

Friday, 19th February 2016 Company Announcement Office Australian Securities Exchange rimfire pacific mining nl a.c.n. 006 911 744 ASX Code "RIM"

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7m @ 13.41g/t Au & 751g/t Ag from 19m at Sorpresa RC Drilling Including 1m @ 76.70g/t Au & 2490g/t Ag at Roadside

Rimfire Pacific Mining NL (ASX:RIM) ("Rimfire" or "The Company") is pleased to provide very strong results for shallow RC drilling at the Roadside area (a line of 9 holes for 421m) within the known Sorpresa gold and silver mineralised system at Fifield NSW. This report covers the first 5 holes, with other results pending. Further RC drilling will continue at Roadside, with additional reports in due course.

<u>Highlights of RC Drilling Results within Roadside Location at Sorpresa</u>

- Best combined intersection was Hole Fi 0716 with 7m @ 13.41g/t Au & 751g/t Ag from 19m o includes 1m @ 76.70g/t Au & 2490g/t Ag
- ☐ Highest individual Au assay results for 1m intervals (>20g/t Au) included:
 - Fi 0716 with 1m @ 76.70g/t Au (& 2490g/t Ag);
 - o Fi 0718 with 1m @ 23.90g/t Au (& 163g/t Ag); Plus 1m @ 26.30g/t Au (& 328g/t Ag);
 - o Fi 0715 with 1m @ 23.90g/t Au (& 649g/t Ag);
 - Fi 0714 with 1m @ 26.40g/t Au (& 26g/t Ag);
- Highest individual Ag assay results (that are not already shown above) for <u>1m intervals</u> (>500g/t Ag) included:
 - o Fi 0717 with 1m @ 6.68g/t Au & 1850g/t Ag; Plus 1m @ 5.09g/t Au & 2550g/t Ag;
 - o Fi 0716 with 1m @ 5.06g/t Au & 555g/t Ag; Plus 1m @ 1.74g/t Au & 1410g/t Ag;
 - Fi 0718 with 1m @ 5.10g/t Au & 594g/t Ag;

Highlights of RC Drilling the Full Intersections (the 5 holes subject to this report)

■ Best Gold and Silver grade intersections (in ranked order, for gm-metre ¹ Au) included:

Hole (location)	Main Intersection(s)	Including Intersection(s)
Fi 0716 (Roadside)	9m @ 0.25g/t Au & 57g/t Ag from 10m <u>AND</u> 7m @ 13.41g/t Au & 751g/t Ag from 19m <u>AND</u> 8m @ 0.83g/t Au & 25g/t Ag from 26m	1m @ 5.06g/t Au & 555g/t Ag from 19m 1m @ 76.70g/t Au & 2490g/t Ag from 22m 1m @ 1.74g/t Au & 1410g/t Ag from 23m 1m @ 5.80g/t Au & 135g/t Ag from 25m
Fi 0718 (Roadside)	5m @ 0.19g/t Au & 223g/t Ag from 22m <u>AND</u> 7m @ 8.83g/t Au & 243g/t Ag from 27m	2m @ 0.25g/t Au & 425g/t Ag from 22m 1m @ 23.90g/t Au & 163g/t Ag from 27m 1m @ 5.10g/t Au & 594g/t Ag from 32m 1m @ 26.30g/t Au & 328g/t Ag from 33m
Fi 0715 (Roadside)	17m @ 2.50g/t Au & 145g/t Ag from 12m AND	1m @ 2.65g/t Au & 236g/t Ag from 17m 1m @ 23.90g/t Au & 649g/t Ag from 20m 1m @ 2.48g/t Au & 482g/t Ag from 24m

 $^{^{1}}$ gm-metre = <u>number of metres of the intersection x average grammes per metre of</u> the intersection, and is a measure of relative strength of the intersection e.g. hole Fi0716 had 7m @ 13.41g/tAu = 93.87gm-metresAu

Hole (location)	Main Intersection(s)	Including Intersection(s)
Fi 0714 (Roadside)	10m @ 0.32g/t Au & 37g/t Ag from 10m <u>AND</u> 8m @ 5.33g/t Au & 181g/t Ag from 20m	1m @ 3.11g/t Au & 395g/t Ag from 20m 1m @ 6.43g/t Au & 454g/t Ag from 23m 1m @ 26.40g/t Au & 26g/t Ag from 26m
Fi 0717 (Roadside)	8m @ 0.40g/t Au & 83g/t Ag from 12m <u>AND</u> 11m @ 2.59g/t Au & 503g/t Ag from 20m	1m @ 6.68g/t Au & 1850g/t Ag from 25m 1m @ 5.09g/t Au & 2550g/t Ag from 26m 1m @ 5.14g/t Au & 250g/t Ag from 27m

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

CEO and Managing Director, John Kaminsky stated:

"These results are some of the best we have seen at Sorpresa, exceeding our expectations on this latest drilling. Hitting bonanza patches of silver upto 2550 g/t Ag at Roadside, and high grades of gold upto 76.7g/t Au was very pleasing.

"The previous best silver result (in Dec 2012, 2m @ 2020g/t Ag from 76m) was more than 100m down dip from the current location. It suggests there is likely more high grade to be intersected at Roadside and the closer space drilling is helping to achieve this.



"Hole Fi0715 was unable to continue deeper, due to difficult drilling conditions. This was unfortunate as we stopped in 26g/t Au and more than 300g/t Ag, so the hole is likely to be understated.

"The regularity seen in the drilling since October last year, of the higher grade results (>10g/t Au) including results above 30g/t Au in numerous places, is very encouraging. The existing Sorpresa resource envelope, represents less than $5\sim10\%$ of the known Sorpresa style geology, which is predominantly under shallow alluvium cover ($1\sim8m$). There is considerable exploration upside on this basis.

"The RC drilling results in the last few months at Sorpresa, including Trench 31 and now at Roadside, provides good evidence of continuity within the higher grade gold lenses in the oxide zone at Sorpresa. This work assists both delineation and extension discovery strategies for Sorpresa. We are looking to use the information for projections into previously undrilled areas, whether adjacent or at greater depths, outside the existing resource boundary.

"There is a priority to focus our efforts on increasing the gold and silver resource that is suited to shallow open-cut mining, with ideas emerging from the recent work for new shallow extensions.

"The recently completed Ground Gravity survey to the south of Trench 31 and some extra data points north of Roadside (in a new prospect area, called Northern Gold) will assist additional gold and silver target development within the current wider Sorpresa 11km² area. This is under review and complemented by the new geological mapping program to the north of the known Sorpresa area. More locations are planned for drilling at Trench 31, Roadside and the wider Sorpresa area accordingly.

Fifield work programs continue

"Work programs (Figure 1) continue in the Company project areas within 6km radius of Sorpresa as follows:

- ✓ RC drilling continues within Roadside area in the shallow oxide at Sorpresa -1 new traverse is completed, 2 additional traverses are underway
 - o Additional results are likely for reporting in February
- Auger drilling geochemistry assessment commenced at north of Yoes, targeting a gold copper porphyry signature identified in geophysics and supported by encouraging rock chips and geology
 - o Phase 1 involves approx. 100 holes testing bedrock in 1km x 1km area
 - o The program will be extended to cover additional ground
- ✓ **The ground Gravity Geophysical survey has now been completed.** This provides infill to previous surveys, and extensions to the south and north, looking for repeat style structures similar to Sorpresa
 - o A strong correlation is already noted between Gravity and the known Sorpresa mineralisation
 - o Examination, interpretation and review is currently underway
- ✓ Geological mapping is progressing well in the Eclipse-CO₂-Yoes copper/gold area
 - o This will integrate the understanding and assist planning for the next stages of work

- o This mapping is approximately 40% complete
- ✓ Creek and soil sampling programs within 6km radius of Sorpresa are being deployed
 - o These infill programs will assist targeting the better prospective areas for gold and copper
- ✓ **Interpretation and modelling of recent RC drilling** in Au/Ag zones at Sorpresa to help build pitshell models and assess selective mining feasibility
 - o Sections within Trench31 and Roadside will be assembled for the modelling

"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.

"We intend to maintain manageable work programs that continue to advance the opportunities at Fifield, within the financial constraints currently facing the industry.

"The Company has a strong bias for consistent high quality field work, which



generates regular newsflow. Despite the difficult market conditions, the Company is constantly looking to enhance its project areas, to the benefit of shareholders.

"This includes continued discussion with potential collaborative partners in possible joint ventures."

Sorpresa RC Drill program comments - assessing high grade lenses

Currently the Sorpresa Deposit comprises 6.4Mt for 7.9Moz of silver and 125kOz of gold (at 0.5g/t Au & 25g/t Ag cutoff) as an Inferred and Indicated Mineral Resource, equating to approximately 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. New areas to the north are currently being investigated also.

The RC drilling is part of an ongoing assessment of the structural controls and orientation of high grade lens areas such as Trench 31 and Roadside 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.

During the December 2015 quarter a program of 54 holes for 2,227m of shallow RC drilling was completed over high grade gold and silver areas within Trench 31 of the Sorpresa Resource . The drilling programs have provided a better understanding of the 3D gold lens shapes. This has 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.

This approach has been continued at the Roadside area. For context, the intersection highlight results previously reported on 8th February 2016 at Roadside are provided (above 20 gramme-metres, are only shown below in Table 1). Details of all results in the December quarter are accessed in the Hyperlinks in the **Appendix** to this report.

Table 1 - Reported 8th February 2016

Hole (location)	Main Intersection(s)	Including Intersection(s)
Fi 0713 (Roadside)	15m @ 3.91g/t Au & 223g/t Ag from 34m	1m @ 12.85g/t Au & 1200g/t Ag from 38m 1m @ 0.42g/t Au & 1140g/t Ag from 39m 1m @ 40.40g/t Au & 94g/t Ag from 48m
Fi 0711 (Roadside)	15m @ 3.00g/t Au & 162g/t Ag from 31m	1m @ 2.32g/t Au & 492g/t Ag from 33m 1m @ 14.05g/t Au & 198g/t Ag from 34m 1m @ 20.20g/t Au & 430g/t Ag from 35m 1m @ 1.04g/t Au & 356g/t Ag from 43m 1m @ 4.00g/t Au & 47g/t Ag from 45m

Hole (location)	Main Intersection(s)	Including Intersection(s)
Fi 0712 (Roadside)	14m @ 2.24g/t Au & 162g/t Ag from 33m	1m @ 14.55g/t Au & 302g/t Ag from 33m 1m @ 1.98g/t Au & 174g/t Ag from 34m 1m @ 2.40g/t Au & 323g/t Ag from 35m 1m @ 6.87g/t Au & 356g/t Ag from 36m 1m @ 3.62g/t Au & 790g/t Ag from 37m
Fi 0707 (Roadside)	18m @ 1.37g/t Au & 99g/t Ag from 13m	1m @ 0.32g/t Au & 256g/t Ag from 18m 1m @ 1.59g/t Au & 841g/t Ag from 19m 1m @ 11.50g/t Au & 95g/t Ag from 23m 1m @ 3.83g/t Au & 88g/t Ag from 25m
Fi 0708 (Roadside)	13m @ 1.66g/t Au & 128g/t Ag from 22m	1m @ 0.91g/t Au & 528g/t Ag from 22m 2m @ 1.19g/t Au & 218g/t Ag from 23m 1m @ 3.72g/t Au & 217g/t Ag from 30m 1m @ 4.03g/t Au & 59g/t Ag from 32m 1m @ 5.68g/t Au & 126g/t Ag from 33m
Fi 0709 (Roadside)	17m @ 1.38g/t Au & 71g/t Ag from 22m	1m @ 5.00g/t Au & 178g/t Ag from 27m 1m @ 2.83g/t Au & 50g/t Ag from 37m 1m @ 7.72g/t Au & 135g/t Ag from 38m
Fi 0706 (Roadside)	14m @ 1.68g/t Au & 108g/t Ag from 14m	1m @ 11.20g/t Au & 686g/t Ag from 16m 1m @ 1.77g/t Au & 376g/t Ag from 17m 1m @ 2.25g/t Au & 20g/t Ag from 19m

Background on Geological interpretation for the RC drilling at Sorpresa

The RC 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.

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.

Magnetic Step- important East West feature

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.

JOHN KAMINSKY

CEO and Managing Director

Figure 1: Fifield Prospect and Concept Map with location of the Sorpresa Resource and New RC Drilling reported February 2016 and Regional Programs shown

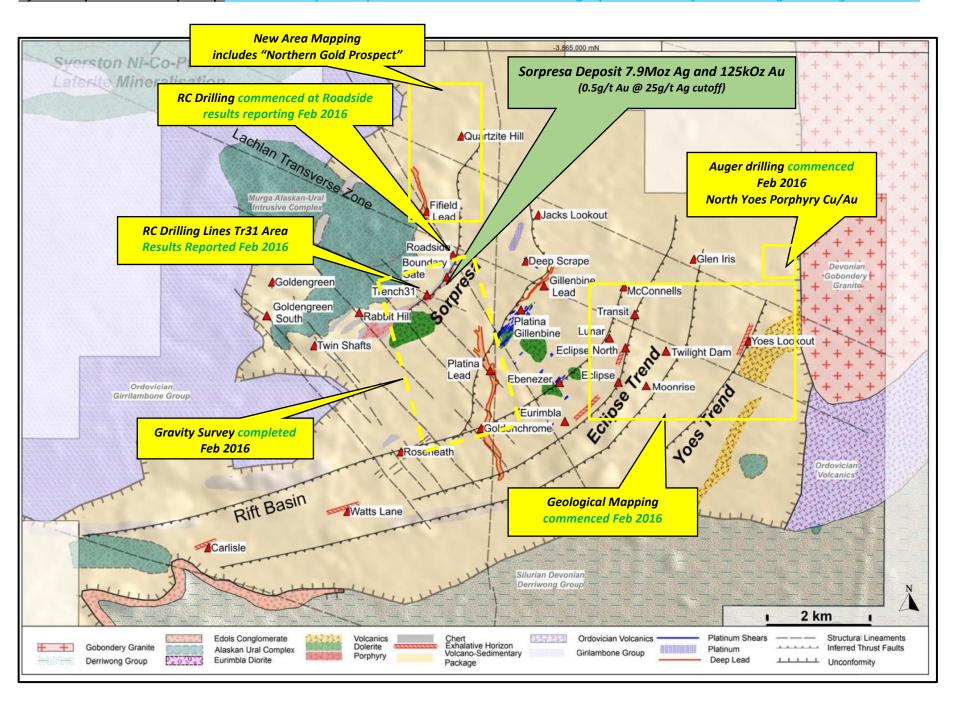


Figure 2: RC Drilling at Sorpresa -Roadside Area - Oxide Zone 0~60m

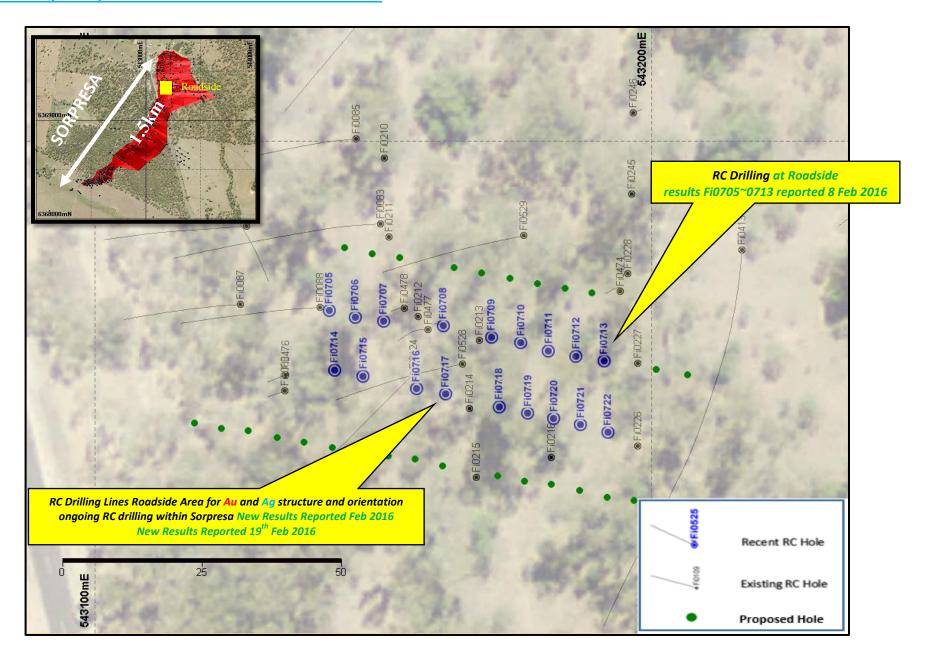
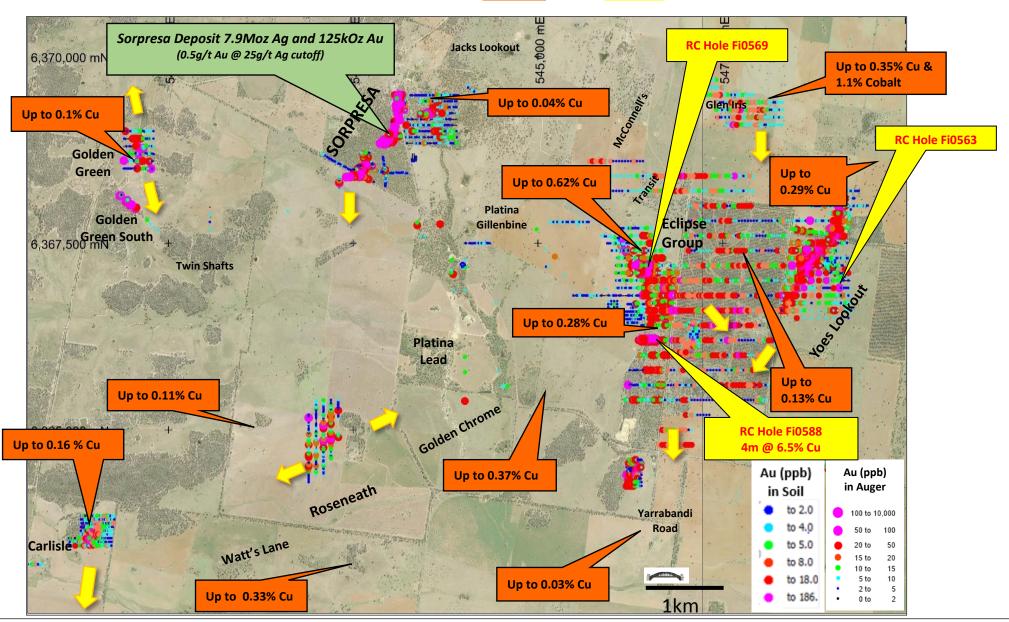


Figure 3: Wider Sorpresa area Map, shows the underlying gold signature, with best Copper Rock Chips overlaid. RC drilling (May~July 2015) has confirmed Copper (Chalcopyrite)



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

Table 2: Assay Results from recent RC drilling at Sorpresa – Roadside Area Oxide (0~50m)

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)
Fi0714	543143	6369359	GPS	293	-90	0	30	RC	Roadside		0	10	10	0.22	7
									and		10	20	10	0.32	37
									and		20	28	8	5.33	181
										incl.	20	21	1	3.11	395
										incl.	23	24	1	6.43	454
										incl.	26	27	1	26.40	26
Fi0715	543148	6369358	GPS	292	-90	0	39	RC	Roadside		4	12	8	0.18	8
									and		12	29	17	2.50	145
										incl.	17	18	1	2.65	236
										incl.	20	21	1	23.90	649
										incl.	24	25	1	2.48	482
Fi0716	543158	6369356	GPS	292	-90	0	39	RC	Roadside		10	19	9	0.25	57
										incl.	17	18	1	0.11	203
									and		19	26	7	13.41	751
										incl.	19	20	1	5.06	555
										incl.	22	23	1	76.70	2490
										incl.	23	24	1	1.74	1410
										incl.	25	26	1	5.80	135
									and		26	34	8	0.83	25
									and		34	39	5	0.13	5

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

Table 2: Assay Results from recent RC drilling at Sorpresa – Roadside Area Oxide (0~50m)

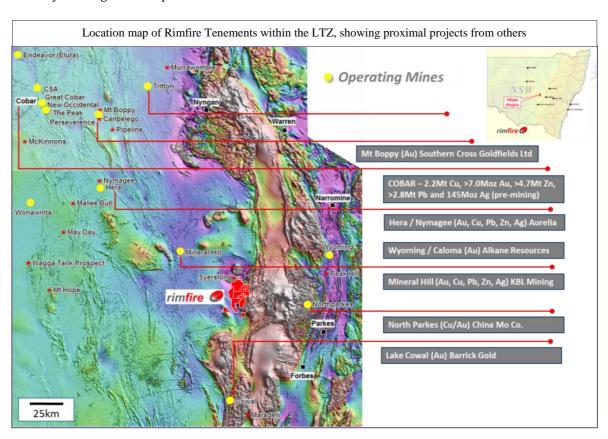
Hole ID	Easting (m GDA94)	Northing (m GDA94)	Survey Base	RL (mAHD)	Dip (°)	GDA Azimuth (°)	Depth (m)	Drilling Type	Prospect		From (m)	To (m)	Down hole Length (m)	Au (g/t)	Ag (g/t)
Fi0717	543163	6369355	GPS	292	-90	0	42	RC	Roadside		12	20	8	0.40	83
									and		20	31	11	2.59	503
										incl.	25	26	1	6.68	1850
										incl.	26	27	1	5.09	2550
										incl.	27	28	1	5.14	250
									and		31	42	11	0.32	10
										incl.	33	34	1	1.17	22
Fi0718	543173	6369352	GPS	292	-90	0	34	RC	Roadside		19	22	3	<0.1	36
									and		22	27	5	0.19	223
										incl.	22	24	2	0.25	425
									and		27	34	7	8.83	243
	Difficult	drilling cond	itions prev	ented ho	le goi	ng beyond	d 34m de	pth		incl.	27	28	1	23.90	163
		, ,			1	Γ				incl.	32	33	1	5.10	594
										incl.	33	34	1	26.30	328
Fi0719	543178	6369351	GPS	292	-90	0	60	RC	Roadside						
													pend	ing	
Fi0720	543182	6369350	GPS	291	-90	0	60	RC	Roadside						
													pend	ing	
Fi0721	543187	6369349	GPS	291	-90	0	57	RC	Roadside						
													pend	ing	
Fi0722	543192	6369348	GPS	291	-90	0	60	RC	Roadside						
						-							pend	ing	

Note: Intersections in Table 2 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)**:

14m @ 21.9g/t Au plus 6m @ 93g/t Ag Trench 31 Trench 31 13m @ 8.46g/t Au Trench 31 9m @ 18.1g/t Au plus 3m @ 280g/t Ag 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

The current main Sorpresa Strike line containing gold and silver mineralisation is approximately 1.5km in length and is at various stages of further discovery extension drilling.

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

The Company has now established multiple project areas of importance involving hard rock Gold (Au), Silver (Ag), Copper (Cu) and Platinum (Pt) within a 6km radius of the Sorpresa discovery covering an extensive prospective 35km² area at Fifield, which is part of the contiguous 566km² tenement position held.

The latest presentations on the Company are at hyperlinks:

Rimfire CEO Presentation - AGM 27 November 2015 - John Kaminsky

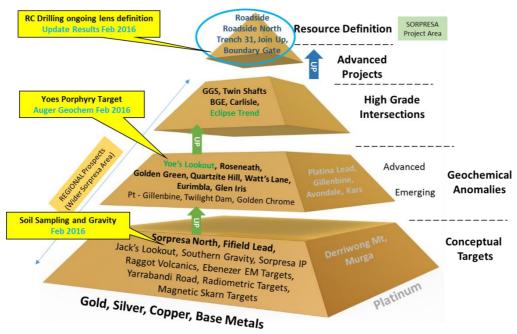
Benchmarking - AGM 27 November 2015 - Richard Schodde

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, 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 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 3: Ranked Prospect Portfolio at Fifield NSW

Table o	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	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, <mark>Cu</mark> anomalous	yes	Magnetic Radiometric	No	
Eclipse Trend	18.7	N/A	20~700	2.7km	4m @ 6.5% Cu 4m @ 2.3g/t Au	yes	Ag, <mark>Cu</mark>	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: <u>ASX Announcements</u>. 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 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 <u>Drilling Update and 3D Exploration Model for Sorpresa Project – 2m @ 7.49g/t Gold intersected</u> 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 ASX 13th April 2015 Skarn style mineralisation intersected with Copper Anomalism at Yoes Lookout Prospect ASX 20th May 2015 Yoes Area Assays confirm Copper Anomalism with Gold Present ASX 16th June 2015 RC Drill Assays Confirm Copper Anomalism and Gold at Eclipse Trend ASX 23rd July2015 4m @ 6.5% Cu and 2.3g/t Au Massive Chalcopyrite at Eclipse ASX 26th August 2015 Sorpresa Drilling Continues best intersection of 14m @ 5.24g/t gold & 156g/t silver from 21m ASX 20th October 2015 Sorpresa Drilling - Best Intersection of 3m @ 20.42g/t Au AND 4m @ 5.34g/t Au ASX 20th November 2015 Sorpresa Drilling gives 13m @ 8.46g/t gold (incl. 2m @ 31.35g/t) at shallow depths ASX 27th November 2015 CEO Presentation Corporate and Exploration AGM 2015 ASX 4th December 2015 New Drilling Results Include 9m @ 18.15g/t gold at Sorpresa, Fifield NSW

ASX 27th January 2016 <u>Activities Report December Quarter 2015</u>

ASX 8th February 2016 Drilling results give 15m @3 91g/t Au & 223g/t Ag

ASX 8th February 2016 Drilling results give 15m @3.91g/t Au & 223g/t Ag, Incl. 1m @ 40.40g/t Au and 1m @ 1200g/t Ag

Table 5: JORC Code Reporting Criteria

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
	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. 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 & outcrop (identified in results table).
	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 25, 51 and 52nd sample respectively. Previously duplicates were every 50
	mineralisation that are Material to the Public Report. In cases where 'industry standard' work	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.
	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	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.

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.
	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 autoblow 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.
	sample recovery and grade and whether sample bias may have occurred due to	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	been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation.	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. The total length and percentage of 	Geological logging of drill chips is qualitative by nature, drill chip trays are retained for future reference. All metres drilled are logged
	the relevant intersections logged.	The first armed 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.	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	· The nature, quality and	Reported RC samples are dispatched to ALS Laboratories
laboratory tests	appropriateness of the assaying	with Au determined by Au_AA26.
	and laboratory procedures used	
	and whether the technique is	RAB and Auger samples are dispatched to ALS
	considered partial or total.	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.
		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.
		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,	All significant results reported from NATA accredited
	spectrometers, handheld XRF	laboratory.
	instruments (fpXRF), etc, the	Handheld XRF (fpXRF) (Olympus Delta50) is used to
	parameters used in determining	determine sample character and type applied to 1m riffle
	the analysis including instrument	split or composite. All data is collected using a 30
	make and model, reading times,	seconds reading time (this is sometimes modified to
	calibrations factors applied and	15secs, if stable readings are achievable) for each of the
	their derivation, etc.	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
	Nature of quality control	assay Reviews of internal QAQC results has shown that the
	procedures adopted (e.g.	field sampling, riffle splitting compositing methods used
	standards, blanks, duplicates,	are appropriate to the mineralisation being tested.
	external laboratory checks) and	External laboratory analysis of "umpire" samples confirm
	whether acceptable levels of	results from the primary laboratory.
	accuracy (i.e. lack of bias) and	
	precision have been established.	

Criteria	JORC Code explanation	Commentary
Verification of sampling	· The verification of significant	All reported intersections are independently
and assaying	intersections by either independent or	reviewed by 2 company personnel
	alternative company personnel.	
	· The use of twinned holes.	Hole Twinning when used, is reported.
	Documentation of primary data, data	Primary field data is captured electronically
	entry procedures, data verification, data	using established templates. Assay data
	storage (physical and electronic) protocols.	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	"<" values are converted
	data.	into "-" values and for geochemical
		analysis results returning less than
		detection are ascribed to half the detection limit.
Location of data points		Drill collars are located using handheld
	locate drill holes (collar and down- hole	Garmin GPS and are RC collars are picked
	barveys), trenenes, mine workings and other	up by a Trimble Differential GPS.
	locations used in Mineral Resource	Downhole digital multi-shot surveys are
	estimation.	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	Collar elevation data from digital terrain
	topographic control.	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
Data anadaa and	Data maring for an action of	sourced from handheld GPS.
Data spacing and distribution	Data spacing for reporting of	RC Exploration was on nominal 80 X
distribution	Exploration Results.	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.

Criteria	JORC Code explanation	Commentary
Data spacing and	· Whether the data spacing and	The nominal RC exploration grid is
distribution continued.	degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and	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	· Whether the orientation of sampling	Current observations do not suggest a
relation to geological structure		bias in sampling from the drilling orientation.
	I	The drilling orientation is designed to intercept the mineralisation orthogonally where known.
Sample security	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. 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.
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	easting and northing of the drill hole collar	Plans showing location of drill holes and also location of significant results and interpreted trends are provided in the figures of report. Any new significant RC results are provided in tables within the report. Any new significant RAB results are provided in tables in within the report.

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.
	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.
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 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 $\geq 0.1g/t$ Au and or $\geq 10g/t$ Ag cut off and $\leq 2m$ 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 and comments in the report.
Other substantive	· Other exploration data, if	There is currently no other substantive
exploration data	reported including (but not limited	exploration data that is meaningful and material to report, beyond that reported already, in this or previous reports.
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