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# QUARTERLY EXPLORATION AND ACTIVITIES REPORT

(For the period 1<sup>st</sup> January 2013 to 31<sup>st</sup> March 2013)

## Sorpresa Project continues its advance at Fifield

Further progress and additional positive results were achieved in the March Quarter at the Sorpresa Project, Fifield NSW. Drilling activities were focussed predominantly on the Roadside and Boundary Gate locations. The Company continues to receive confirmation on the presence of gold and silver mineralization in the Sorpresa area. The best assays (refer previous ASX reports for context and details) at each of these locations were:

Boundary Gate North	Hole Fi 275 with <b>30m @ 2.39g/t Au</b> from 10m, including <b>2m @ 10.15g/t Au</b>
Boundary Gate North	Hole Fi 287 with 4m @ 21.9g/t Au from 38m, including 2m @ 41.8g/t Au
Roadside	Hole Fi 258 with 28m @ 72g/t silver (Ag) from 20m, including 2m @ 534g/t silver (Ag)
Roadside	Hole Fi 286 with <b>16m @ 110g/t silver(Ag)</b> from 22m, including <b>2m @ 310g/t Ag</b> (Plus An Additional 4m @ 28.3g/t Ag from 42m)

Concurrent drill programs were planned in the quarter and were underway in April at Sorpresa, including:

- The first Diamond Drilling, including the deepest drilling yet conducted (3 locations, 5 holes and approx. 1,300m)
- Approximately 2,500m of RC drilling at 3 locations
- RAB drilling, 60 shallow holes, in 6 lines, south east of Trench 31 location

These programs will have been completed within first half of May. Appendices (1 to 8) attached provide locations and context to this report.

## Highlights for the March Quarter at Sorpresa

- ◆ Solid intersections for both Gold and Silver were recorded within the Sorpresa Project
  - Top 10 ranked assays for drill holes to date for Silver and Gold were seen at Sorpresa
    - Roadside Hole Fi 258 silver hole, and Boundary Gate North gold hole, Fi 287
  - A new gold area with important geology is developing now at Boundary Gate North Location
- **→** The percussion drilling completed and assayed was approx. 2,700m, mainly drilling in the oxide zone
  - There were 24 holes for approx. 1650m in the Boundary Gate location
  - Roadside location had 17 holes for approx. 1,050m
  - All holes were mineralized
- **◆** Coherent cross sections are being constructed from completed drilling of the mineralization at Roadside
  - A north-south strike of 350m has been established, and mineralization appears open in most directions
- → A Geophysical Gravity Survey was conducted, providing input into the Diamond Drilling program Design
  - 350 stations were taken, on close spacings and integrated with previous gravity survey lines
  - The gravity survey assists in determination of important geology and mineralization correlations
- Drill Programs were designed, then commenced in April, including Diamond Drilling, RC and RAB
  - The diamond drilling and RC were focused on Trench 31, Boundary Gate and Roadside locations
  - Scout RAB drilling is planned south east of Trench 31 location

#### The Executive Chairman, John Kaminsky, remarked on the March Quarter performance:

"The March Quarter produced another solid series of results at Sorpresa. This is reflected in some further good assays at the Roadside location and the development of a new location at Boundary Gate North, which is particularly pleasing.

In the previous quarter at the Roadside location we had confirmed that the mineralization has an important relationship to the IP Anomaly there.

The design of the diamond drilling program has taken into account the re-inforced merits seen in different data sets known to us and includes consideration of the IP anomaly, gravity, known structure and geology, leakage geochemistry and the gold and silver mineralized zones.

Deeper drilling at Sorpresa is now required representing the start of the methodical testing that will need to be conducted to help determine the interplay of the mineralization with structure and geology. These diamond drilling holes are the first to be drilled at Sorpresa, so we expect to learn a significant amount from them, but it could take a little while to digest this.

The next stage of RC drilling is designed to tackle the need to build the resource definition at Sorpresa, so this will be part of an ongoing series of programs.

Additionally, scout RAB drilling to the south of Trench 31 is investigating the underlying bedrock below shallow alluvium. This is important, because the RAB drilling can quickly grow the potential scale of adjacent Sorpresa type geology and geochemistry. Deeper drilling would follow any positive results seen in the RAB.

With 3 drill programs overlapping in the second quarter it is definitely an exciting time for the Company and we look forward to updating our progress."

## The Head of Exploration, Colin Plumridge, expanded:

"The Sorpresa gold and silver mineralization in the March quarter has again shown the capacity to reach excellent grades. The subsequent planning process has distilled the various drill programs now being deployed in the second quarter. This work lays a strong foundation for significant knowledge growth at Sorpresa.

The Boundary Gate North location is an important growing gold area at Sorpresa. To date a high grade of **2m @ 41.8g/t Au** has been seen, complimenting other recent results at that location. This emerging area has influenced the positioning of the diamond drilling to the south east.

We are looking to understand more on the geology and structure that is present at Sorpresa with some of the deeper diamond drill holes designed to be in excess of 300m. The first diamond hole drilled in the Trench 31 location looks extremely interesting, well mineralized and we are expecting to see common features across each of the diamond holes.

In aggregate the combination of drilling programs, but particularly the diamond program, should provide further important insight and context into the gold and silver mineralization, at Sorpresa."

## **Key Comments for the last Quarter of Percussion Drilling at Sorpresa**

In the previous quarter the RC drilling at Roadside gave a solid preliminary test of the IP response in this location, where the chargeability values trend closer to surface. A clear basis for chargeability was observed and the mineralization connection to the IP anomaly now appears well established. Deeper diamond drilling now planned will further investigate this association in the next quarter.

Observing where the gold and silver mineralization resides exactly within the IP anomaly on a wider scale is still required, given the large size of the anomaly. Also, the IP survey area did not exhaustively cover the prospective target area for the mineralization at Sorpresa.

The developing cross sections on the mineralization at Sorpresa are coherent with substantial widths, nice shape and good accessibility indicated. These shapes and orientation are in harmony with the 3D geological model, as described in recent presentations by the Company.

Drilling was conducted across a range of locations, in the quarter, with depths of drilling generally maintained to approximately  $60m\sim80m$ . In instances, mineralization was not adequately tested at these shallow depths. Two locations within Sorpresa were a major focus for the work.

#### 1. The Roadside Location connecting to Roadside North

Percussion holes confirmed the Au and Ag mineralization at Roadside has a continuous strike in excess of 350m. The mineralization is open in many directions and in general, this area remains silver dominant with associated gold credits.

13 holes were assayed in the period that achieved a main intersection value of at least 300 gram-meters Ag or better, with a best intersection achieved in **hole Fi 258 with 28m @ 72g/t Ag from 20m, including 2m @ 534g/t Ag.** This hole is in the top 10 silver mineralized holes at Sorpresa.

A number of holes finished in or close to the bottom of the mineralization, so there is a need to be stepping out, particularly to recognizing the inferred dip to the east, with deeper drilling. This will occur in early May.

(A North-South cross-section is shown and labeled with grades and intersections in **Appendix 3**).

#### 2. Boundary Gate North Location - (New Gold Mineralized Location South of the Roadside Area)

Boundary Gate North is located at an observed division between the silver dominant area at Roadside and the more dominant gold position emerging to the south. This intermediate area has been known for some time to be geologically complex.

A total of 12 holes were completed at this new location, drilled to depths of approx. 60m~80m. These holes have now filled an important gap along the main Sorpresa Strike line, and provide excellent potential to grow the Au mineralization.

Gold was encountered in new large intersections, particularly hole Fi 275, which was **gold mineralized for approx**. **60m, including 30m @ 2.39g/t Au, from 10m,** which included a high grade of **2m @ 10.15g/t Au and** hole Fi 287 with **4m @ 21.9g/t Au** from 38m, including **2m @ 41.8g/t Au**.

## **Geology Note Boundary Gate North**

The recent drilling has now confirmed that this location contains important cross cutting structures, which appear related spatially to the gold mineralized zones. The geology noted in some of the drilling included gossanous zones, alteration and likely intrusive features.

The complex geological structure identified at Boundary Gate North is new and important. The gold mineralization uses the fault channels for access to the Sorpresa gold receptive horizon ("black silica" – silicified carbonaceous sediments), whereby gold is precipitated. A part of the Company developed geological model operating for gold is shown in more detail in **Appendix 5**.

This gold is not associated with quartz, but the silica manifests as chalcedony, that replaces the carbonaceous sediments, giving rise to the "black silica". The gold is fine (typically <50um) and well dispersed in the black silica host.

Later faulting results in brittle fractures that are filled with more chalcedony and a higher sulphide content. This is well reflected at the Roadside area, where the strong silver is in association with the sulphide event.

Part of the objective of the diamond drilling program is to witness aspects of the geology and improve this understanding by viewing the geological core.

## Immediate Drilling Programs at Fifield for the Next Quarter

Discovery programs at various locations in the wider prospective 8km<sup>2</sup> district, including Sorpresa, will continue during 2013. The delineation growth on the known Sorpresa mineralization, helping establish resource definitions in the various locations is also a priority.

Better characterization of the mineralization is also required, including mineralogy and metallurgy. In the Company's view the work to date at Sorpresa provides a robust backdrop to these new programs.

The drilling programs in April have the capacity to make a significant contribution to the Sorpresa project area. A mixture of drilling methods, including Diamond, RC and RAB is being used.

## Diamond Drilling Program - 5 holes in 3 locations for approx.1,300m at Sorpresa

The first rock core seen of the Sorpresa mineralization styles and the deepest drilling to date was underway in April.

The first hole, Dia4 (Fi325) was finished at the Trench 31 location, and was drilled to 152m depth. Based on preliminary core inspection in the field, the hole has intersected mineralization in much of the core length, but it should be recognized that this is not a true width, as drilling is close to down dip.

The core provides visually important and exciting geology, with abundant brecciation, shearing, pervasive silica, sulphides and graphite. Intervals for assay await a more detailed examination of the core for structure, geology and metallurgy perspectives.

The diamond drilling at Boundary Gate is located in the down dip position of the mineralised horizon. This deeper component (greater than 300m for two holes) of the diamond drilling program is designed to intersect in part, the mineralized horizon. The program will assist in providing better insight to the highly elevated chargeability and resistivity associated with the IP survey.

This first deeper drilling program will not provide an exhaustive test of the IP at this location, due to uncertainty in the strike and dip of this zone. Nor does it resolve the larger IP anomaly noted elsewhere at Sorpresa. However, this next step is important and follows the recent successes seen at Roadside and Boundary Gate areas in what is anticipated to be a systematic assessment of the connection of the known mineralization, to underlying structure and geophysics at Sorpresa.

It is expected that this initial program should provide an important advancement on the bigger picture at Sorpresa, and the wider Fifield district.

The Diamond Drilling program being conducted is shown below and is displayed in **Appendix 6**. (In addition, the Company released an ASX update on 26<sup>th</sup> April, available as a hyperlink in this report).

Planned Diamond Hole Program Sorpresa Project								
Planned Diamond Hole	North	East	Depth	Dip	Azimuth	Location		
Dia1	6368733	543105	250	-50	334	Boundary Gate		
Dia2	6368505	543175	300	-60	300	Boundary Gate		
Dia3	6369225	543165	150	-50	180	Roadside		
Dia4	6368266	542483	150	-50	165	Trench 31		
Dia5*	6368450	543295	450	-60	270	Boundary Gate		

<sup>\*</sup> note this hole is subject to change, as information is gathered on precursor holes, other holes may also vary according to conditions

It is anticipated drilling will be completed early May, then core examination will likely take some extended time to enhance the understanding of the structure, geology and mineralization seen, prior to assay.

## RAB Drilling

RAB drilling commenced in April to the south east of the known gold mineralized position at Trench 31 location, within the Sorpresa project area. Drilling is to shallow depths ( $6\sim12$ m), approximately 60 holes, using 25m to 50m spacings, on 6 traverse lines.

The objective of the RAB drill program is to penetrate the alluvium cover in this location and test the underlying bedrock potential for gold. This is the first extensive prospecting for gold under the alluvium cover sequence and begins to scope the recent Gravity Survey extensions in this location.

Much of the highly prospective Sorpresa Project, yet to be explored (8km²), is hidden under shallow alluvium, so the RAB drilling lays the foundation for subsequent deeper RC drilling.

## RC Drilling

A proposed drill program of approximately 2,500m was designed for commencement in April/May, with typical depths **ranging 80m~150m per hole** in step out delineation drilling extensions and further scout holes in some cases.

Locations include Roadside, Boundary Gate and Trench 31 areas, shown in the appendices. It is possible the drilling may be extended beyond the original estimated program metres.

## **Sorpresa Information Thread**

The Company provides a **hyperlink thread** of the Sorpresa Gold Mineralization area of recent ASX and video materials as follows. The thread provides important views previously expressed, that will assist the reader with understanding the Company's technical consideration and outlook for the work it is undertaking:

- 1. ASX April 26th 2013 Mineralized Zones Intersected in Diamond Drilling
- 2. ASX April 12th 2013 RAB Drilling program Commences at Sorpresa
- 3. ASX April 5th 2013 Diamond Drilling and RC Drilling Commences at Sorpresa Gold Project
- 4. ASX March 27th 2013 Additional Assays at Sorpresa Gold Project
- 5. ASX March 13th 2013 Sorpresa Gravity Geophysical Survey Commences
- 6. ASX February 19th 2013 Continuous 350m Section Established at Roadside Area & New Gold Zone Intersected
- 7. ASX January 31st 2013 Quarterly Exploration Activities December 2012
- 8. ASX December 18th 2012 Sorpresa Project Produces More Encouraging Results
- 9. ASX November 22<sup>nd</sup> 2012 Presentation for 2012 AGM
- 10. ASX November 5th 2012 Best Silver Grades to Date Seen at Sorpresa Project Area
- 11. ASX October 10th 2012 Highest Gold and Silver Grades seen to date at Sorpresa Project
- 12. ASX September 17th 2012 First Gold Sections Created at Sorpresa Project New Assay Results
- 13. ASX August 31st 2012 New Gold in Soil Zones Located 4km South of Sorpresa
- 14. ASX July 31st 2012 Quarterly Exploration Activities June 2012
- 15. ASX July 26th 2012 Successful Intersections at Sorpresa Gold Project
- 16. ASX June 13th 2012 High Grade Gold Intersection Sorpresa Project Fifield NSW
- 17. ASX May 28th 2012 Sorpresa Gold Project has Increased Potential at Depth

A video link is provided to a 3D model of the IP Anomaly at Sorpresa (click here).

- 18. ASX April 30th 2012 Quarterly Exploration Activities March 2012
- 19. ASX January 31st 2012 (Quarterly Exploration Activities December 2011)
- 20. A video link is provided <u>January 2012 Sorpresa Gold Project Trench 31 Area Review Video</u>
- 21. ASX 28th November 2011 AGM Exploration Presentation Including Key Summary Assay results of Sorpresa
- 22. Rimfire Website Summary Brief history of Sorpresa Mineralisation discovery and style (to September 2011)

## 23. ASX Assays Confirm Significant Gold and Silver at Sorpresa Project 6th July 2011

#### COMMODITY PRICING FOR THE MARCH 2013 QUARTER

The prices of Gold, Platinum and Silver all had notable price corrections in the quarter (www.kitco.com).





As at 27<sup>th</sup> April 2013, the prices for metals in New York based on closing Ask in USD were as follows:

Gold	\$1,464/oz
Platinum	\$1,484/oz
Silver	\$24/oz

## **CORPORATE ACTIVITIES**

## **Tenement Position**

The tenement position remained unchanged at the end of the period.

## **Cash, Facilities and Investments**

As at 31<sup>st</sup> March 2013 the Company had approximately \$2.027 million in cash.

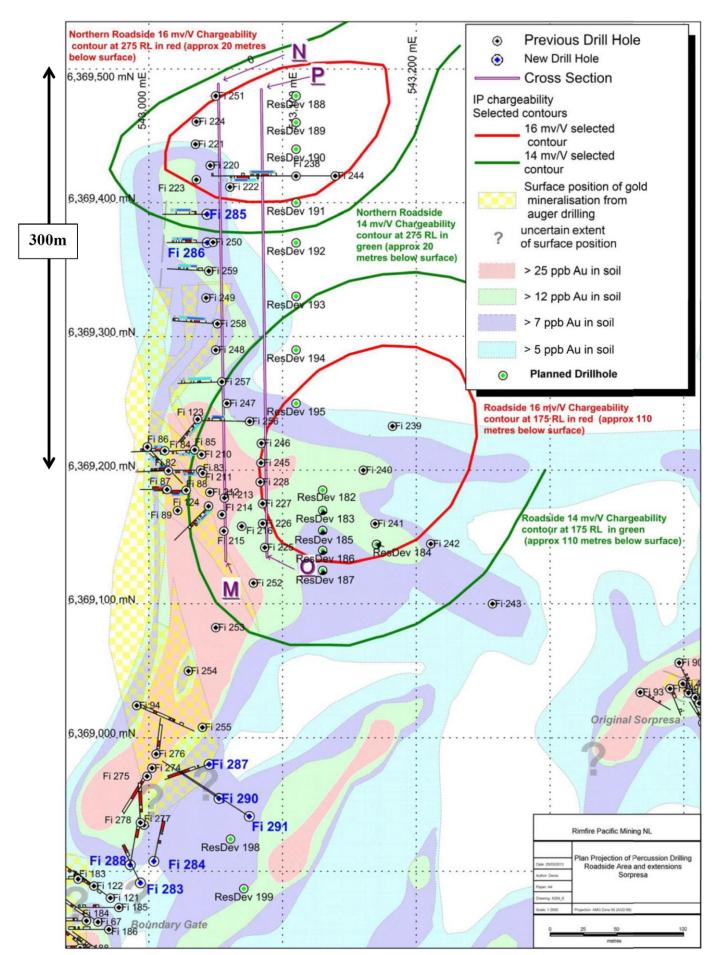
## **Issued Capital**

The issued capital remained unchanged and at the close of business on 31st March 2013 there were 610,529,976 ordinary shares.

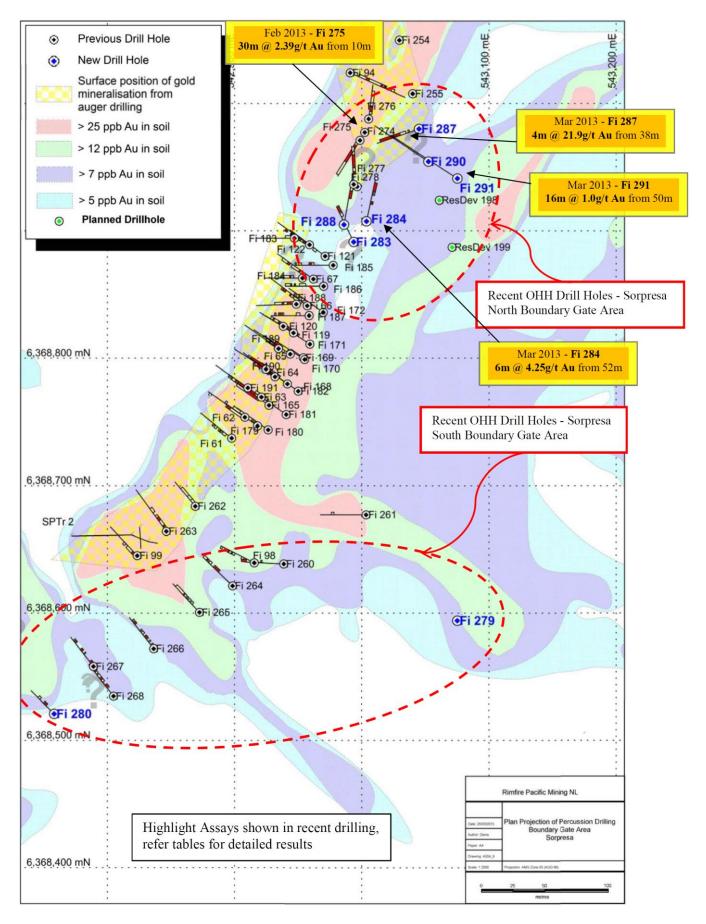
JOHN KAMINSKY Executive Chairman

The information in the report to which this statement is attached that relates to Exploration Results is compiled by Mr Colin Plumridge, who is a Member of The Australian Institute of Mining and Metallurgy, with over 40 years experience in the mineral exploration and mining industry. Mr Plumridge is employed by Plumridge & Associates Pty. Ltd. and is a consulting geologist to the Company. He has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which is being undertaken to qualify as a Competent Person as defined in the 2004 edition of the "Australian Code for Reporting of Mineral Resources and Ore reserves". Mr Plumridge consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

APPENDIX 1
Plan View RC Drilling Collar Hole Locations at "Roadside Area" Sorpresa Project Area

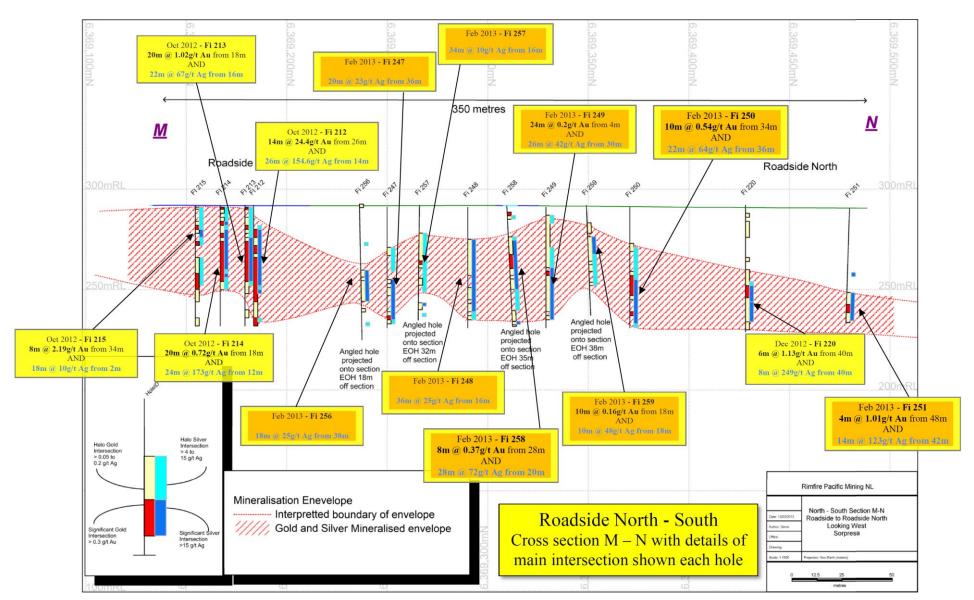


APPENDIX 2
Plan View RC Drilling Collar Hole Locations at "Boundary Gate" Sorpresa Project Area

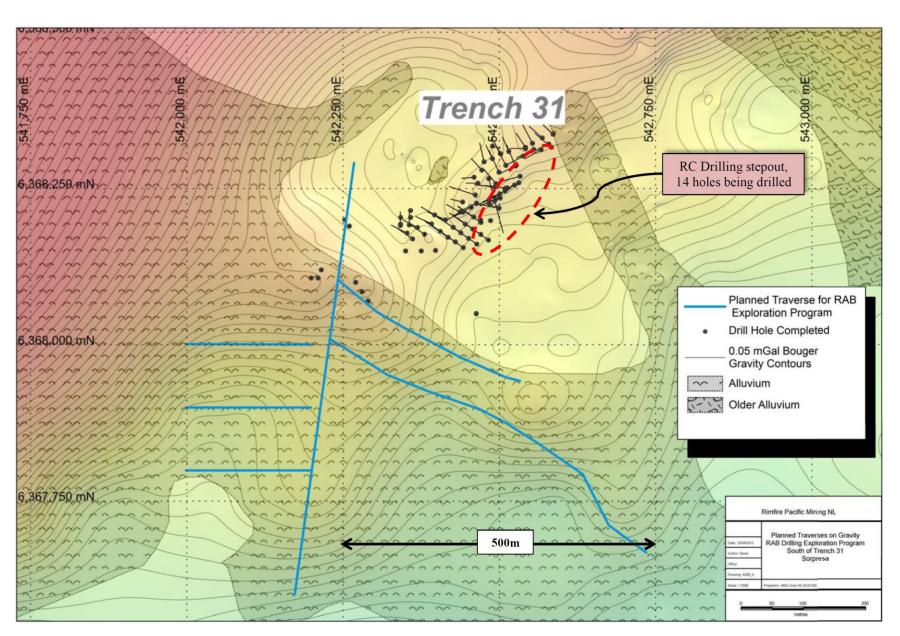


APPENDIX 3

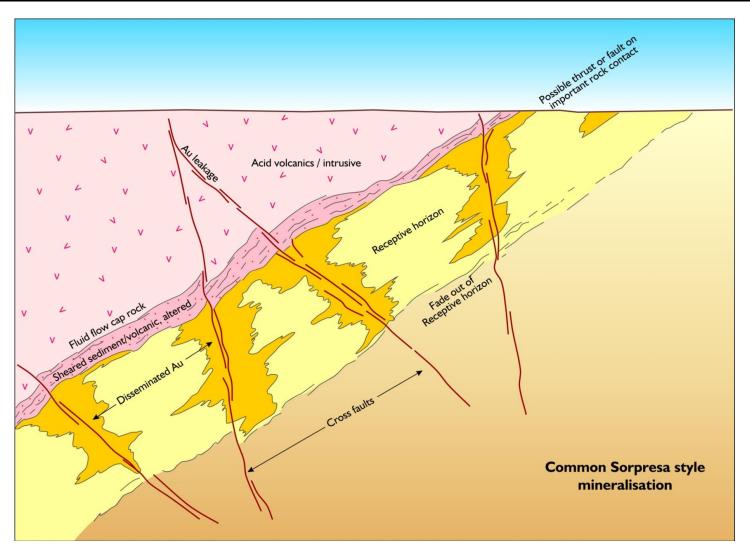
RC Drilling 350m Section North - South at "Roadside Location" Sorpresa Project Area



APPENDIX 4
Plan View RAB Drilling Lines and RC Drilling Locations at "Trench 31" Sorpresa Project Area

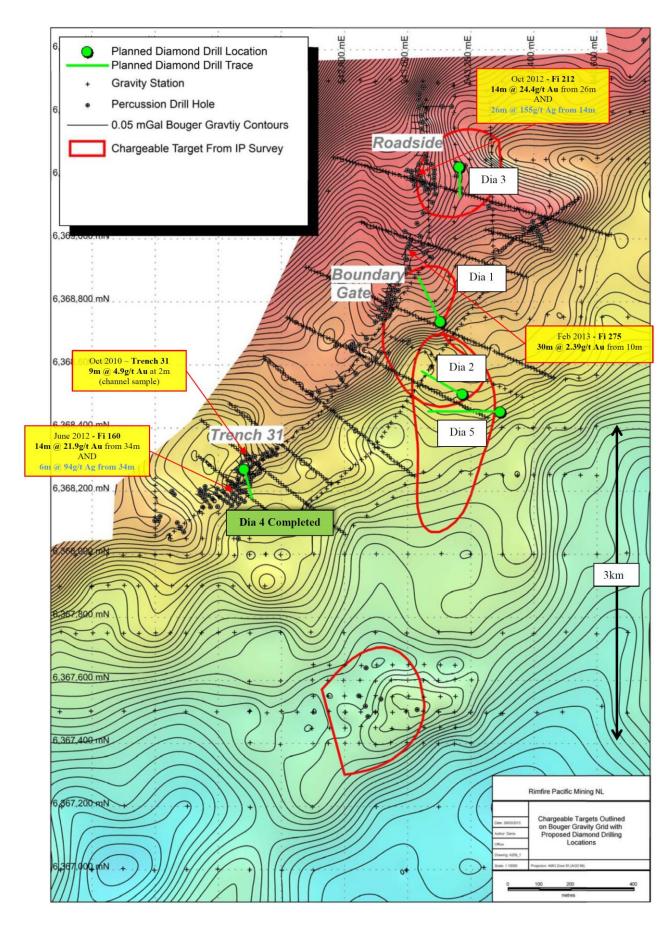


<u>Appendix 5</u> Geological Model Conceptual Cross Section for Gold Mineralization encountered at Sorpresa – The Common Style Seen



Where the mineralization breaks surface, and has been sampled by surface geochemistry, the subtle gold signature may be more easily located (e.g. Trench 31 Area Discovery). The "Capping Rock" may reduce the surface gold signature to a "leakage anomaly" making surface discovery less effective, and the surface gold signature distal to the source mineralization.

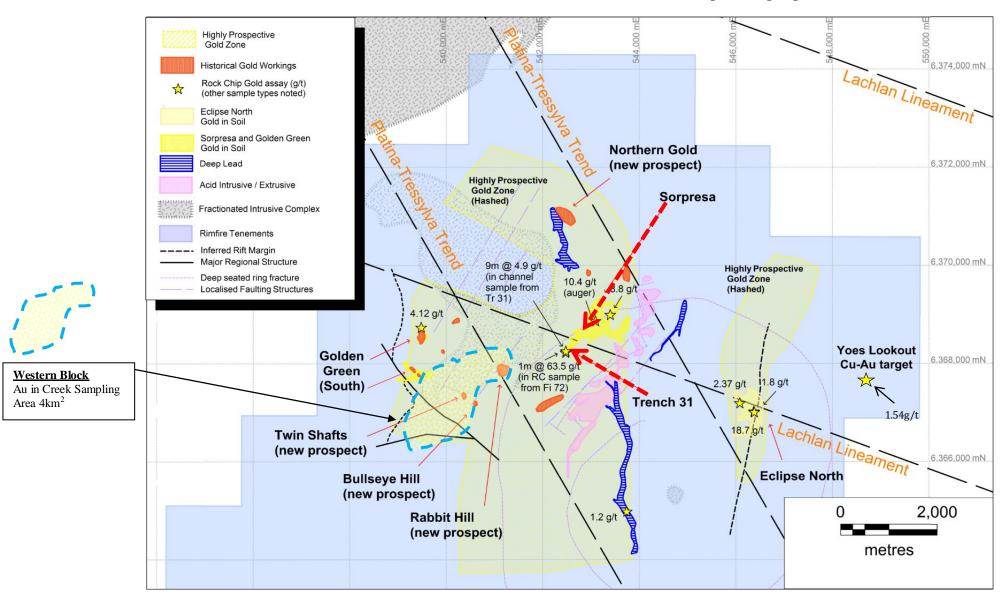
APPENDIX 6
Plan View Proposed Diamond Drilling Locations at Sorpresa Project Area



APPENDIX 7

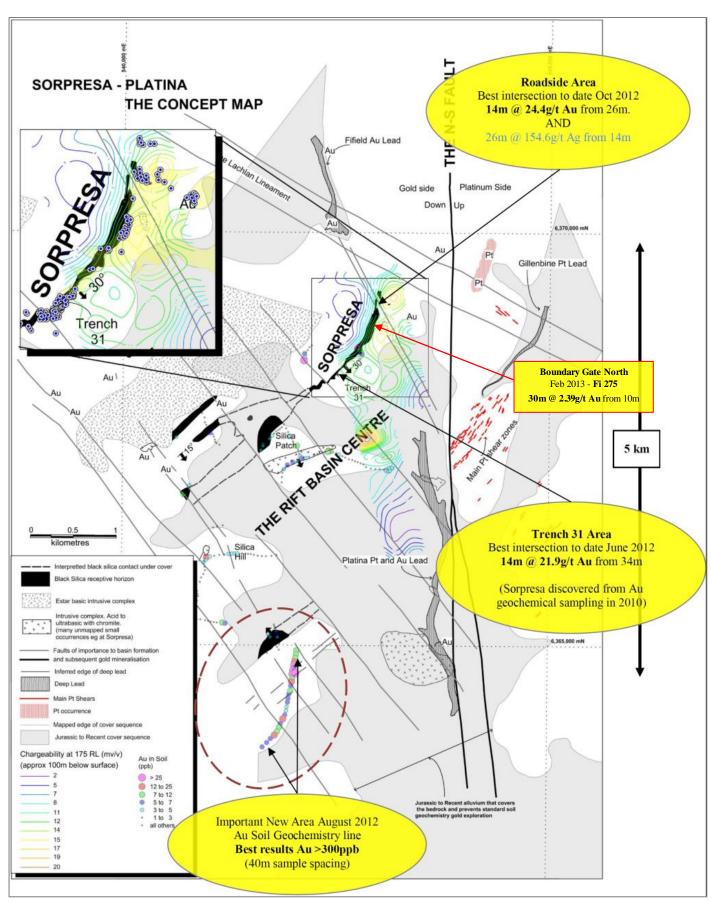
The Main Strike Sorpresa Area Anomalous Gold Zone and Yoes Lookout

- within the wider Fifield Gold Observations "Some" New Prospects Highlighted



<u>Appendix 8</u> <u>Sorpresa District Geological Concept Model – Syncline Rift Basin in Plan View</u>

(Note that the IP survey chargeable response at approx. 100 m depth is overlaid)



# Appendix 9 Project Locations at Fifield NSW within Lachlan-Cadia Lineament and Metal Zoning Interpretations at Rimfire Fifield Project Areas

