



20<sup>th</sup> September 2013  
Company Announcements Platform  
Australian Securities Exchange

## **Drilling Program completed within the Sorpresa Project, Fifield NSW** **- Assay results to follow shortly at Roadside area**

Rimfire Pacific Mining NL (ASX:RIM) is pleased to advise a step-out 9 hole Reverse Circulation (RC) Drilling campaign for 1,335m has been successfully completed at the Company's emerging Roadside target, located in the northern portion of the greater Sorpresa gold and silver Project area.

### **Highlights and Background**

- RC Drilling targeted interpreted strike, dip and plunge extensions to previously defined mineralization such as:
  - **16m @ 2.67g/t Au and 113g/t Ag** from 68m (Fi 313 – June 2013).
  - **10m @ 1.01g/t Au and 535g/t Ag** from 70m (Fi 241 – Dec 2012).
- Drill targeting was assisted by structural and stratigraphic information gained from recently reported diamond drill hole Fi 328 DDH which intersected **7m @ 4.24g/t Au** from 87m, and **20m @ 97.6g/t Ag** from 80m, and indicated a gently East dipping (20 degree) zone of sulphide mineralization. This easterly dip has been confirmed in this RC program.
- The drilling aimed to investigate a coincident gravity high anomaly and soil geochemical anomaly, elevated in key pathfinder elements associated with the known mineralization. The gravity anomaly is interpreted to represent a NW striking fault / shear zone position and silicification likely to represent a hydrothermal fluid conduit.
- Drilling also aimed to investigate any possible link between the mineralization intersected in the diamond core, to gold mineralization approximately 250m away at the "Original Sorpresa" prospect (**12m @ 1.2g/t Au** from 2m in Fi 205 – Sept 2012). (Appendix 1).
- Field Portable XRF analysis and geological observations suggest all holes intersected the projected target stratigraphy, with variable thicknesses.
- Drilling was completed incident free, on time and on budget with all samples now delivered to the laboratory. Results with interpretation are anticipated during the next few weeks.



Rimfire's Executive Chairman John Kaminsky commented:

"The drilling is designed to confirm the style, geometry and continuity of mineralization intersected in previous drilling along strike and down dip (Appendix 2). The holes ranged from 100m to 175m deep with the deeper holes targeting nominal 40m x 40m centers to explore the down dip potential.

The projected targets appear to have been intersected as planned in all holes with excellent predictability, although thickness is variable. We now await the assay results.

Concurrent Auger drilling to the east and south of the RC drilling remains ongoing to assist the definition of 'leakage' pathfinder anomalism. This will assist future RC drill targeting.

At the same time, the Company is heading for a strong uptake in its Share Purchase Plan (SPP), which is currently running in excess of \$1.2m. The combined funding provided by this SPP and the recent placement (\$2.04m) will see the Company able to implement its next stage programs with confidence.

This has also enabled us to invest in a few areas, including skills, infrastructure and analysis tools, to enhance our ability to deal with the growing needs of the project.”

*An example of typical mineralization comprising intense silicification, brecciation with carbonate and chalcedonic quartz infill containing base metal sulphides (Sphalerite, Galena, Pyrite, Arsenopyrite and trace Chalcopyrite).*



See **Appendices** for details of the current drill locations, and recently completed RC drill holes shown on plan.

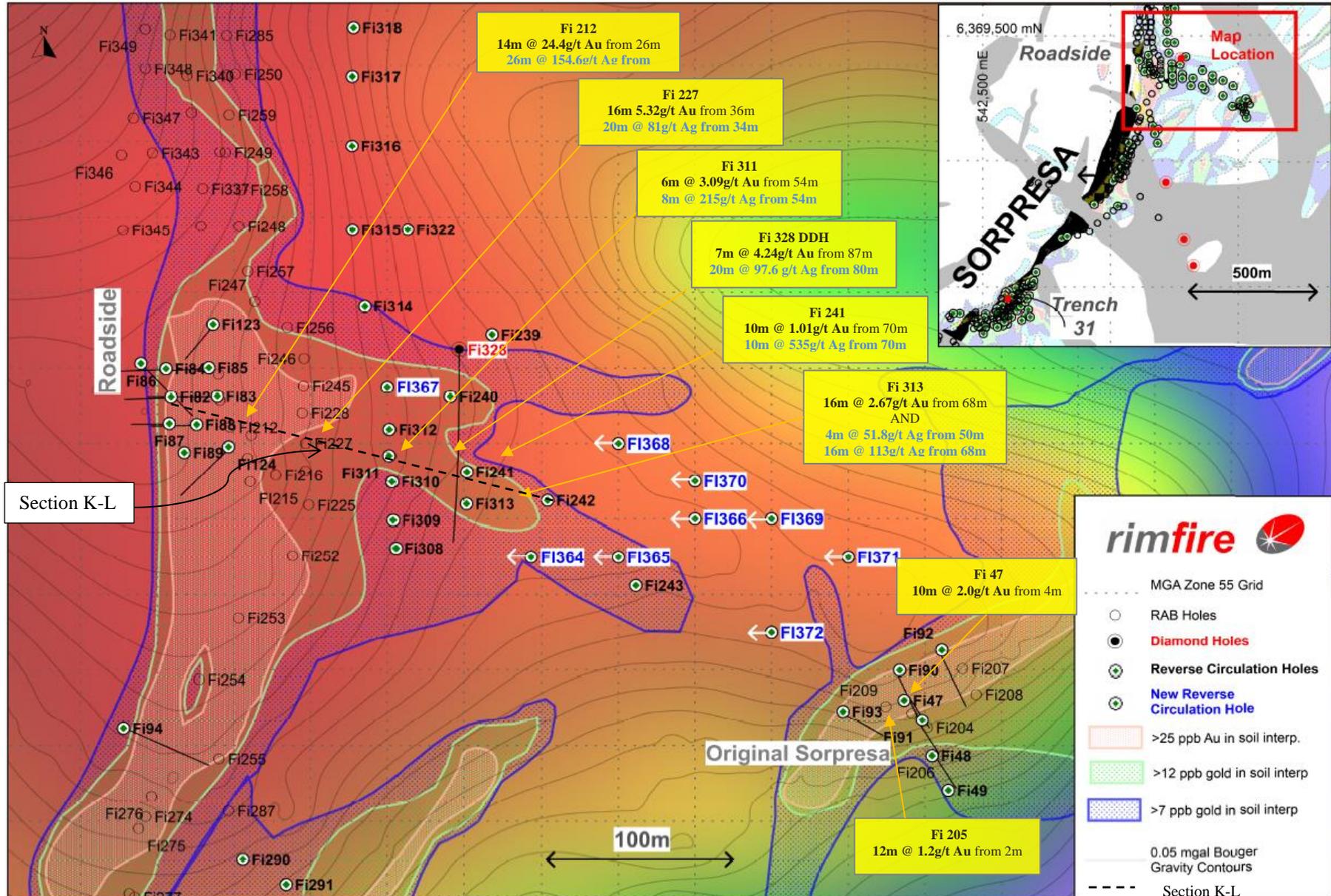
A handwritten signature in black ink, appearing to read 'J. Kaminsky', written in a cursive style. The signature is positioned above a horizontal line.

**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 mineralization and type of deposit under consideration and to the activity, which is being undertaken to qualify as Competent Persons 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

**Sorpresa Project at Roadside area, showing previous drilling and collar locations of most recently completed RC drilling  
(On Bouguer Gravity image with Gold in soil anomalism illustrating the coincidence of soil geochemistry and gravity)**



## Appendix 2

### Roadside West to East Cross Section (looking north) of current significant intersections

