 24.4 | yes | IP/Gravity | Minor |
| Yoes Lookout | 3.4 | 10~300 | 20~1,000 | 1.7km | Current Drilling | yes | Magnetic Feature | No |
| Eclipse | 18.7 | N/A | 20~500 | 2.2km | N/A | yes | Ag | Minor |
| Golden Green Group | 8.1 | N/A | 10~100 | 0.5km | 2m @ 9.11 | 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 @ 1.47 | yes | Magnetic Feature | Minor |

## Company Strategy

The Company has been 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, Platinum and Base Metals
- 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 2** Dates and Hyperlinks for previously referred to results in this report

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

**Metal Prices**

As at 10th April 2015, the trading prices (www.kitco.com) for metals in New York were, closing Ask in USD:

| | |
|---|---|
| Gold | $1,208/oz |
| Platinum | $1,177/oz |
| Silver | $16.59/oz |

## *Table 3: JORC Code Reporting Criteria*

# Section 1 Sampling Techniques and Data

| *Criteria* | *JORC Code explanation* | *Commentary* |
|---|---|---|
| **Sampling techniques** | · 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. | RC Samples are collected at 1m intervals from the cyclone in plastic bags.<br>RAB Samples are collected at 1m intervals from the cyclone in plastic bags.<br>1 metre intervals are sampled from all Auger holes within in situ weathered basement geology.<br>Nominal 2 kg samples are collected at the drill rig.<br>Rock Chips samples are a mix of float, sub crop & outcrop (identified in results table). |
| | · Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. | Industry standard QAQC protocols with insertion of certified reference samples, blank samples and field duplicates are included every 50, 51 and 52nd sample respectively. |
| | · Aspects of the determination of mineralisation that are Material to the Public Report.<br>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. | 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. |
| **Drilling techniques** | · 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). | Reverse Circulation conducted using face sampling hammer (119mm diameter).<br>RAB drilling conducted using blade bit (100mm diameter).<br>Auger drilling conducted by trailer mounted hydraulic driven auger rig with nominal hole diameter of 100mm. |

| *Criteria* | *JORC Code explanation* | *Commentary* |
|---|---|---|
| **Drill sample recovery** | · 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. |
| **Logging** | · 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 |
| **Sub-sampling techniques and sample preparation** | · If core, whether cut or sawn and whether quarter, half or all core taken. | No core reported in this release |

| *Criteria* | *JORC Code explanation* | *Commentary* |
|---|---|---|
| **Sub-sampling techniques and sample preparation continued.** | · 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.<br>. | 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. |

| *Criteria* | *JORC Code explanation* | *Commentary* |
|---|---|---|
| **Quality of assay data and laboratory tests** | · The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. | Reported RC samples are dispatched to ALS Laboratories with Au determined by Au_AA26.<br><br>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.<br><br>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.<br><br>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. |
| | · For geophysical tools, spectrometers, **handheld XRF instruments (fpXRF)**, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. | All significant results reported from NATA accredited laboratory.<br>**Handheld XRF (fpXRF) (Olympus Delta50) is used** to determine sample character and type applied to 1m riffle split or composite. All data is collected using a 30 seconds reading time 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 |
| | · 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. | Reviews of internal QAQC results has shown that the field sampling, riffle splitting compositing methods used are appropriate to the mineralisation being tested. External laboratory analysis of "umpire" samples confirm results from the primary laboratory. |

| *Criteria* | *JORC Code explanation* | *Commentary* |
|---|---|---|
| **Verification of sampling and assaying** | · 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. |
| **Location of data points** | · 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. |
| **Data spacing and distribution** | · 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.<br>RAB exploration conducted on traverses with coverage on 60 ° dipping holes.<br>Auger exploration currently on a nominal 100 X 20m grid. Rock Chip samples not on a defined grid pattern. |

| *Criteria* | *JORC Code explanation* | *Commentary* |
|---|---|---|
| **Data spacing and distribution continued.** | · 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. |
| **Orientation of data in relation to geological structure** | · 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. |
| **Sample security** | · 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. |
| **Audits or reviews** | · 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

| *Criteria* | *JORC Code explanation* | *Commentary* |
|---|---|---|
| **Mineral tenement and land tenure status** | · 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.<br><br>All samples were taken on Private Freehold and / or Common Land (prescribed for mining).<br>No native title exists.<br>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. |
| **Exploration done by other parties** | · 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. |
| **Geology** | · 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. |
| **Drill hole Information** | · 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.<br><br>Any new significant RC results are provided in tables within the report.<br><br>Any new significant RAB results are provided in tables in within the report. |
| | easting and northing of the drill hole collar | |
| | elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar | |

| *Criteria* | *JORC Code explanation* | *Commentary* |
|---|---|---|
| **Drill hole Information Continued.** | dip and azimuth of the hole | Any new significant rock chip results are provided in tables within the report.<br><br>Any new significant Auger results are provided in figures within the report. |
| | down hole length and interception depth | |
| | · 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. |
| **Data aggregation methods** | · 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<br>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 ≥ 0.1g/t Au and or ≥ 10g/t Ag cut off and ≤ 2m 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. |
| **Relationship between mineralisation widths and intercept lengths** | · 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° 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. |

| *Criteria* | *JORC Code explanation* | *Commentary* |
|---|---|---|
| **Diagrams** | · 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. | Refer to Figures |
| **Balanced reporting** | · 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. | This information is provided in results Table. |
| **Other substantive exploration data** | · 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. | There is currently no other substantive exploration data that is meaningful and material to report. |
| **Further work** | · The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). | Further work is discussed in the document in relation to the exploration results. |
| | · Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | Refer to Figures |