



21<sup>st</sup> February 2012

Company Announcement Office  
Australian Securities Exchange

## **Significant Gold Anomalism Observed at Yoes Lookout – Fifield NSW** **- soil sampling indicates a possible new discovery within important contextual geology**

As indicated in the December Quarterly Activities Report, the Company has raised the exploration priority for gold at the Yoes Lookout prospect (EA 11), which is located 5km due east of the Sorpresa Gold project area at Fifield NSW. **Based on the coherent nature of a significant gold (Au) in soil anomaly<sup>1</sup> now identified, which remains open to the south, it is believed that a new gold mineralised area has been discovered, although the assessment is still at a very early stage.**

### **Current Exploration Summary for Yoes Lookout**

- **Soil sampling assay results for Au give elevations in the range of 6ppb to 100ppb, with a peak value of 171ppb**
  - An anomaly of 750m length x 400m width using a 6ppb Au value is seen and open to the south
  - Within this larger anomaly, there is an area of **500m length x 350m width using a 13ppb Au value**
  - Soil sample lines were spaced between 100m and 200m apart and sample intervals at 50m spacing
  - **A single rock chip sample was taken within the soil anomalism area and assayed 1.54g/t Au**
  - Additional infill soil lines are currently underway
- **Wider geological mapping and interpretation** of the area has provided an encouraging context to the Au anomalism
  - The geology at Yoes Lookout differs to that of Sorpresa
    - Upper Ordovician volcanics appear to be the dominant underlying host rock style
    - **The setting is closer to the porphyry copper-gold style geology that includes North Parkes**
  - Magnetite veining in altered andesite has been identified
  - A shear zone appears to be present, along the strike of the main corridor of the Au in soil anomaly
  - A negative topographic expression of the main gold zone is evident
- Detailed **ground magnetic surveying** has been undertaken on the Au in soil anomaly
- Approximately **90 auger drilling holes** have been completed within the central corridor of the Au in Soil anomaly
  - 8 auger lines at approx. 100m intervals with 5m hole spacings were drilled into shallow bedrock (<5m)
  - **A probable mineralised corridor (shear zone) has been identified and samples await Au assay**

#### **The Head of Exploration, Colin Plumridge, remarked:**

“Yoes Lookout is an excellent gold in soil anomaly that is progressing quickly. The level of gold anomalism at 6ppb to 100ppb Au is significant and comparable to anything we have seen at Fifield to date, including Sorpresa. Evaluation will continue via infill soil sampling, bedrock auger drilling, ground magnetics and geological appraisal, with RC drilling to follow. The work is still at an early stage, but we are definitely encouraged.

The geology at Yoes Lookout differs from the Sorpresa Au area to the west, in that the rocks are part of the porphyry copper-gold style of geology that includes North Parkes<sup>2</sup>.

The Fifield area continues to develop its gold credentials. The turning point was the RC drilling that confirmed discovery of disseminated gold at Sorpresa in 2011, elevating the importance of the gold geochemistry and trench work done in 2010. We can no longer portray gold as a curiosity associated with the stereo typed platinum geology at Fifield, gold exploration in its own right is now to be taken very seriously.

Accordingly gold exploration is being carried out both in the immediate Sorpresa area and in the surrounding district. Yoes Lookout is a perfect example of why we need to progress discovery exploration in parallel with assessment and delineation work at Sorpresa.”

<sup>1</sup> Appendix 1 – Yoes Lookout Au in Soil results in plan view

<sup>2</sup> North Parkes mine is operated by Riotinto and located approx. 50km SE of Yoes Lookout – Refer Appendix 3

**The Executive Chairman, John Kaminsky, commented:**

“There has been no prior recognition by other modern day explorers of the disseminated gold potential at Fifield. In each instance we have made a greenfields gold mineralization discovery. These gold anomalies have remained undiscovered, masked by soil and look deceptively subdued. It is expected that numerous new disseminated gold anomalies will be found using our successfully applied exploration techniques on an ongoing basis.

The delineation of the Sorpresa mineralization whilst very important, needs to be balanced against the weighted probability of new discoveries being made in the Fifield area. Yoes Lookout vindicates this approach and whilst it is still at the early exploration stage we could not have a better start.

Work continues at Sorpresa, but weather conditions have hindered large vehicle movements. The IP Geophysical survey has been completed and the 3D modeling has begun. We are looking for important clues to any deeper geological significance underlying the Sorpresa mineralization. It is expected we will have preliminary conclusions over the next few weeks.

In the meantime, as the ground dries out near Sorpresa, we will be commencing some deeper reconnaissance drilling, to test for the important Black Silica gold receptive horizon as it extends away from the Trench 31 location at Sorpresa. ”

**Sorpresa Gold Project Review - New Video**

The Company provides a review of the Sorpresa Gold Mineralisation area, with a particular focus around the Trench 31 gold lens being established at the south end of Sorpresa and the important Black Silica gold receptive horizon now identified which forms the basis for the conceptual exploration target announced previously at Sorpresa. The video is complimentary to previous ASX releases in November 2011 (AGM 2011 Presentation at link <http://www.rimfire.com.au/PDF/1051660-AGM-2011-Presentation.pdf> ) and January 2012 ([Quarterly Exploration Activities December 2011](#)).

**The video can be seen by activating the hyperlink:** [Sorpresa Gold Project –Tr31 Area Review Video - January 2012](#)

**Notes on the Unique Geological Position of the Fifield Project Area**

The district wide exploration work continues to find mineralisation zoning of various styles at Fifield. The eastern areas, which includes Yoes Lookout has underlying Silurian-Devonian aged rocks which have been eroded to expose the underlying Upper Ordovician porphyry copper-gold style rocks.

The western gold areas at Fifield have Girilambone age rocks below the Silurian-Devonian rocks. Accordingly, it is postulated that somewhere below the Sorpresa area, there is a massive fault contact between the Girilambone rocks and the Upper Ordovician porphyry copper-gold style rocks.

This important geological contact below Sorpresa is also cut by the Lachlan Lineament structure and is intruded by many and varied intrusives. It is also the site of a deep rift with highly carbonaceous rocks being deposited simultaneously with rhyodacite and basic volcanics.

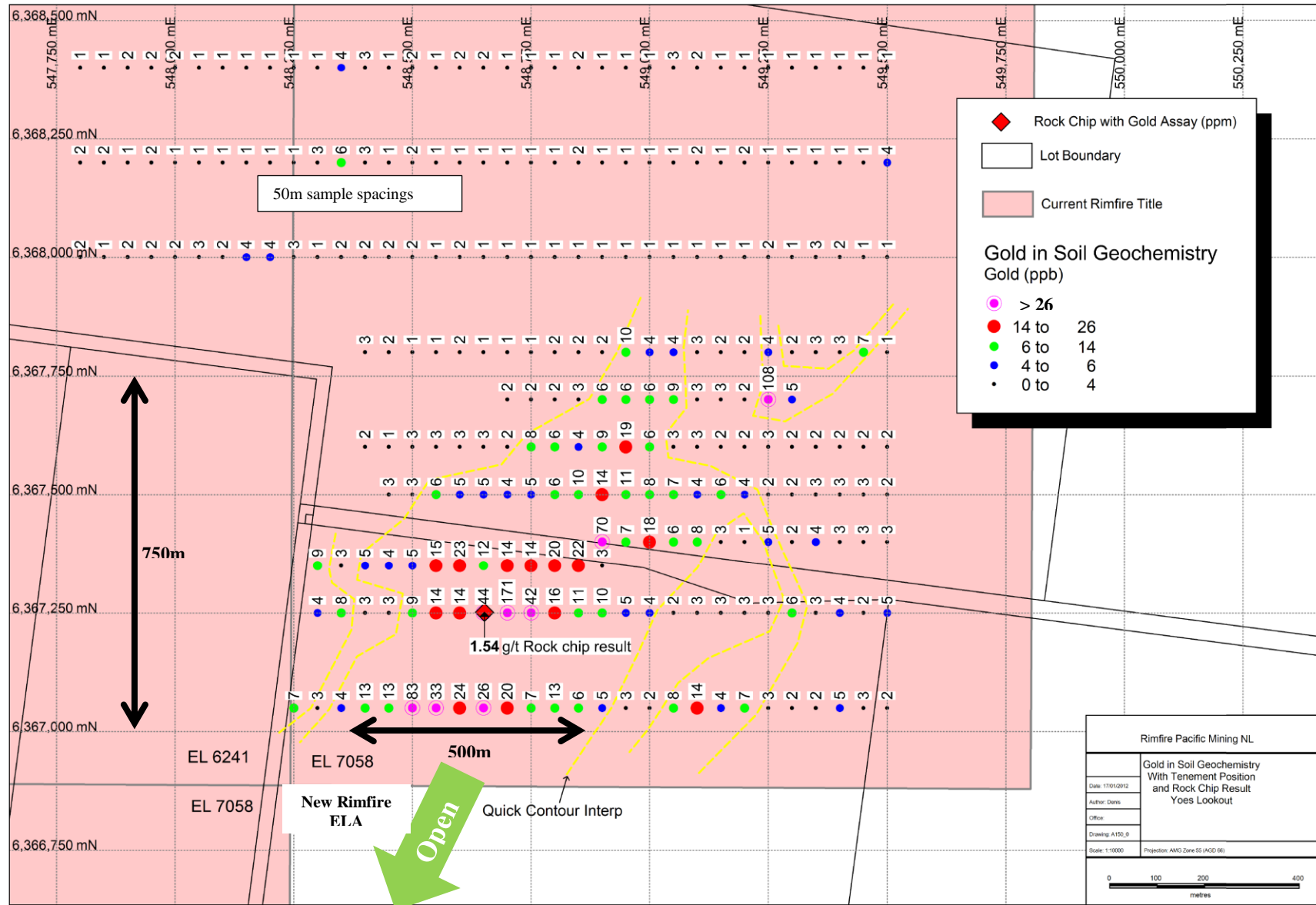
Disseminated gold deposits appear evidenced to occur in this dynamic geological setting within the Fifield district, and this has gone largely unrecognised prior to the Sorpresa gold discovery by Rimfire.



**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 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.*

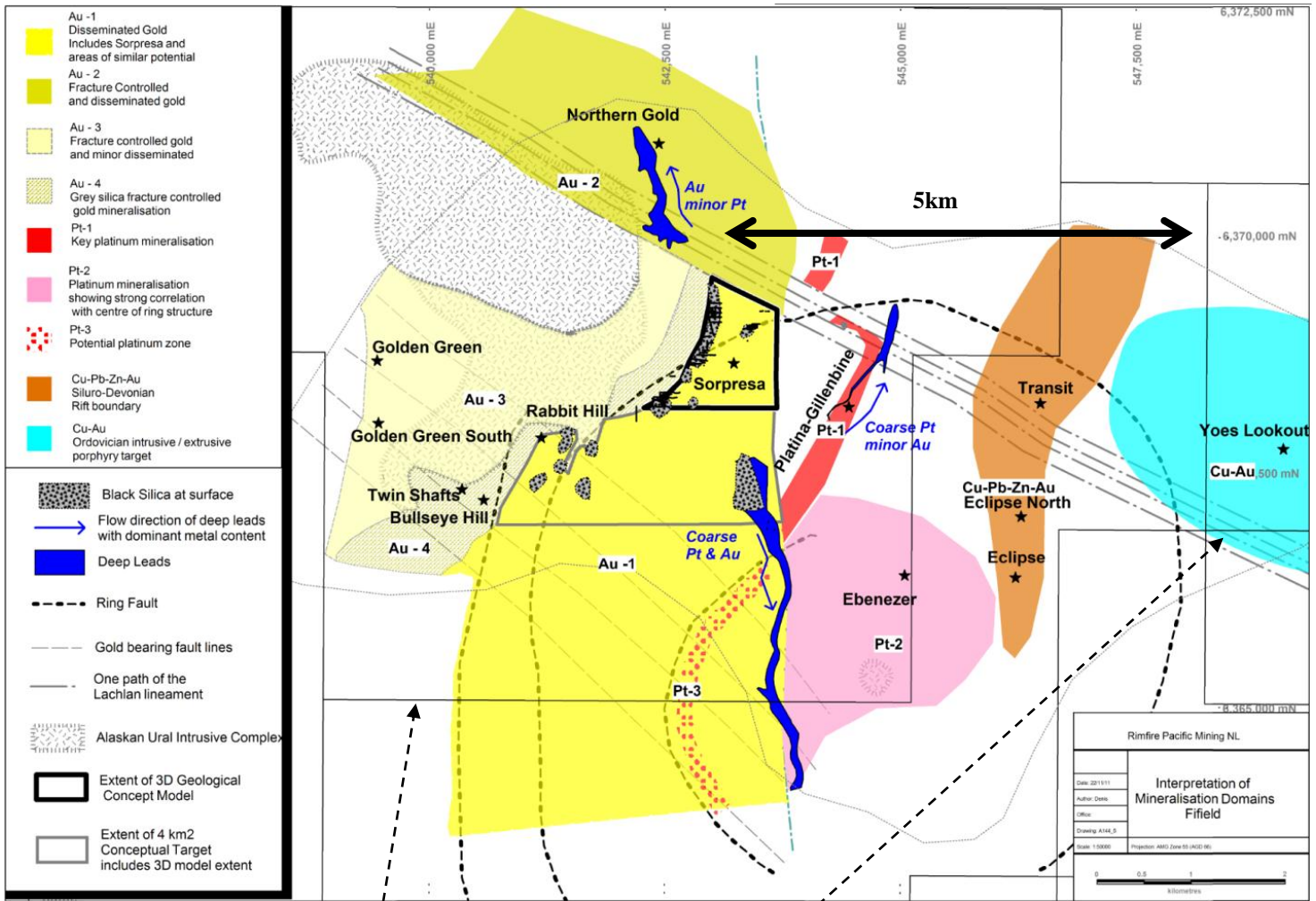
**Appendix 1**  
**Yoes Lookout Gold in Soil Anomaly – Plan View of Values in ppb Au<sup>3</sup>**



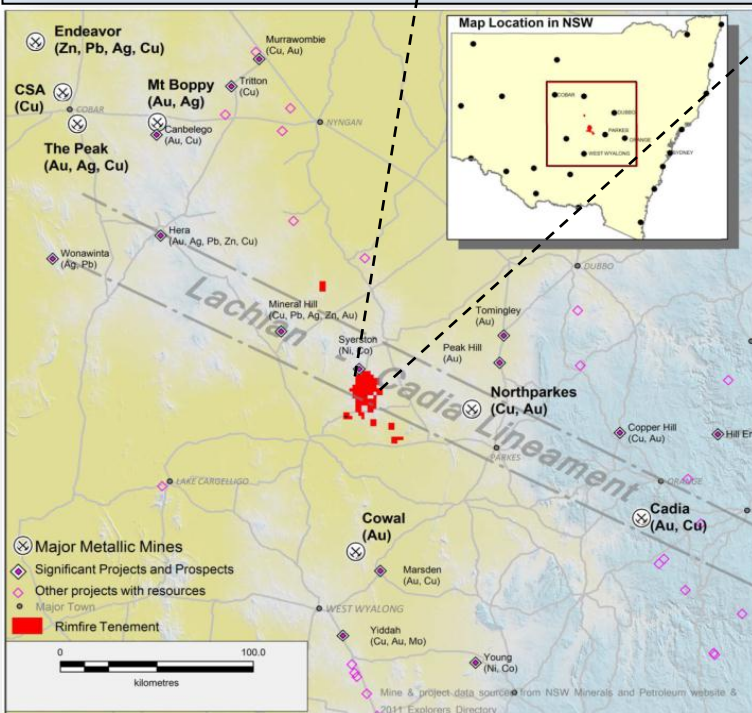
<sup>3</sup> Au assays in parts per billion (ppb) using fire assay method Au-TL44, 50g charge size, ICP-MS finish, detection limit 1ppb Au

## Appendix 2

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



#### Regional Position for Fifield Mineralisation



*Rimfire tenements shown in red (at left) within the Lachlan-Cadia Lineament.*

*Metal zoning interpreted (above) within key Rimfire Tenements at Fifield, making this an exciting location for discoveries.*

*Note the Black Silica areas (above) mapped as part of the Au receptive horizon inferred*

**APPENDIX 3**

**EL5534 The Sorpresa Area Anomalous Gold Zone – within the wider Fifield Gold Observations “Some” New Prospects Highlighted**

