

Monday, 21st March 2016

Company Announcement Office

Australian Securities Exchange

Sorpresa RC Drilling continues at Gold and Silver Roadside Area Regional sampling programs yielding new gold prospects

Rimfire Pacific Mining NL (ASX:RIM) ("Rimfire" or "The Company") is pleased to provide additional results for shallow RC drilling at the Roadside area within the known Sorpresa gold and silver mineralised system at Fifield NSW. This report covers 7 holes (approx. 400m), with further results pending. RC drilling will continue at Roadside, with additional reports in due course. Additionally, recent regional mapping and sampling (soils and creeks) is identifying new prospective areas for gold, and has expanded the known Sorpresa basin style geology significantly.

Highlights of RC Drilling Intersections (the 7 holes subject to this report)

☐ **Best Gold and Silver grade intersections (in ranked order, for gm-metre¹ Au) included:**

Hole (location)	Main Intersection(s)	Including Intersection(s)
Fi 0719 (Roadside)	11m @ 2.27g/t Au & 63g/t Ag from 28m	1m @ 4.68g/t Au & 220g/t Ag from 35m
Fi 0725 (Roadside)	10m @ 2.05g/t Au & 113g/t Ag from 29m <u>AND</u> 17m @ 32g/t Ag from 39m	1m @ 0.71g/t Au & 267g/t Ag from 34m 1m @ 9.34g/t Au & 252g/t Ag from 37m
Fi 0724 (Roadside)	9m @ 1.95g/t Au & 188g/t Ag from 28m <u>AND</u> 10m @ 69g/t Ag from 39 <u>AND</u> 1m @ 28g/t Ag from 53	2m @ 0.58g/t Au & 325g/t Ag from 28m 2m @ 1.78g/t Au & 263g/t Ag from 32m 2m @ 5.29g/t Au & 101g/t Ag from 34m 2m @ 268g/t Ag from 44m
Fi 0723 (Roadside)	14m @ 1.12g/t Au & 48g/t Ag from 24m	1m @ 6.01g/t Au & 40g/t Ag from 24m 1m @ 0.82g/t Au & 103g/t Ag from 25m
Fi 0720 (Roadside)	18m @ 0.78g/t Au & 32g/t Ag from 30m	1m @ 4.68g/t Au & 88g/t Ag from 41m 1m @ 2.22g/t Au & 173g/t Ag from 43m
Fi 0722 (Roadside)	20m @ 0.51g/t Au & 28g/t Ag from 32m	1m @ 4.84g/t Au & 41g/t Ag from 48m
Fi 0721 (Roadside)	22m @ 0.37g/t Au & 19g/t Ag from 30m	1m @ 1.25g/t Au & 58g/t Ag from 39m

(See Figures 2 & 3a,b,c, for locations and Table 3 for complete assay details)

CEO and Managing Director, John Kaminsky commented:



"We continue to delineate the priority areas within Sorpresa, with the current focus on the Roadside area. The most recent results enhance our detailed knowledge of the controls and orientation of the gold and silver system. The results in aggregate in the last 2 months have been impressive. The best in the current program period was Fi 0716 with **7m @ 13.41g/t Au & 751g/t Ag** (Reported 19th Feb 2016).

"RC drilling is ongoing at Roadside, and early indications in Fp XRF (field observations) suggest we have some more solid assay results likely to follow in the next reporting period, due in a few weeks.

"We are placing a priority on looking to increase the gold and silver resource that is suited to shallow open-cut mining, with ideas emerging from the recent work for new extensions.

"It is also important to realise that we have been applying considerable effort in the last 2 months to advancing the regional discovery opportunities within 6km radius of Sorpresa. This has involved extensive geological mapping, creek and soil sampling programs. **Significant outcomes are shown in Figure 1, page 3, and stated as follows:**

- ✓ **The Sorpresa style geology footprint has been expanded from 11km² to 18km²**
 - New observations to the north of the Sorpresa resource area
 - With less than 5~10% of the known Sorpresa geology currently RC drill tested, there is potential upside

¹ gm-metre = number of metres of the intersection x average grammes per metre of the intersection, and is a measure of relative strength of the intersection e.g. hole Fi0719 had 11m @ 2.27g/tAu = 24.97gm-metresAu and 693gm-metres Ag

- ✓ **3 new areas were prospected; anomalous gold was identified in parts** via geochemical sampling (soil, pebbles & creeks). This work involved extensive prospecting, guided by geology and geophysics
 - **7.1km² was examined at the Carlisle & Watts Lane areas**, field observations included Au in creeks
 - **6.4km² north of Sorpresa was completed**, and a prospective Au zone identified at Quartzite Hill area
 - **2.3km² was covered at Eclipse South Extended**, a new Au anomaly with a quartz porphyry connection is emerging
- ✓ **A unique structural corridor at Carlisle & Watts Lane areas exists with prospective Au geology**
 - With recent and historic work, an area is now established of some 15km² area, with scope for discovery
 - Assay results are pending to confirm the new Au potential adding to existing results (best rock chips historically reported at Carlisle was 23g/t Au in 2014)
- ✓ **The Ground Gravity survey (Feb 2016) has now provided additional gold and silver targets**
 - Particularly to the south/south east of Trench 31, with a subparallel 2km length target

“Each of these areas will be pursued in the coming periods for additional discovery growth opportunities.

“We are still uncovering new opportunities at Fifield, typically with subtle surface expressions for the mineralisation. The recent surface prospecting, mapping and sampling is filling in the gaps in our surface knowledge and is extremely valuable work. This will lead to better interpretation of the geology and mineralisation assisting additional discoveries. The area around Sorpresa remains highly prospective.

“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.

“In the meantime, discussions continue with potential joint venture partners with the aim to assist the Company’s ability to deliver the best outcome in discovery growth opportunities for shareholders.”



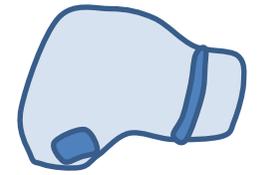
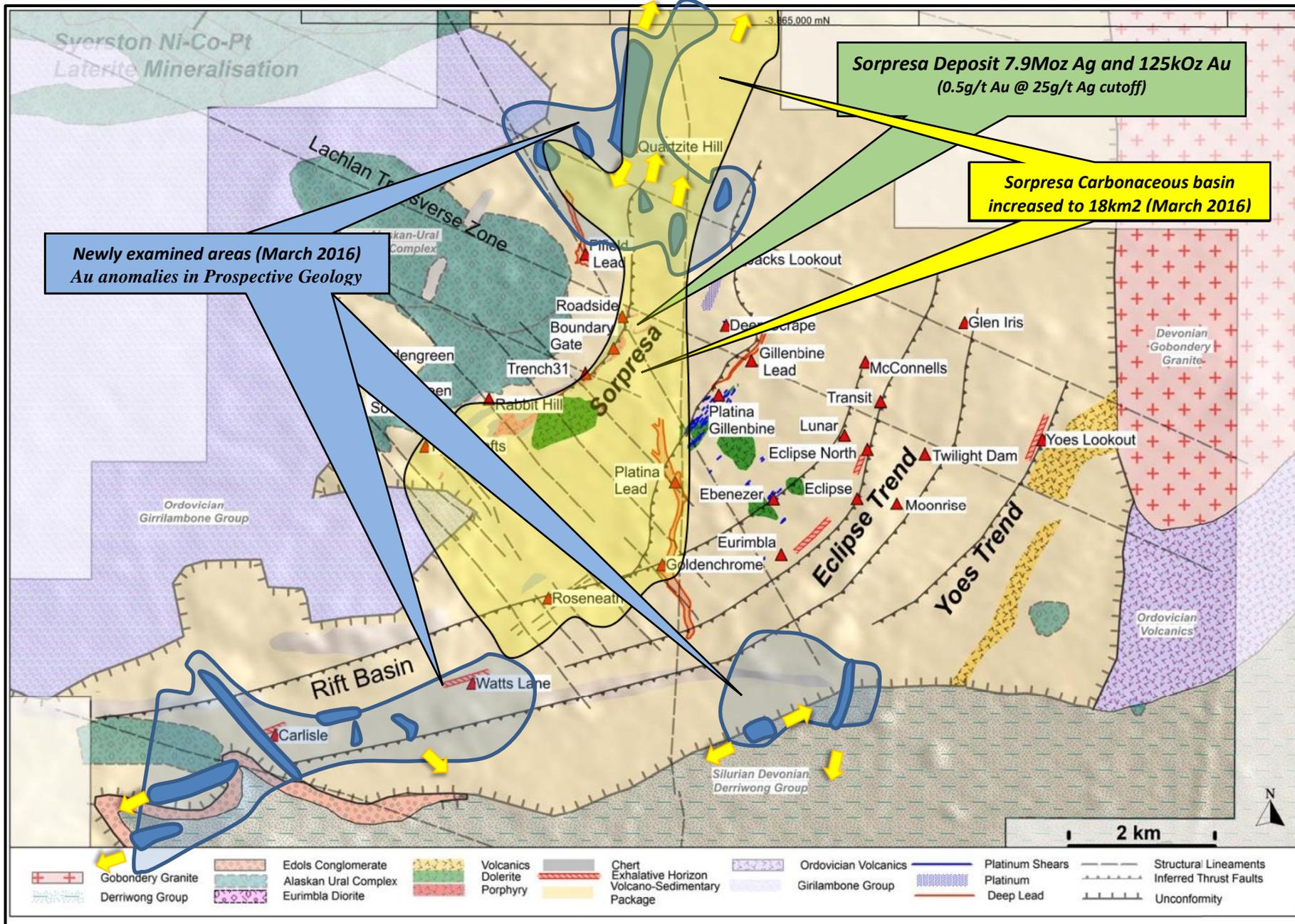
Encouraging expansion of the prospective area for Au at Carlisle & Watts Lane

Update on Fifield work programs and activities

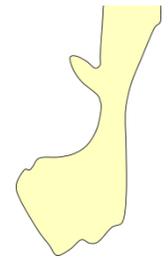
Work programs (**Figure 2**) continue in the Company project areas within 6km radius of Sorpresa as follows:

- ✓ **RC drilling continues within Roadside area in the shallow oxide at Sorpresa** –2 additional traverses are underway, and extensions on previous drilling are planned
 - Additional results are likely for reporting within April, fpXRF indications are positive
- ✓ **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
 - A strong correlation is already noted between Gravity and the known Sorpresa mineralisation
 - Interpretation and review of data has identified high priority RC drill targets to the south of Trench 31
- ✓ **Geological mapping has been completed in the Eclipse-CO₂-Yoes copper/gold area**
 - This will integrate the understanding and assist planning for the next stages of work
- ✓ **Creek and soil sampling programs within 6km radius of Sorpresa continues to be deployed**
 - These infill programs are assisting 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
 - Sections within Trench31 and Roadside areas will be assembled for the modelling

Figure 1: *Fifield Prospect and Concept Map with location of the expanded Sorpresa Basin footprint and New Prospective Au anomaly areas - March 2016*



Recently prospected areas, highlighting zones of interest which includes newly identified Au areas and geology



Expanded known area of 18km² of Sorpresa style carbonaceous sediments, of which less than 10% is currently drill tested for Au

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 (such as Quartzite Hill) are currently being investigated also, with recent surface sampling and geological mapping providing a sizable gold and arsenic anomaly in the Sorpresa style geology.

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 and 19th February 2016 at Roadside are provided (above 20 gram-metres, are only shown, below in Tables 1 & 2). For all results including the December quarter refer to the Hyperlinks in the **Appendix** to this report.

Table 1 – Reported 19th February 2016 (Highlights)

Hole (location)	Main Intersection(s)	Including Intersection(s)
Fi 0716 (Roadside)	9m @ 0.25g/t Au & 57g/t Ag from 10m AND 7m @ 13.41g/t Au & 751g/t Ag from 19m AND 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 AND 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
Fi 0714 (Roadside)	10m @ 0.32g/t Au & 37g/t Ag from 10m AND 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 AND 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

Table 2 – Reported 8th February 2016 (Highlights)

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

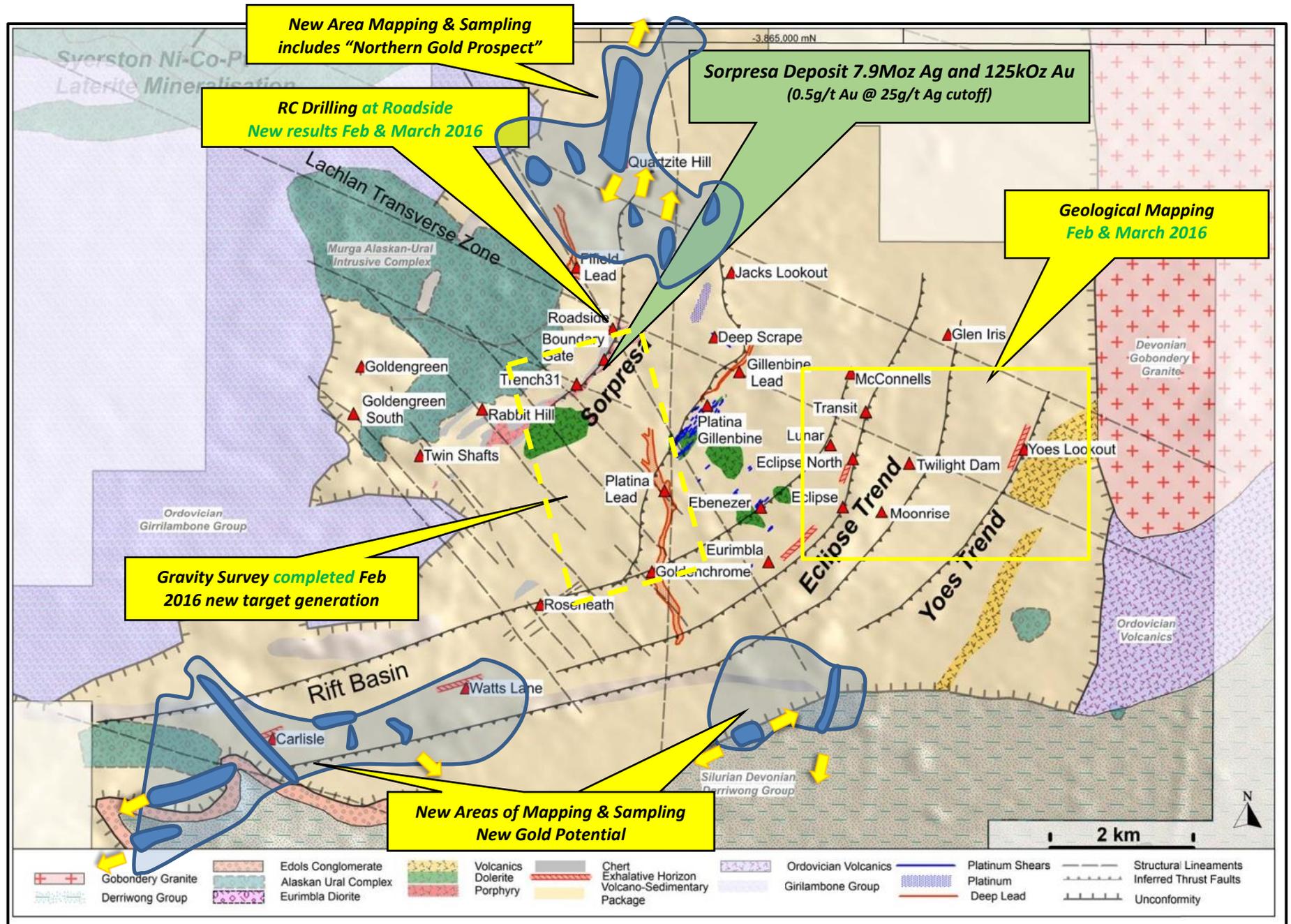


Figure 3a: RC Drilling at Sorpresa –Roadside Area – Oxide Zone 0~60m Locations and planned drilling and extensions

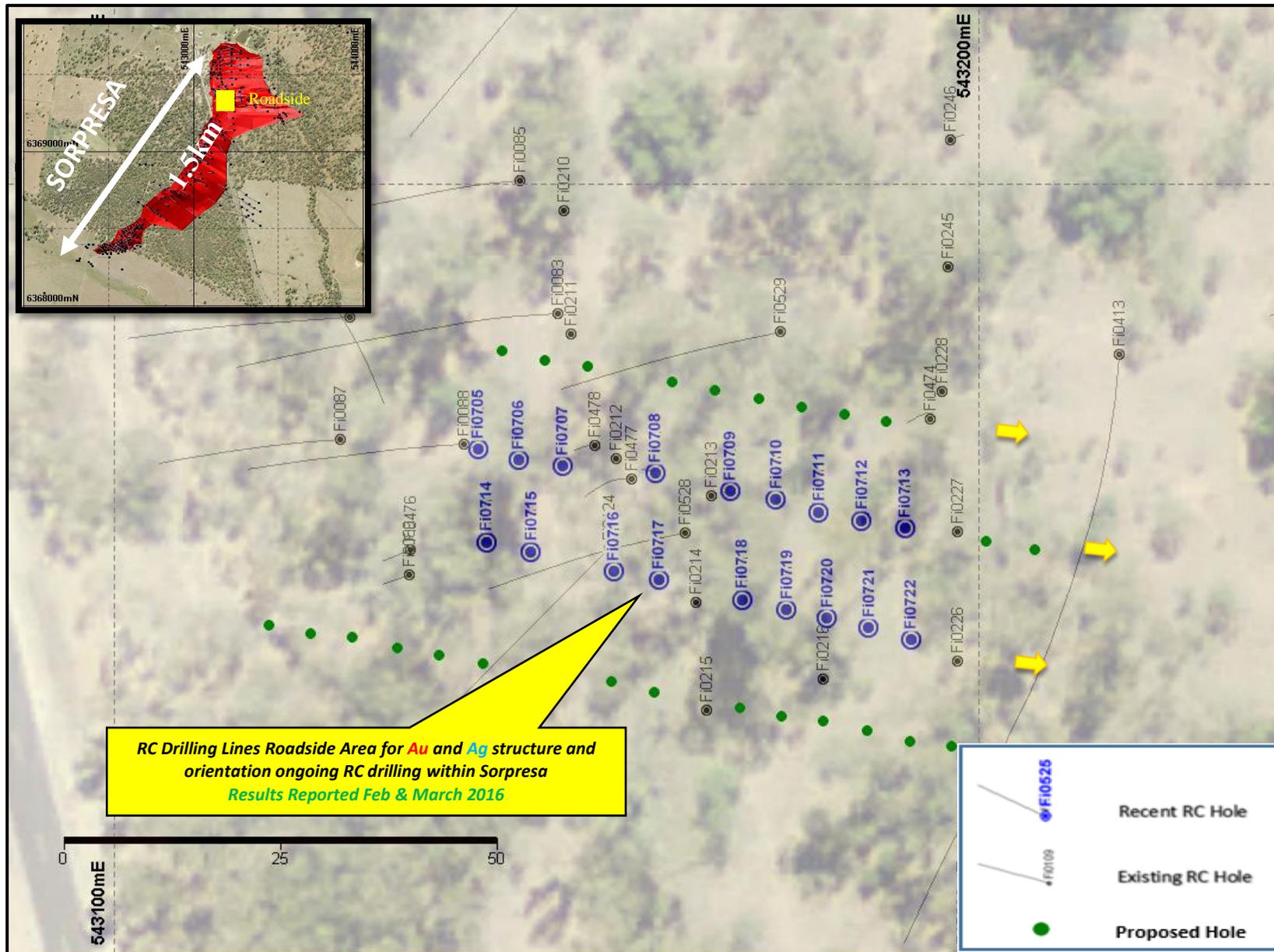


Figure 3b: RC Drilling at Sorpresa –Roadside Area – Oxide Zone 0~60m – showing gram-metre in plan view Au Eq (1gm Au = 70gm Ag conversion)

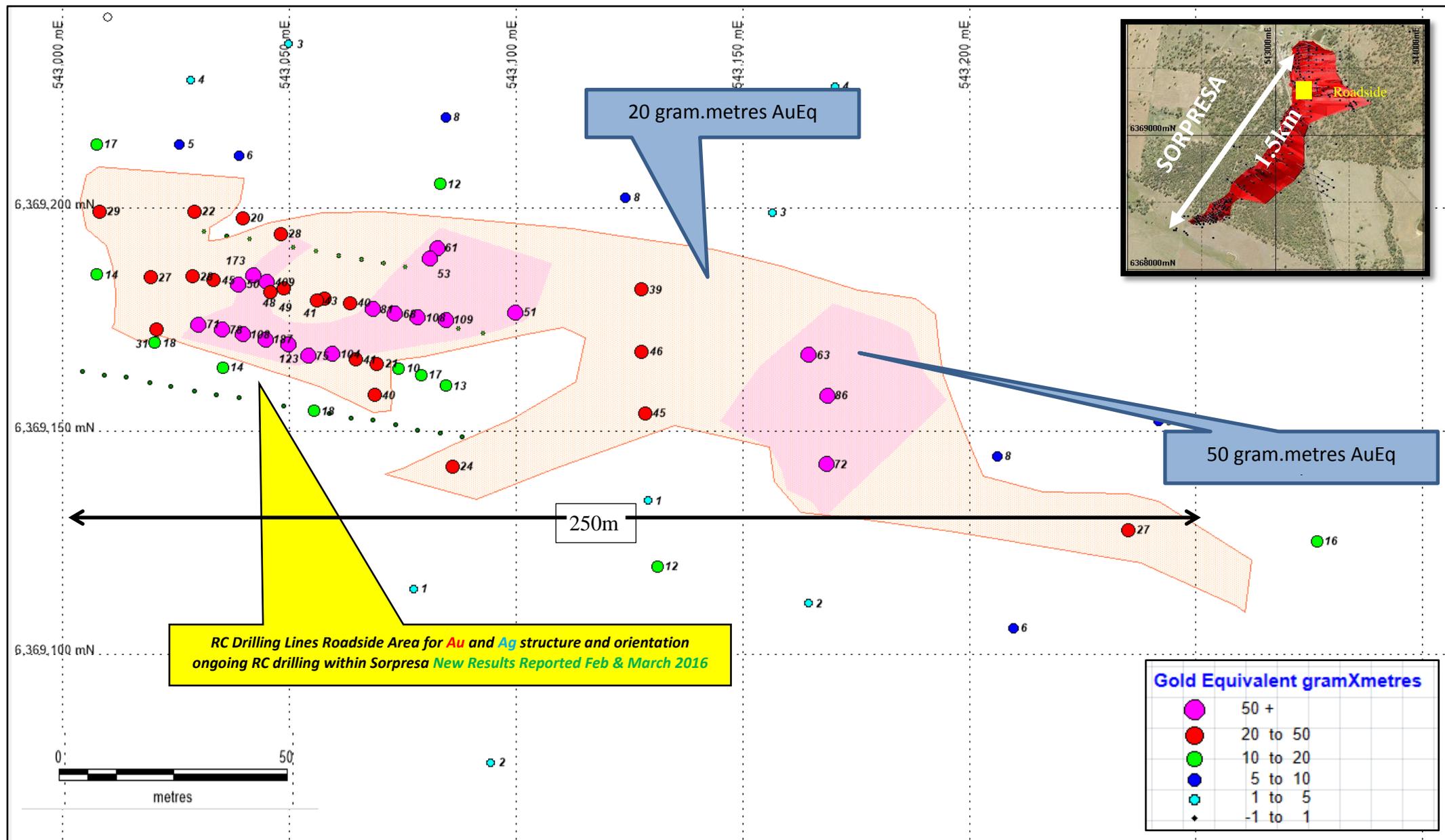


Figure 3c: RC Drilling at Sorpresa –Roadside Area – Oxide Zone 0~60m – showing gram-metre in plan view Au Eq (1gm Au = 70gm Ag conversion)

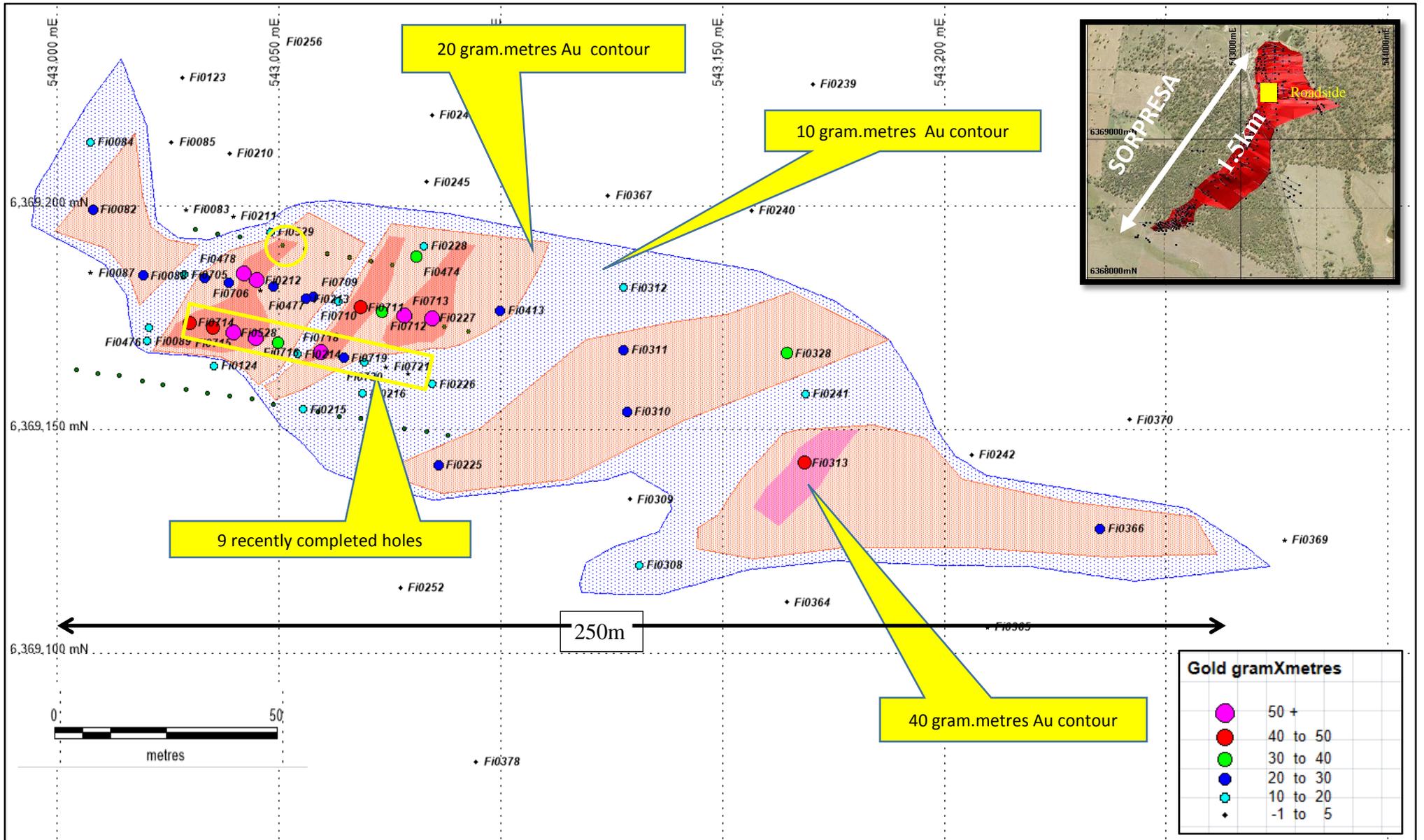
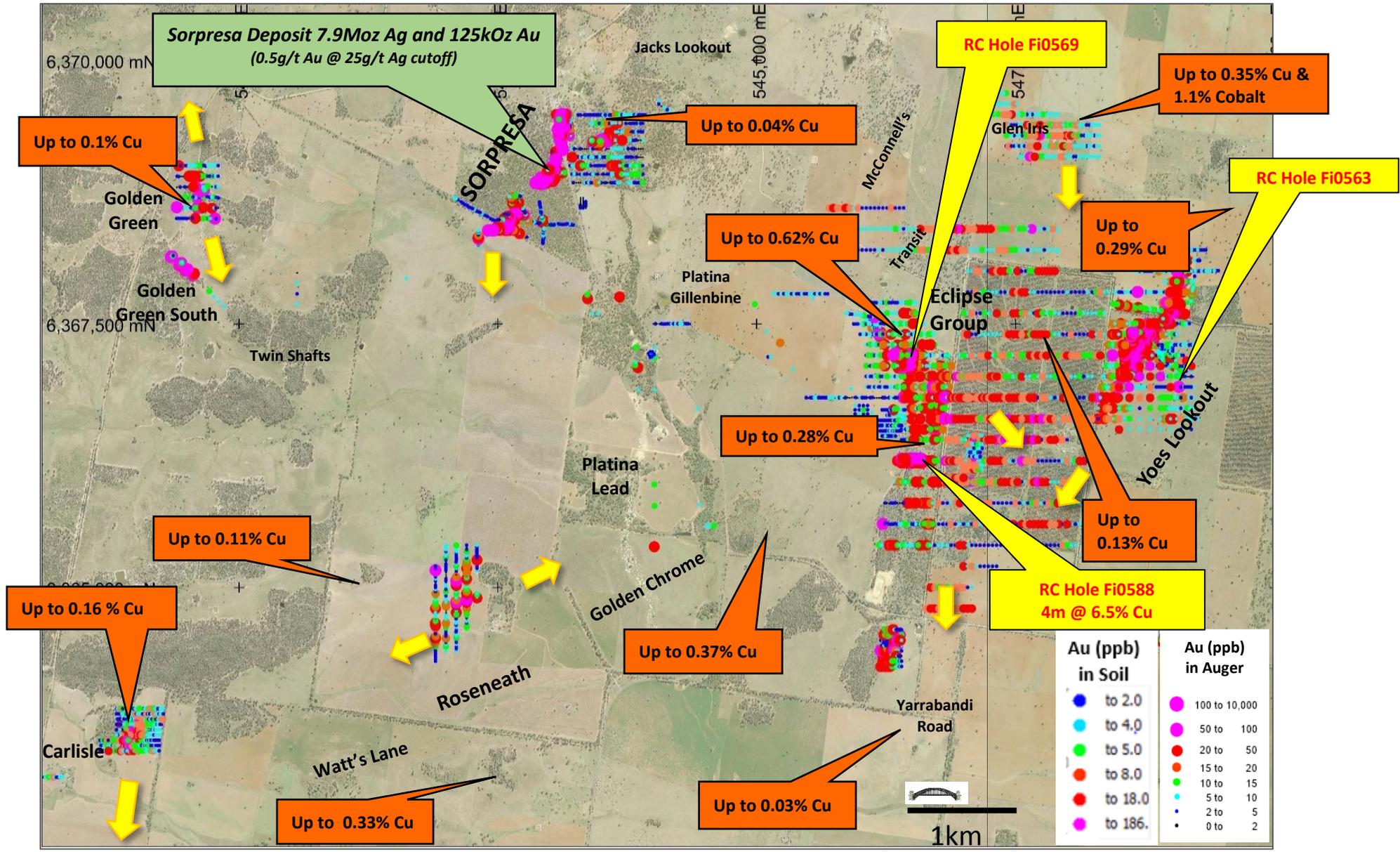


Figure 4: Wider Sorpresa area Map, shows the underlying gold signature, with best Copper **Rock Chips** overlaid. **RC drilling** (May~July 2015) has confirmed Copper (Chalcopyrite)



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 3:

Assay Results from recent RC drilling at Sorpresa – Roadside Area Oxide (0~60m)

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)
Fi0719	543178	6369351	GPS	292	-90	0	60	RC	Roadside	13	17	4	0.38	22
										19	24	5	0.08	26
										25	28	3	0.28	13
										28	39	11	2.27	63
									incl.	29	36	7	3.33	59
									incl.	35	36	1	4.68	220
Fi0720	543182	6369350	GPS	291	-90	0	60	RC	Roadside	30	48	18	0.78	32
									incl.	41	42	1	4.68	88
									incl.	43	44	1	2.22	173
Fi0721	543187	6369349	GPS	291	-90	0	57	RC	Roadside	30	52	22	0.37	19
									incl.	33	34	1	1.49	17
									incl.	39	40	1	1.25	58
									incl.	50	51	1	1.64	6
Fi0722	543192	6369348	GPS	291	-90	0	60	RC	Roadside	32	52	20	0.51	28
									incl.	48	49	1	4.84	41
Fi0723	543167	6369375	GPS	291	-90	0	45	RC	Roadside	24	38	14	1.12	48
									incl.	24	28	4	3.06	55
									which incl.	24	25	1	6.01	40
									which incl.	25	26	1	0.82	103

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

Table 3: Assay Results from recent RC drilling at Sorpresa – Roadside Area Oxide (0~60m)

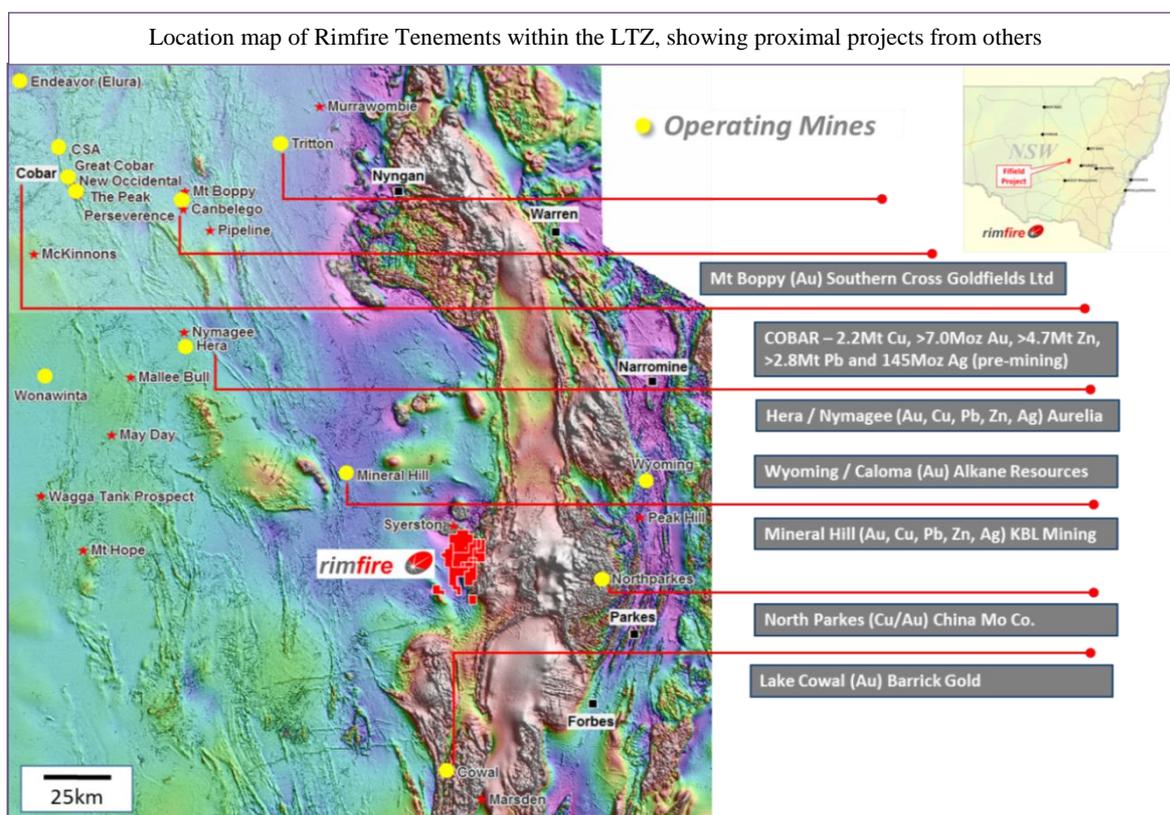
Hole ID	Easting (m GDA94)	Northing (m GDA94)	Survey Base	RL (mAHD)	Dip (°)	GDA Azimuth (°)	Depth (m)	Drilling Type	Prospect	From (m)	To (m)	Down hole Length (m)	Au (g/t)	Ag (g/t)
Fi0724	543187	6369373	GPS	291	-90	0	57	RC	Roadside	28	37	9	1.95	188
									incl.	28	30	2	0.58	325
									incl.	32	34	2	1.78	263
									incl.	34	36	2	5.29	101
									and	37	49	10	<0.1	69
									incl.	44	46	2	<0.1	268
									and	53	54	1	<0.1	28
Fi0725	543191	6369372	GPS	291	-90	0	60	RC	Roadside	29	39	10	2.05	113
									incl.	34	39	5	3.81	177
									which incl.	34	35	1	0.71	267
									which incl.	37	38	1	9.34	252
									and	39	56	17	<0.1	32

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
13m @ 8.46g/t Au	Trench 31
9m @ 18.1g/t Au plus 3m @ 280g/t Ag	Trench 31
14m @ 24.4g/t Au plus 26m @ 155g/t Ag	Roadside
7m @ 13.41g/t Au & 751g/t Ag	Roadside
10m @ 535g/t Ag plus 1.0g/t Au	Roadside
20m @ 230g/t Ag	Roadside North
16m @ 5.32g/t Au plus 20m @ 81g/t Ag	Roadside
1m @ 114g/t Au plus 1m @ 33g/t Ag	Boundary Gate East (BGE)
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](#)

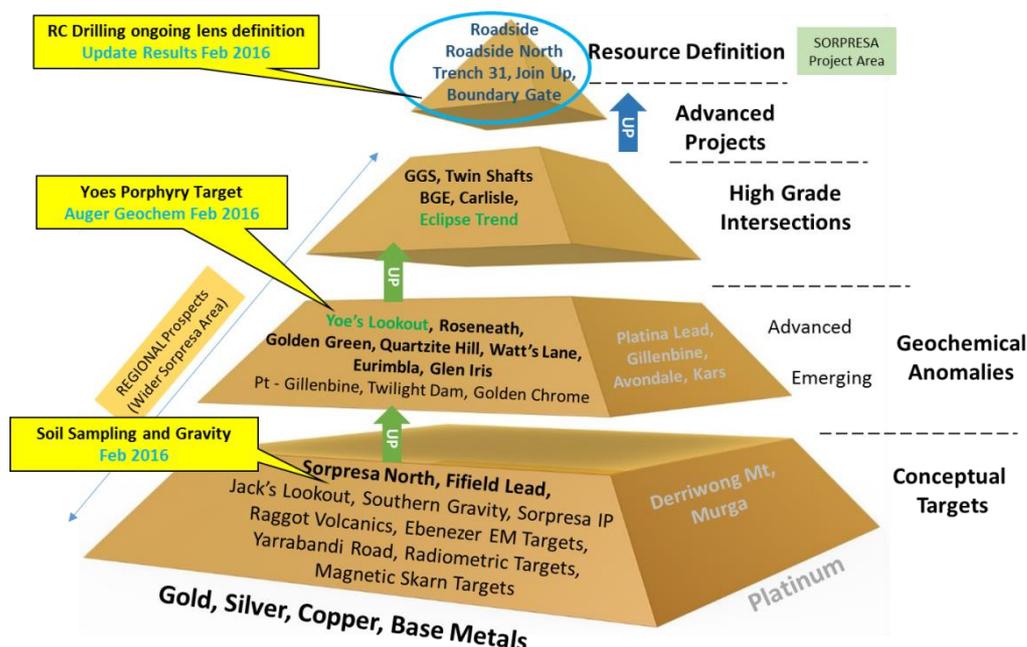
[Benchmarking - AGM 27 November 2015 – Richard Schodde](#)

[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.

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

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

Table 4: 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	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 Radiometric	No
Eclipse Trend	18.7	N/A	20~700	2.7km	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 5 Dates and Hyperlinks for previously referred to results in this report

ASX November 9 th 2007 Golden Green Gold Prospect Returns Encouraging Assay
ASX July 25 th 2008 Quarterly Report For the period April 1st to June 30th 2008
ASX March 30 th 2012 Coherent Gold geochemistry at Yoes Lookout Confirmed – Fifield NSW
ASX September 17 th 2012 First Gold Sections Created at Sorpresa Project, Fifield NSW
ASX June 13 th 2012 High Grade Gold Intersection Sorpresa Project – Fifield NSW
ASX July 26 th 2012 Successful Intersections at Sorpresa Gold Project
ASX October 10 th 2012 Highest Gold and Silver Grades seen to date at Sorpresa Project
ASX December 18 th 2012 Sorpresa Project Produces More Encouraging Results
ASX March 27 th 2013 Additional Assays at Sorpresa Gold Project
ASX June 13 th 2013 Further Positive RC Drilling Results at Sorpresa Project
ASX July 17 th 2013 Diamond Drilling Reveals Bonanza Grade of 1m @ 114g/t Au
ASX October 21 st 2013 Results Confirm Extensions of Gold and Silver at Sorpresa Project
ASX December 20 th 2013 High Grade Silver extensions continue at Roadside
ASX February 14 th 2014 Gold Intersections Confirm New Intersections at Sorpresa
ASX May 16 th May 2014 4,000m RC Drilling Program at Sorpresa Project – Regional Intersection 2m @ 9.11g/t Gold
ASX May 30 th May 2014 Drilling Update and 3D Exploration Model for Sorpresa Project – 2m @ 7.49g/t Gold intersected
ASX July 23 rd 2014 Encouraging Regional Rock Chip Results up to 13.7g/t Gold, Fifield NSW
ASX August 18 th 2014 New High Grade Rock Chip Results up to 23g/t Au at Fifield NSW
ASX August 26 th 2014 Sorpresa Gold and Silver Mineralisation Extended at Fifield, NSW
ASX November 28 th 2014 Encouraging Gold Results Intersected in New Shallow Oxide Position at Sorpresa
ASX December 8 th 2014 High Grades Intersected in Sorpresa Resource Definition Drilling
ASX December 23 rd 2014 Sorpresa Maiden Resource Fifield NSW – 6.4Mt for 125kOz of gold and 7.9Moz of silver
ASX January 30 th 2015 December Quarter Exploration Report
ASX February 20 th 2015 Sorpresa RC Drilling Assays Finalised, New RC Drilling underway to extend mineralisation
ASX February 23 rd 2015 Gold Intersections confirmed from Surface at Carlisle, Fifield NSW
ASX 23 rd March 2015 Encouraging Results including 2m @ 10.09g/t Gold Intersected at Sorpresa
ASX 13 th April 2015 Skarn style mineralisation intersected with Copper Anomalism at Yoes Lookout Prospect
ASX 20 th May 2015 Yoes Area Assays confirm Copper Anomalism with Gold Present
ASX 16 th June 2015 RC Drill Assays Confirm Copper Anomalism and Gold at Eclipse Trend
ASX 23 rd July 2015 4m @ 6.5% Cu and 2.3g/t Au Massive Chalcopyrite at Eclipse
ASX 26 th August 2015 Sorpresa Drilling Continues best intersection of 14m @ 5.24g/t gold & 156g/t silver from 21m
ASX 20 th October 2015 Sorpresa Drilling - Best Intersection of 3m @ 20.42g/t Au AND 4m @ 5.34g/t Au
ASX 20 th November 2015 Sorpresa Drilling gives 13m @ 8.46g/t gold (incl. 2m @ 31.35g/t) at shallow depths
ASX 27 th November 2015 CEO Presentation Corporate and Exploration AGM 2015
ASX 4 th December 2015 New Drilling Results Include 9m @ 18.15g/t gold at Sorpresa, Fifield NSW
ASX 27 th January 2016 Activities Report December Quarter 2015
ASX 8 th February 2016 Drilling results give 15m @ 3.91g/t Au & 223g/t Ag, Incl. 1m @ 40.40g/t Au and 1m @ 1200g/t Ag
ASX 19 th February 2016 7m @ 13.41g/t Au & 751g/t Ag from 19m at Sorpresa, incl. 1m @ 76.70g/t Au & 2490/t Ag

Table 6: JORC Code Reporting Criteria

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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>RC Samples are collected at 1m intervals from the cyclone in plastic bags.</p> <p>RAB Samples are collected at 1m intervals from the cyclone in plastic bags.</p> <p>1 metre intervals are sampled from all Auger holes within in situ weathered basement geology.</p> <p>Nominal 2 kg samples are collected at the drill rig.</p> <p>Rock Chips samples are a mix of float, sub crop & outcrop (identified in results table).</p>
	<ul style="list-style-type: none"> Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	<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>
	<ul style="list-style-type: none"> 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>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>
Drilling techniques	<ul style="list-style-type: none"> 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>Reverse Circulation conducted using face sampling hammer (119mm diameter).</p> <p>RAB drilling conducted using blade bit (100mm diameter).</p> <p>Auger drilling conducted by trailer mounted hydraulic driven auger rig with nominal hole diameter of 100mm.</p>

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.	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>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 	<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"> 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. 	<p>All significant results reported from NATA accredited laboratory.</p> <p>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 (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"> 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. 	<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>

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. 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 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. 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	· 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.

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 $\geq 0.1\text{g/t Au}$ 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.
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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 exploration data	<ul style="list-style-type: none"> 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, beyond that reported already, in this or previous reports.
Further work	<ul style="list-style-type: none"> 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.
	<ul style="list-style-type: none"> 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