



QUARTERLY EXPLORATION AND ACTIVITIES REPORT

(For the period 1st January 2016 to 31st March 2016)

Sorpresa RC Drilling returns High Grades in Gold and Silver

Best 7m @ 13.41g/t Au & 751g/t Ag from 19m at Roadside

Highlights – Sorpresa Gold and Silver area “Top 10 holes” reported/drilled in the period

□ High grade gold and silver results at shallow depths (typically 0~50m)

Hole (location)	Main Intersection(s)	Including Intersection(s)
Fi 0716 (Roadside)	9m @ 0.25g/t Au & 57g/t Ag from 10m <u>AND</u> <u>7m @ 13.41g/t Au & 751g/t Ag from 19m</u> <u>AND</u> 8m @ 0.83g/t Au & 25g/t Ag from 26m	1m @ 5.06g/t Au & 555g/t Ag from 19m <u>1m @ 76.70g/t Au & 2490g/t Ag from 22m</u> <u>1m @ 1.74g/t Au & 1410g/t Ag from 23m</u> 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 <u>1m @ 23.90g/t Au & 163g/t Ag from 27m</u> 1m @ 5.10g/t Au & 594g/t Ag from 32m <u>1m @ 26.30g/t Au & 328g/t Ag from 33m</u>
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	<u>1m @ 6.68g/t Au & 1850g/t Ag from 25m</u> <u>1m @ 5.09g/t Au & 2550g/t Ag from 26m</u> 1m @ 5.14g/t Au & 250g/t Ag from 27m
Fi 0713 (Roadside)	15m @ 3.91g/t Au & 223g/t Ag from 34m	<u>1m @ 12.85g/t Au & 1200g/t Ag from 38m</u> <u>1m @ 0.42g/t Au & 1140g/t Ag from 39m</u> <u>1m @ 40.40g/t Au & 94g/t Ag from 48m</u>
Fi 0711 (Roadside)	15m @ 3.00g/t Au & 162g/t Ag from 31m	1m @ 2.32g/t Au & 492g/t Ag from 33m <u>1m @ 14.05g/t Au & 198g/t Ag from 34m</u> <u>1m @ 20.20g/t Au & 430g/t Ag from 35m</u> 1m @ 1.04g/t Au & 356g/t Ag from 43m 1m @ 4.00g/t Au & 47g/t Ag from 45m
Fi 0715 (Roadside)	17m @ 2.50g/t Au & 145g/t Ag from 12m <u>AND</u>	1m @ 2.65g/t Au & 236g/t Ag from 17m <u>1m @ 23.90g/t Au & 649g/t Ag from 20m</u> 1m @ 2.48g/t Au & 482g/t Ag from 24m
Fi 0738 (Roadside)	10m @ 2.1g/t Au & 313g/t Ag from 25m	<u>1m @ 0.64g/t Au & 1240 g/t Ag from 26m</u> 5m @ 3.84g/t Au & 261 g/t Ag from 30m <u>Which includes:</u> 1m @ 4.03 g/t Au & 406 g/t Ag from 31m 1m @ 5.74 g/t Au & 253 g/t Ag from 32m 1m @ 5.44 g/t Au & 231 g/t Ag from 34m
Fi 0729 (Roadside)	7m @ 4.60g/t Au & 199g/t Ag from 39m <u>and</u> 7m @ 0.42g/t Au & 43g/t Ag from 53m	1m @ 2.13g/t Au & 463 g/t Ag from 41m 1m @ 7.21g/t Au & 136 g/t Ag from 43m <u>1m @ 16.2g/t Au & 448 g/t Ag from 44m</u>
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 <u>1m @ 26.40g/t Au & 26g/t Ag from 26m</u>

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

Greater than 10g/t Au or greater than 1,000g/t Ag highlighted

(This RC drilling is part of an ongoing assessment of the structural controls and orientation of high grade gold and silver lens areas within the known mineralisation at Sorpresa. Additional RC drilling is underway at Roadside area with results due in May 2016).

- The results continue the Company's encouragement in the assessment of an economic case for parts of the Sorpresa high grade lenses, both at Roadside and Trench 31 in particular (Figures 2 & 3, pages 12-13)
- **Sorpresa basin style geology has been expanded from 11km² to 18km².** This increased area is considered prospective for gold and silver, and is less than 10% drill tested (Figure 1 Map, page 6).
 - The **gravity survey** in the quarter has identified prospective targets to the South as potential repeats
 - 6.4km² of detailed mapping and sampling has identified gold potential to the **North of Fifield**, including a prospective Au zone identified around Quartzite Hill area

Highlights - Fifield Regional Activities (within 6km radius of Sorpresa)

- **Detailed geological mapping was completed on the Eclipse Trend - Yoes areas (4km²), to assist interpretation and targeting for the copper-gold signature now established**
- **New regional creek and auger geochemical sampling programs are continuing for copper and gold**
- **Prospecting has identified anomalous gold in parts** via geochemical sampling (soil, pebbles, creeks and chips). 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
 - **Includes a new prospect "Blackstone" with high grade surface exposure at 4.97g/t Au**
 - **An identified gold trend ~4km long, co-incident with the magnetic trend**
 - **2.3km² was covered at Eclipse South Extended**, a new Au anomaly with a quartz porphyry connection
- **Geological model concepts have been further refined and additional targets have also been identified, based on geochemistry, mapped geology and geophysics**

Highlights - Corporate and other activities

- **Presentations were made at Mines & Money international resources conference, Hong Kong and Asia**
- **Discussions for potential partnership opportunities were continued, including site visit**

CEO and Managing Director, John Kaminsky stated:



"These highlighted drill results are some of the best we have seen at Sorpresa, above expectations. Multiple bonanza patches of silver **upto 2550 g/t Ag** at Roadside, and high grades of gold upto 76.7g/t Au has been satisfying to observe and complements the earlier work in 2015.

"The best hole in the 2016 program period has been **Fi 0716 with 7m @ 13.41g/t Au & 751g/t Ag** (Reported 19th Feb 2016). The mineralisation system will have natural variation in grade and thickness, but it seems to be holding together pretty well in these higher grade areas.

"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 to be more high grade intersected at Roadside and the closer space drilling is helping to achieve this.

“The regularity seen in the drilling since October last year, of the higher grade results (>10g/t Au) including results above 20g/t Au in numerous places, is very encouraging. The existing Sorpresa resource envelope represents less than 10% of the known Sorpresa style geology (now assessed as 18km² and open), which is predominantly under shallow alluvium cover (1~8m). Potential for considerable discovery upside exists in this footprint.



“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.

“The high grade gold and silver shoot we are now drilling at Roadside breaks surface and goes to about 110m depth, at approx. 200~250 metres down dip, with good grades and widths along its delineated shape to date. Our next line tracks to the north, and is currently being drilled. Positive field observations (Fp XRF) indicate some further solid assay results are likely in the next market update.

“We are looking to increase the contained tonnes through extensions and high grade areas in this corridor. This will add to the Trench 31 area delineation already done, which is located approx. 1km to the south west of Roadside.

“We are working towards a feasibility understanding of the higher grade areas within the known Sorpresa gold and silver resource, with the aggregate results enhancing our detailed knowledge of the controls and orientation of the gold and silver system. This should offer the potential for extensions in the mineralisation. The overall objective is to increase the gold and silver resource that is suited to shallow open-cut mining from these high grade lenses.

“Mines & Money Asia” International Resource Conference Attended – Improving Resources Investor Sentiment



“The Company successfully presented at Mines and Money Asia 5~7th April ([Hyperlink click here](#)), in Hong Kong. It is clear the mood has improved for resources, with professional investors now more willing to enter the sector. Industry producers are also looking for opportunities.

“In April the markets have performed better, buoyed by increased metal prices. There is an improved appetite for risk from investors which is spilling into the predevelopment exploration space now.

“Hedley Widdup (guest speaker at [Rimfire 2015 AGM](#)), stated in Hong Kong at Mines & Money Asia, that the market cycle had passed its low point. Whilst the junior exploration sector tends to lag in recovery to the general resources market, there is also evidence of some recent emergence of renewed interest and provision of fresh capital to the junior space, which includes joint venture activity.

“This is encouraging and is consistent with the Company’s own view. The continuous quality work programs that are being undertaken by the Company means Rimfire is now well positioned relative to many other juniors, to benefit from a sustained improvement in the resource sector sentiment, and shareholders should be encouraged by this.

“The Company continues discussions for a potential joint venture with the goal to assist the Company’s ability to deliver the best outcome in discovery growth opportunities for shareholders at an accelerated rate.”

Discovery opportunities within 6km radius of Sorpresa Resource –advances made

“In parallel with the Sorpresa assessment, considerable work continues with the regional discovery opportunities. New areas of potential gold mineralisation are being identified and next stage plans for assessment are under development, including drilling priorities. Significant outcomes from recent work are shown in [Figures 1 & 2](#), pages 6 and 7.

“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 Sorpresa style geology footprint has been expanded from 11km² to 18km²**, with less than 10% of the known Sorpresa geology currently RC drill tested, this represents potential upside on the known resource
- ✓ **A potential new gold trend of 4~6km length is emerging via geochemical sampling** (soil, pebbles & creeks) at the Carlisle & Watts Lane areas. A new prospect, “Blackstone”, with high grade rock chip results at 4.9g/t Au average, has emerged in this corridor
- ✓ **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

“Sorpresa was discovered as a subtle surface anomaly (Au ~20ppb in soil), but much of the area surrounding Sorpresa is masked by shallow soil cover. Rimfire has the opportunity to continue to make additional new discoveries just below this cover, and is one of the reasons mineralisation was not discovered by companies prior to Rimfire.

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

“Regular newsflow will be generated from the combined work programs. The Company looks forward to reporting further results and milestones as they occur and remains active. We are enhancing our project areas to the benefit of shareholders, and I think the market is beginning to recognise this in the improved climate for junior companies.”

Regional Exploration – Summary and Key Initiatives

The Company strategy continues to focus on building its regional discovery inventory within a 6km radius of Sorpresa over the next 12 months. Priorities continue to emerge from a combination of ongoing geochemical sampling (creeks, soils, lags and auger bedrock geochemistry), as extensions to current anomalous trends, or new additions, as well as promising geophysical targets.

The Sorpresa resource is a possible peripheral mineralisation event to a much larger mineralising system operating at Fifield. With this in mind, we will be pursuing a number of key concepts over the coming months, to seek the best areas containing the strongest mineralisation potential within the copper-gold footprint currently identified. This also brings the new EL8401 into play (Figure 6, page 15), with a range of targets being reviewed over the next 6 months.

Summary of the extensive work done in the March 2016 Quarter (Sorpresa and Regional) was as follows:

Activity	No. of samples	No. of Holes	Metres
Soil Sampling	250	-	NA
Creek Sampling	191	-	NA
Lag Pebble Sampling	499	-	NA
RC drilling (Sorpresa)	-	31	1473
Auger drilling	-	193	579

The regional programs have covered approx. 20km² of detailed mapping and sampling.

Included in this regional work is range of specific initiatives, with more details to be subsequently published in the next reporting periods.

- ✓ **A ground Gravity Geophysical survey** completed, looking for repeat style structures similar to Sorpresa
 - A strong correlation is already noted between Gravity and the Sorpresa mineralisation
 - Targets identified and ready for drill testing
- ✓ **Geological mapping was 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 within 6km radius of Sorpresa**
 - Infill programs to assist the targeting the better prospective areas for gold and copper

Carlisle-Watts Lane Trend

The Sorpresa Basin (rift) has a complex shape, but an overriding Nth-Sth orientation. The Carlisle-Watts Lane Rift has a clear 70 degree strike. This strike direction is part of a district wide trend that curves more to the north as it proceeds east. The two rifts are closely related in structure and timing but the junction area accommodates some difficult interaction between 70 degree faults, north-south faults and N-W faults.

There is newly discovered gold mineralisation at Carlisle-Watts Lane, including the **Blackstone prospect**, which was successfully located through surface prospecting, giving the result of 4.97g/t Au from 15 composited samples in a 10m area. The rocks were randomly selected, in a totally unbiased sampling process. The results exceeded expectation, and the prospect is ready to drill as an exciting addition to the portfolio.

Carlisle-Watts Lane regional magnetics indicate the strong presence of deep intrusive bodies. These are not present at the surface but could be responsible for gold mineralisation above or around them. Blackstone looks to be a breccia-replacement pipe above an intrusive body, within a shear. This represents a good target, with the possibility of vertical zonation in the mineralisation.

The **Carlisle deep defused magnetic anomaly** is unresolved despite attempts to drill it in 2015. The overlying synclinal sandstone beds extended much deeper than expected and contained water. Hence, another attempt at drilling would require diamond drilling, and this is being considered.



***New gold prospect "Blackstone" within Carlisle-Watts Lane Gold Trend
Possible gold load, breccia alteration pipe in shear, gossan with quartz phases.
10m area random (non selective) sampled averaged 4.97g/t Au***

Sorpresa Basin – Key Gravity Targets emerge from survey

The most useful geophysical method on Sorpresa has been gravity. The Company has an excellent detailed gravity coverage over the Sorpresa Basin (rift), with the newly completed survey in the quarter. This data is combined with detailed low level magnetics to produce exploration target zones.

The magnetic intrusive structure dilational jog south of Sorpresa has a **1,200m long geophysical gravity anomaly**.

The new target is similar to the known Sorpresa mineralisation position for the following reasons:

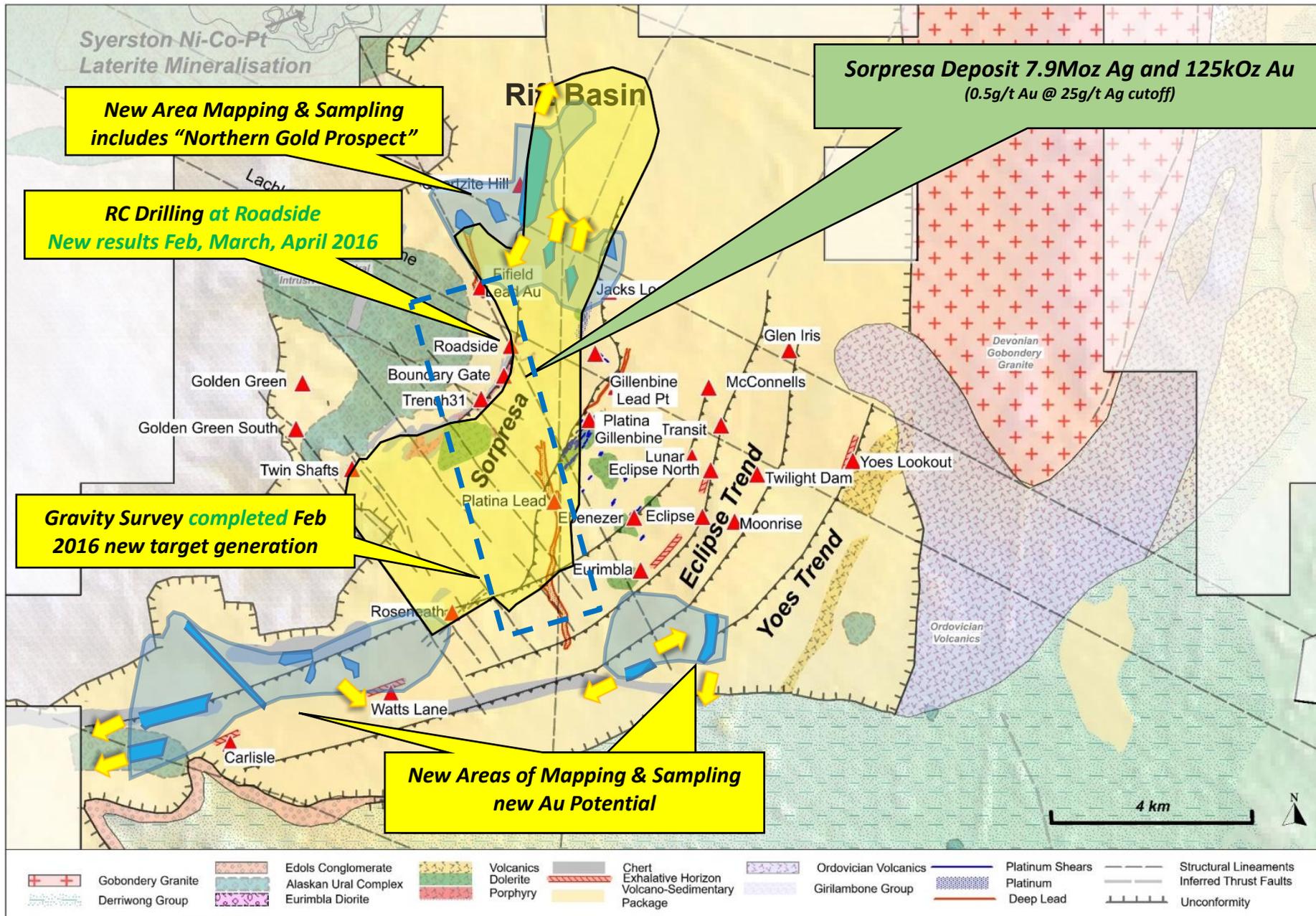
- Similar size, orientation and gravity intensity
- It is directly south of Sorpresa. (Nth-Sth direction is considered important to the position of mineralisation)
- This anomaly has an east dipping magnetic porphyritic cap (same as Sorpresa)

This large gravity target has remained untested due to a veneer of alluvium covering most of it. The recent addition to the gravity data has brought this anomaly into a much clearer focus. It also demonstrates a splay off the main gravity trend, which is East-West and is similar to Roadside.

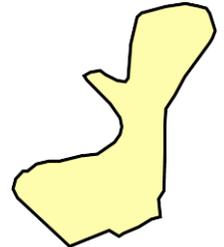
This anomaly has the capacity to be a combination of a thrust fault and a dilational jog. The thrust could collapse back, thus forming the necessary fractures to focus the gold and silver hydrothermal fluids into the carbonaceous horizon.

The Gravity dataset, with the Sorpresa knowledge offers opportunity for additional discovery in the 18km² basin area.

Figure 1: Fifield Prospect and Concept Map with location of the expanded Sorpresa Basin footprint and New Prospective Au anomaly areas – as at April 2016



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

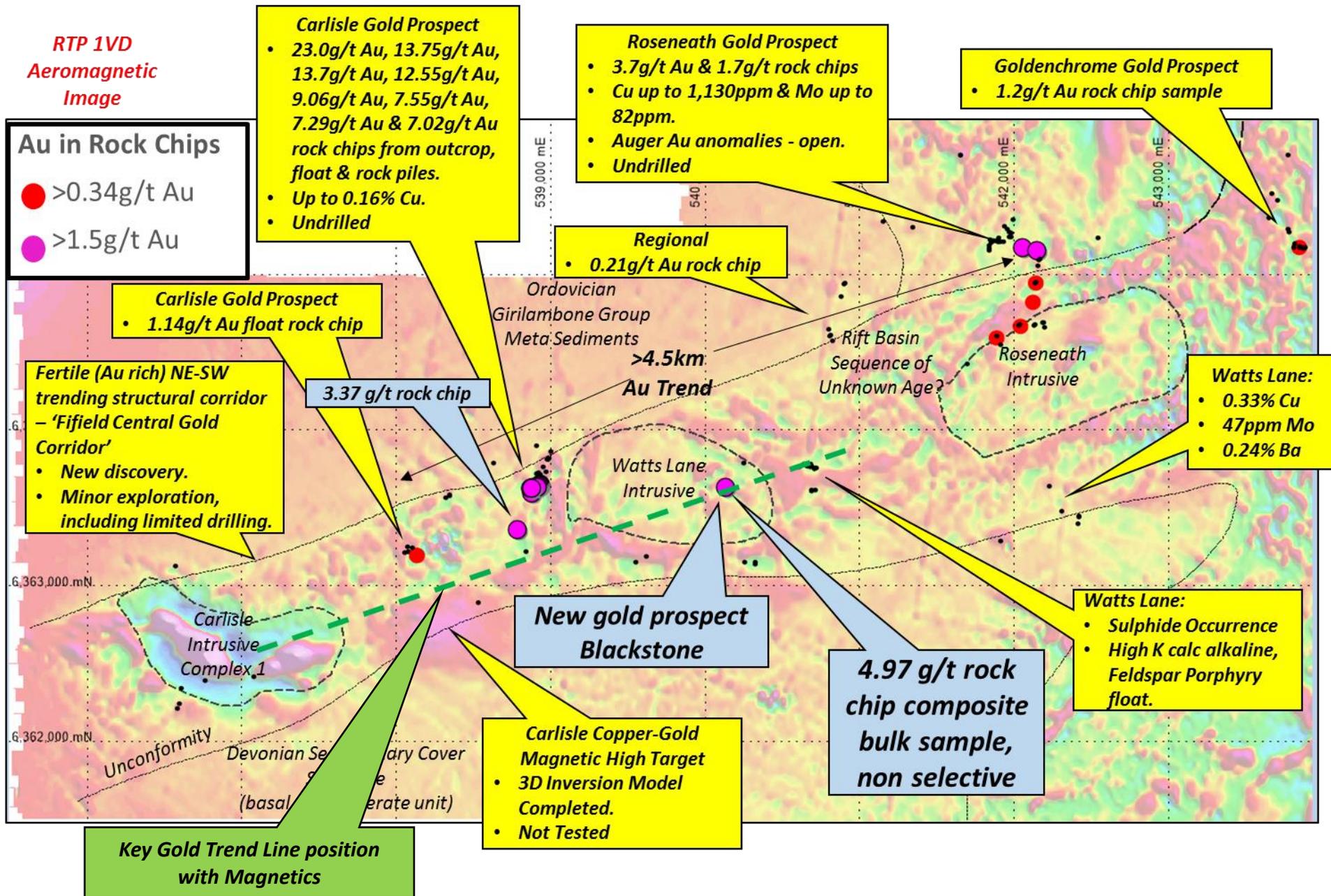


Expanded known area of 18km² of Sorpresa style carbonaceous sediments, of which less than 10% is currently drill tested for Au



Gravity Survey – drill targets identified for repeats of Sorpresa Au & Ag

Figure 2: Fifield Prospect – Carlisle-Watts Lane Gold Trend with new area “Blackstone” – as at April 2016



Sorpresa RC Drill Program Background 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, 21st March and 21st April (drilled in March) at Roadside are provided (**above 25 gram-metres Au eq**)¹, are only shown, below in Tables 1, 2, 3 & 4). For all results including the December quarter refer to the Hyperlinks in the **Appendix** to this report.

Table 1 – Drilled March and Reported 21st April 2016 (Highlights)

This table covers results from 15 holes (approx. 783m)

Hole (location)	Main Intersection(s)	Including Intersection(s)
Fi 0738 (Roadside)	10m @ 2.1g/t Au & 313g/t Ag from 25m	1m @ 0.64g/t Au & 1240 g/t Ag from 26m 5m @ 3.84g/t Au & 261 g/t Ag from 30m <u>Which includes:</u> 1m @ 4.03 g/t Au & 406 g/t Ag from 31m 1m @ 5.74 g/t Au & 253 g/t Ag from 32m 1m @ 5.44 g/t Au & 231 g/t Ag from 34m
Fi 0729 (Roadside)	7m @ 4.60g/t Au & 199g/t Ag from 39m <u>and</u> 7m @ 0.42g/t Au & 43g/t Ag from 53m	1m @ 2.13g/t Au & 463 g/t Ag from 41m 1m @ 7.21g/t Au & 136 g/t Ag from 43m 1m @ 16.2g/t Au & 448 g/t Ag from 44m
Fi 0728 (Roadside)	10m @ 2.08g/t Au & 123g/t Ag from 36m <u>and</u> 9m @ 0.46g/t Au & 74g/t Ag from 49m	1m @ 1.98 g/t Au & 163 g/t Ag from 38m 1m @ 15.45g/t Au & 350 g/t Ag from 41m 1m @ 0.3 g/t Au & 324 g/t Ag from 42m 3m @ 0.84 g/t Au & 143 g/t Ag from 51m
Fi 0736 (Roadside)	16m @ 1.08g/t Au & 117g/t Ag from 25m	3m @ 4.57g/t Au & 462 g/t Ag from 26m <u>Which includes:</u> 1m @ 8.42 g/t Au & 1070 g/t Ag from 26m 1m @ 1.12 g/t Au & 93 g/t Ag from 39m
Fi 0737 (Roadside)	3m @ 6.91g/t Au & 136g/t Ag from 28m <u>and</u> 5m @ 0.28g/t Au & 61g/t Ag from 39m	1m @ 8.90 g/t Au & 166 g/t Ag from 28m 1m @ 8.68 g/t Au & 230 g/t Ag from 29m
Fi 0730 (Roadside)	13m @ 0.71g/t Au & 80g/t Ag from 38m <u>and</u> 7m @ 0.51g/t Au & 80g/t Ag from 55m	6m @ 1.33 g/t Au & 122 g/t Ag from 41m <u>Which includes:</u> 2m @ 2.75 g/t Au & 167 g/t Ag from 45m
Fi 0733 (Roadside)	8m @ 0.31g/t Au & 191g/t Ag from 9m	3m @ 0.6g/t Au & 474 g/t Ag from 12m <u>Which includes</u> 1m @ 0.78 g/t Au & 713 g/t Ag from 13m

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 Fi0738 had 10m @ 2.1g/t Au = 21gm-metresAu plus 3131gm-metres Ag converted at 70:1 for Au eq

Table 2 – Reported 21st March 2016 (Highlights)

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

Table 3 – 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 <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 <u>AND</u>	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 <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

Table 4 – 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
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

Hole (location)	Main Intersection(s)	Including Intersection(s)
		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 mineralizing 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.

COMMODITY PRICING FOR THE DECEMBER 2015 QUARTER

As at 27th April 2016, precious metal prices had improved in the quarter and were quoted (www.kitco.com), in New York based on closing Ask in USD were as follows:

	Price 27 Jan 2016	Price 27 April 2016	Increase %
Gold	USD\$1102/oz	USD\$1247/oz	13%
Silver	USD\$14.26/oz	USD\$17.32/oz	21%
Platinum	USD823/oz	USD\$1031/oz	25%

CORPORATE ACTIVITIES

Cash, Funding, Facilities and Investments

The Company believes that its financial position continues to be well monitored and maintained in a challenging economic climate. As at 31st March 2016 the Company had \$1.260m in cash.

Application for NSW Government Drilling Grant

The Company has applied for non-dilutionary grant funds, up to \$200,000 used towards its drilling proposals at Fifield for use in the period July 2016 to June 2017. The grants are due to be awarded in June 2016. In 2014 the Company was awarded \$175,000 in a similar scheme from the NSW State Government.

New Capital structure

As at 31st March 2016 the capital structure of the Company was:

Fully Paid Ordinary Shares	798,659,607
Options, expiry May 15 th 2017, exercisable at 3.5 cents	52,385,951

The Top 50 shareholder list has changed and is available at hyperlink [click here](#).

Mines & Money Hong Kong Resources conference, exhibition and presentation



The Company successfully participated in a 3 day international resources conference and exhibition during first week in April 2016 enabling a positive interaction with investors and industry participants. The Company and its project areas were well received.

Hong Kong Presentation Hyperlink:

Title: ***CEO Presentation on Sorpresa Gold and Silver area and District Surrounds at Fifield NSW:*** [Click here](#) to view this announcement.

JOHN KAMINSKY
CEO and Managing Director

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

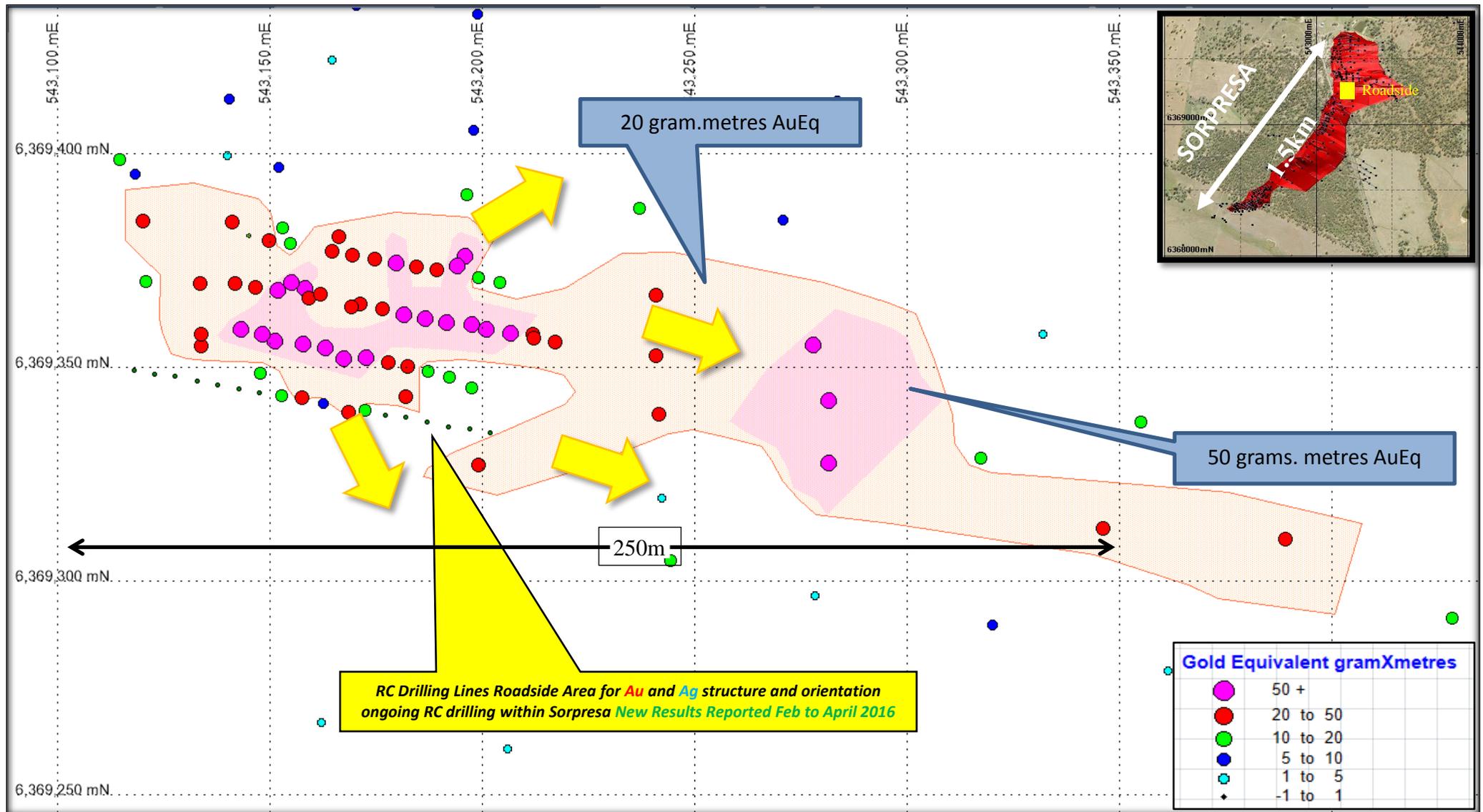


Figure 3b: RC Drilling at Sorpresa –Roadside Area – Oxide Zone 0~60m – Hole Locations showing Au only gram-metre contour in plan view Au Eq

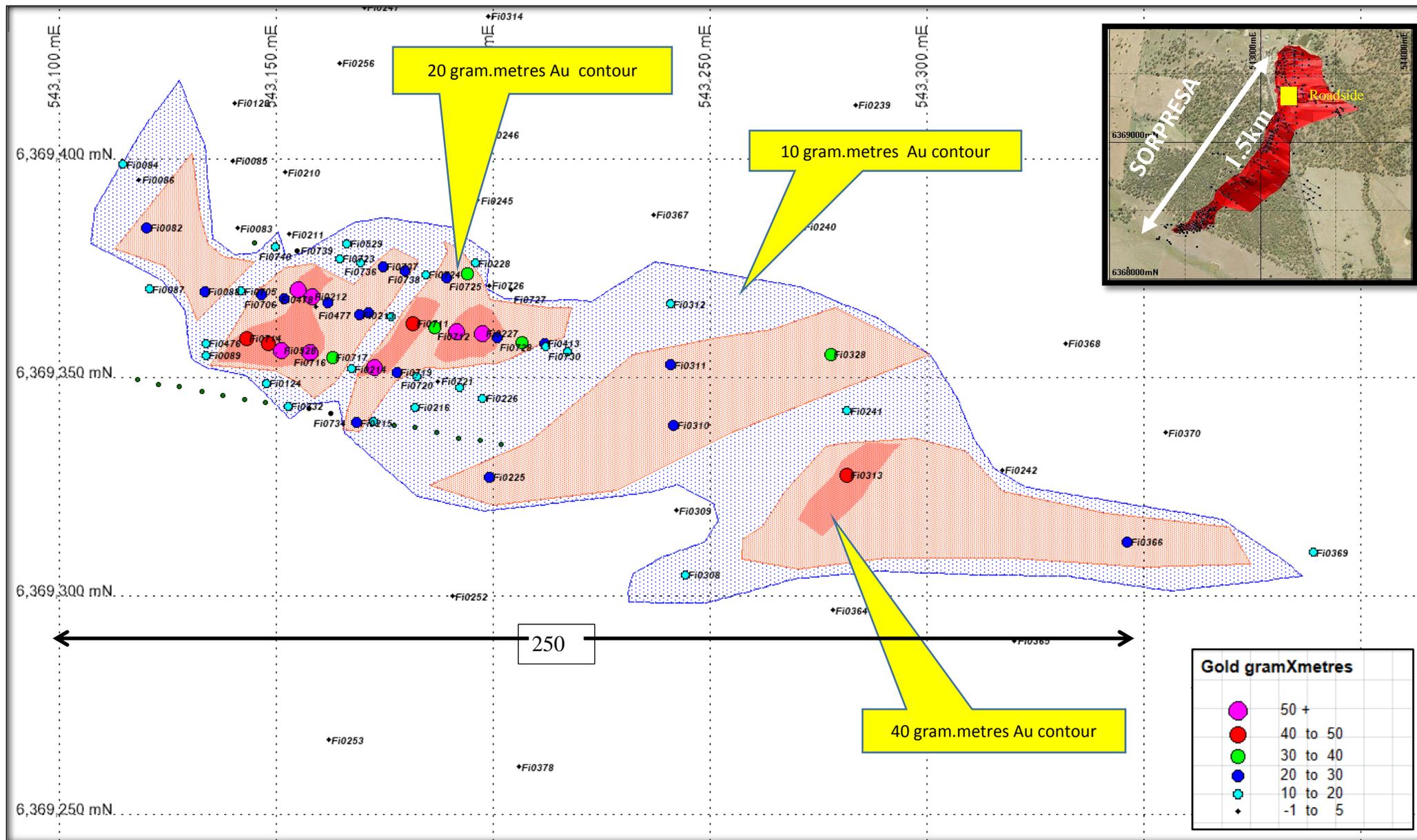


Figure 4: RC drilling at Sorpresa – Trench 31 Area Oxide – Gold in Gram-Metre Representation with some recent highlights >50 gram-metre shown

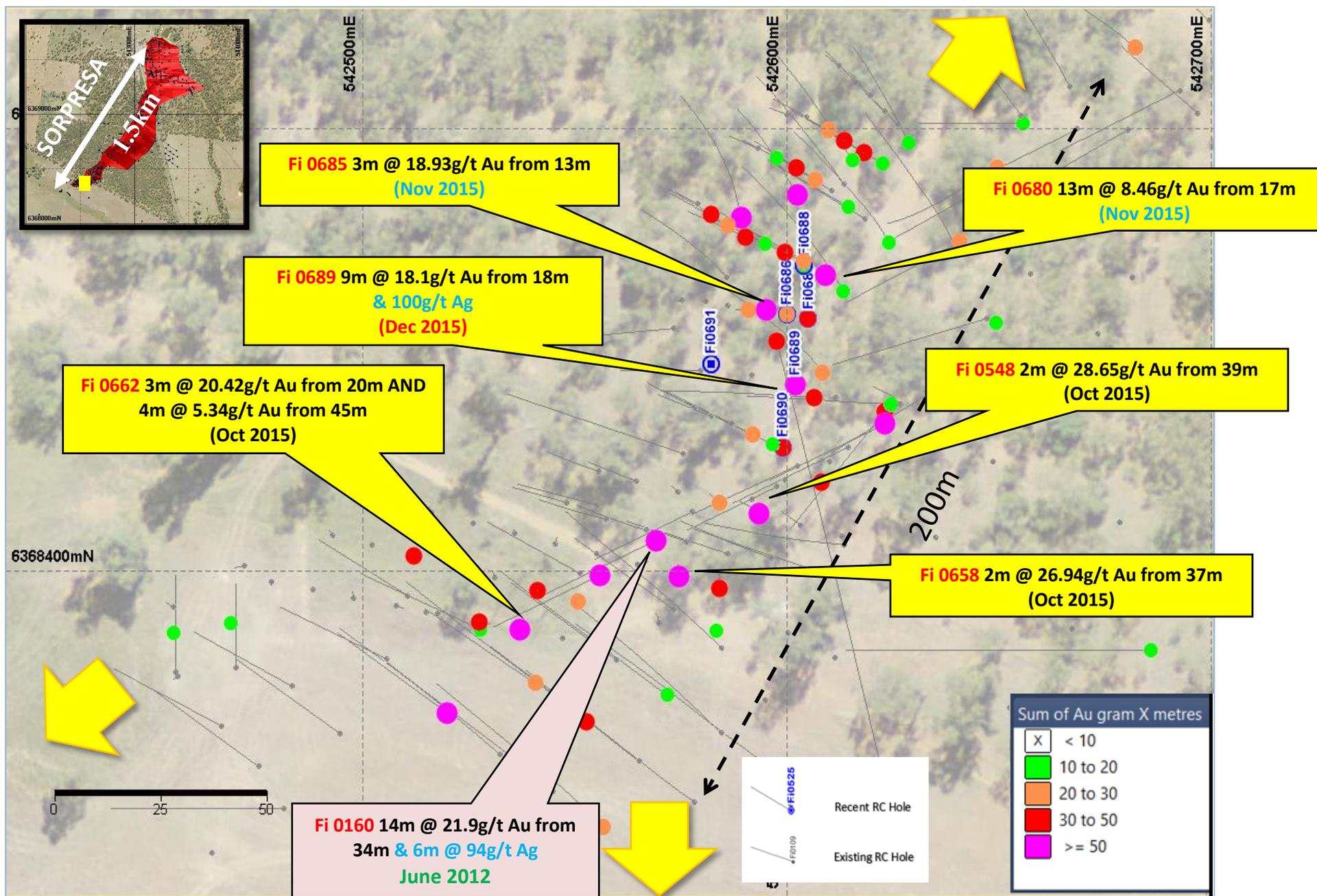
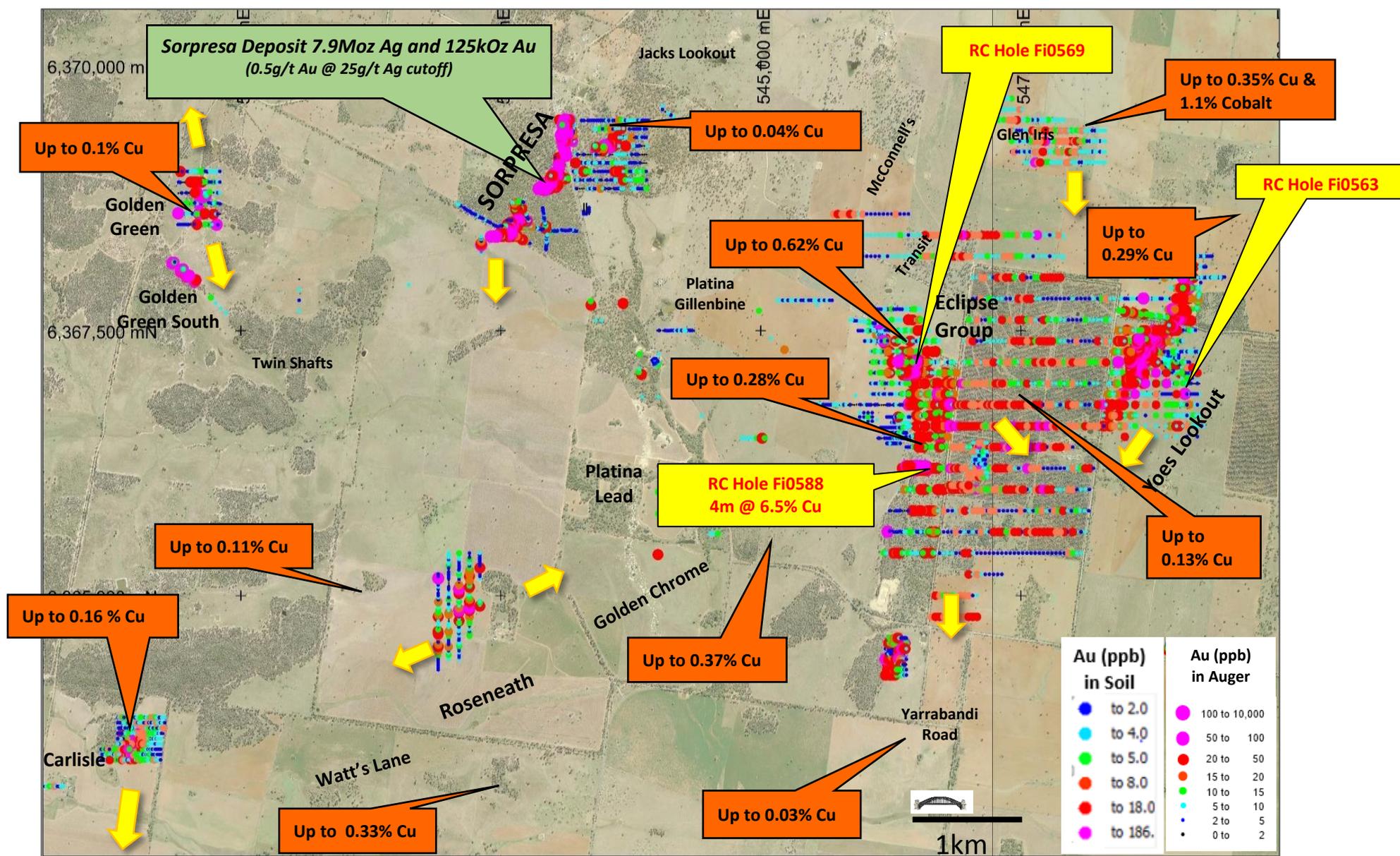
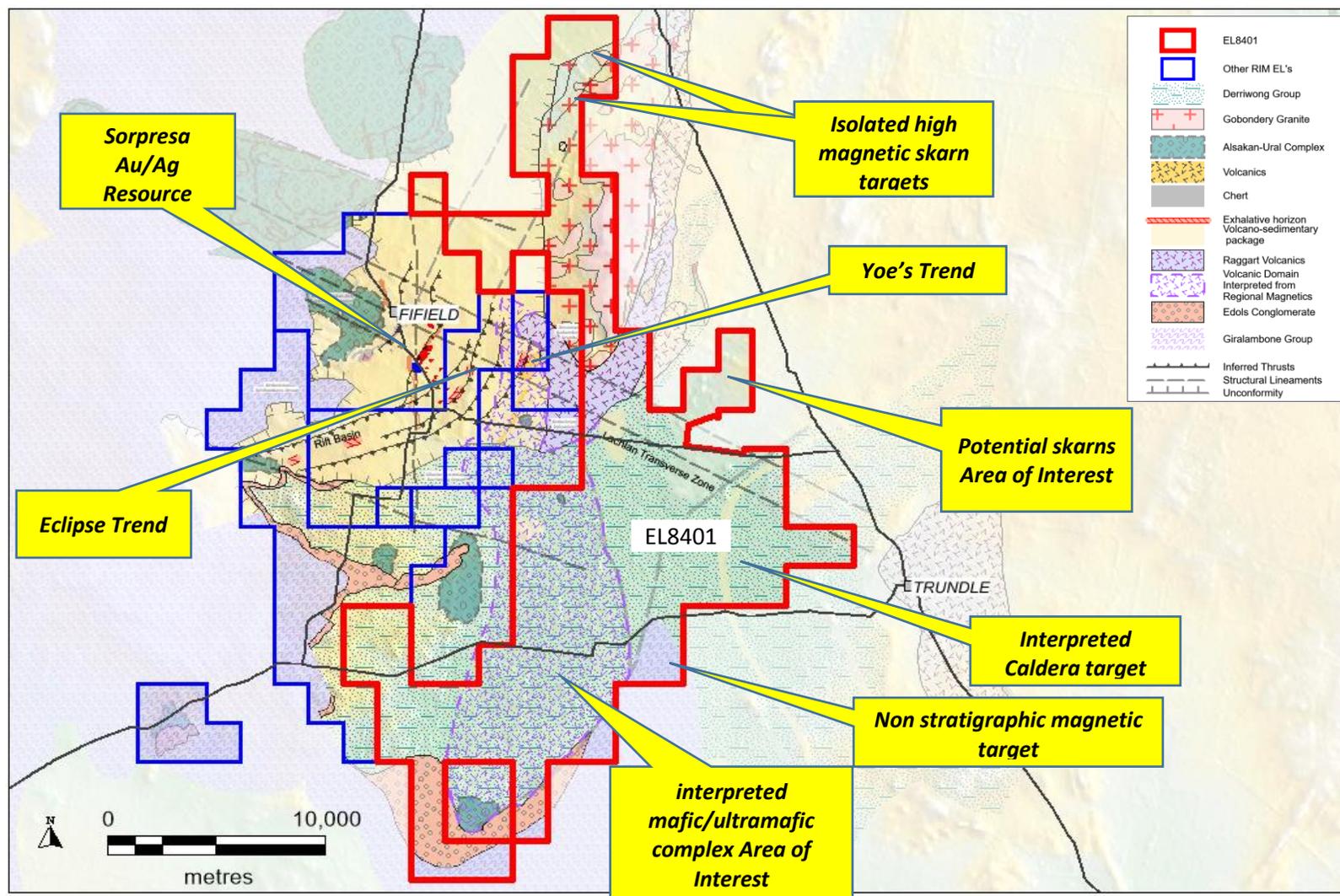


Figure 5: Wider Sorpresa area Map, shows the underlying gold signature, with best Copper Rock Chips overlaid. RC drilling (May~July 2015) has confirmed Copper (Chalcopyrite



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.

Figure 6: Tenement Position at Fifield NSW – New EL 8401 (in red outline) showing target areas of immediate interest

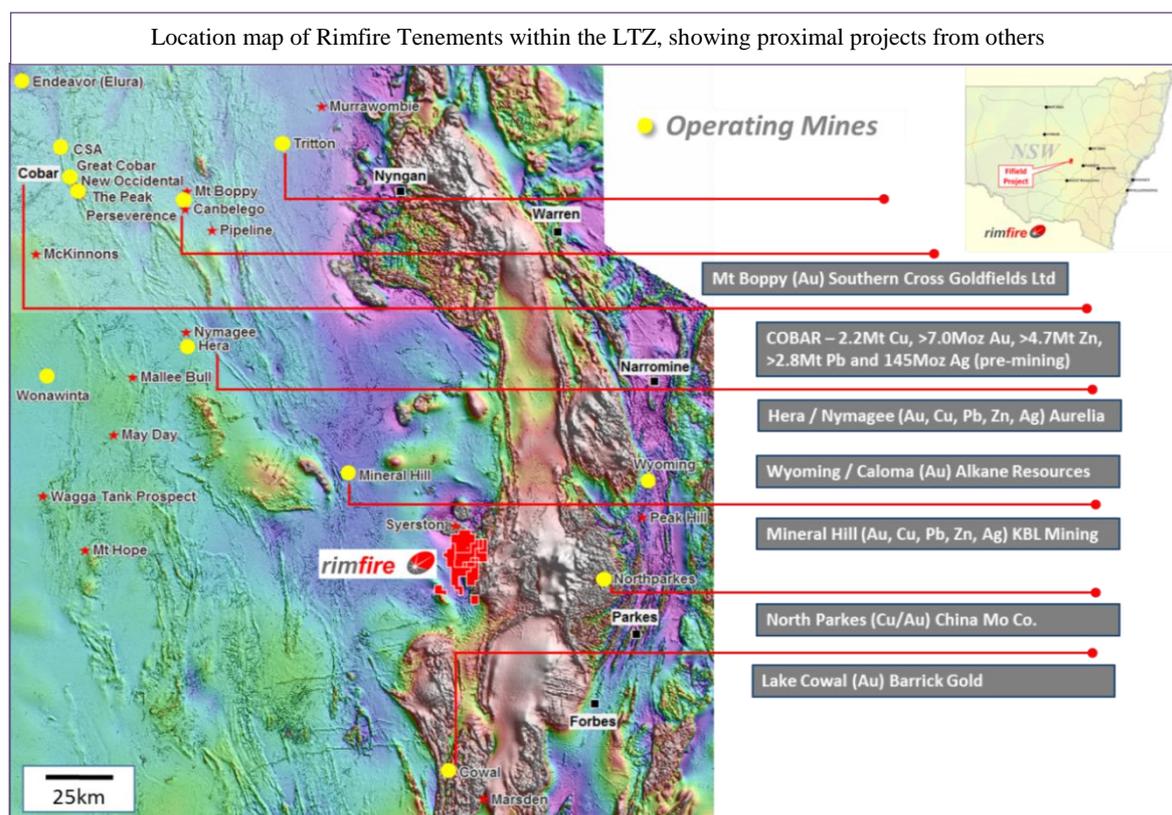


- New EL8401 doubles LTZ Exposure
- Strategic Holding
- Cu/Au/PGE Potential
- Hidden Major Ore Body Potential (under cover)
- Diverse Style Mineralisation likely
 - Mt Leyshon, Kidston
 - Tritton (Besshi)
 - Magmatic Cu/PGE
 - Porphyry Cu/Au

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 – Mines and Money Hong Kong April 2016 – John Kaminsky](#)

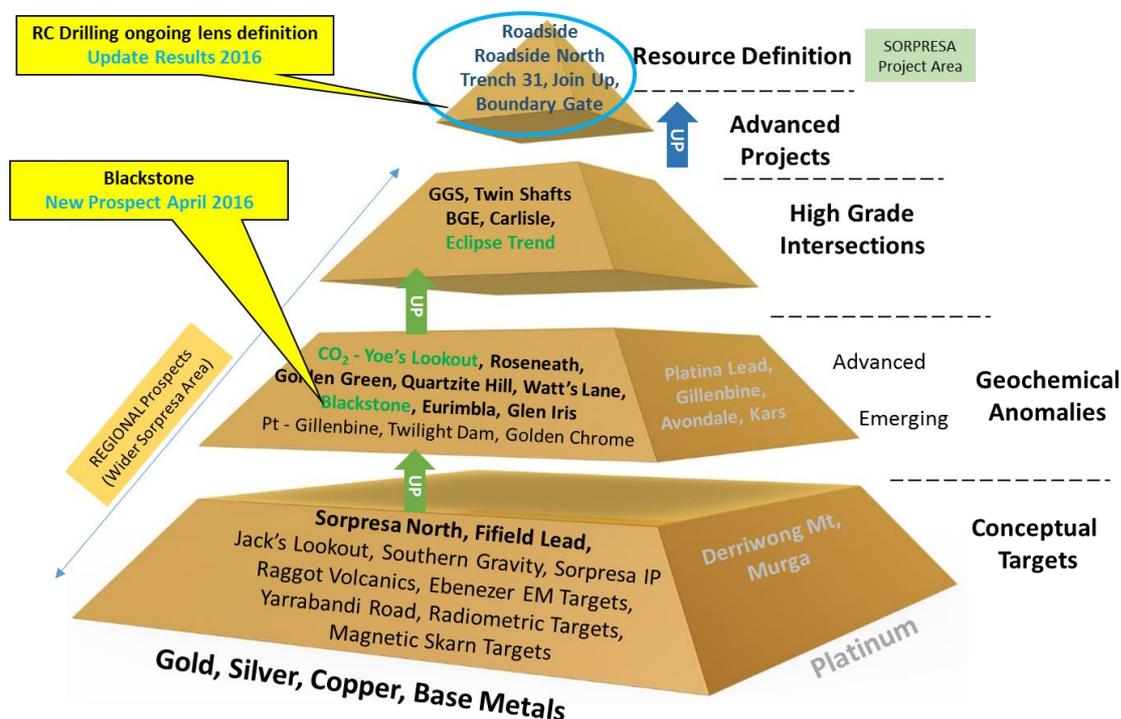
[Benchmarking – AGM 27 November 2015 – Richard Schodde](#)

[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 Porphyry Cu-Au target style)**
5. **Orogenics (Structurally controlled Greenstone and Sediment hosted Au)**- Golden Green, Golden Green South, Twin Shafts, Rabbit Hill, Golden Green East.
6. **Sorpresa Extensions** – Sorpresa North, Quartzite Hill, Fifield Lead, Southern Gravity, Red Mist
7. **Conceptual** – Jack’s Lookout, Gravity Gradient, Raggatt Volcanics, Glen Iris,

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

Table 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
ASX 21 st March 2018 Sorpresa Drilling Results at Roadside Area and Regional Sampling Programs
ASX 7 th April 2016 Presentation to Mines and Money Asia Forum