



Thursday, 11<sup>th</sup> December 2014  
Company Announcement Office  
Australian Securities Exchange

## **Carlisle RC Drilling to Commence 16<sup>th</sup> December** **Program to target previously reported high grade rock chips, up to 23g/t gold**

Rimfire Pacific Mining NL (ASX:RIM) ("Rimfire" or "The Company") is pleased to report the planned commencement of a 7 hole, Reverse Circulation (RC) drilling program for approximately 500m at the regional Carlisle Prospect located ~6.8km SW of the Sorpresa system, at Fifield NSW, (Figures 1-5).

This first pass drill campaign is targeting high grade rock chips up to 23g/t gold, within an arsenic-gold geochemical anomaly of some 350m strike length which remains open to the south, at a very compelling structural intersection interpreted from aeromagnetics.

In addition, the twinning RC drilling program has been completed at the Sorpresa project area, with results from the remaining 4 holes expected to be available within December.

### **Program Summary and Background:**

- This program represents the first ever RC drill test of this highly prospective greenfields target.
- High Grade rock chip results previously reported (July, August) from Carlisle included 23g/t Au, 13.75g/t Au, 12.55g/t Au, 13.7g/t Au, 9.6g/t Au, 7.29g/t Au, 7.02g/t Au and 6.22g/t Au.
  - In total 85% of rock chip results returned > 1g/t Au and 20% > 10g/t Au, up to 23g/t Au.
- RC drilling to consist of 7 x ~66m holes focused on the high grade gold rock chips, within an associated arsenic-gold soil anomaly, currently 350m in length
- The program is likely to be completed within a week, with results to follow as soon as practical.

### **Executive Chairman, John Kaminsky said:**

"Building upon the impressive results announced this week for the RC drilling at Sorpresa, the Company has now engaged a drill contractor for a high impact first pass RC drill program at the very encouraging Carlisle prospect. The work starts next Monday and is likely to take one week in the field to complete.

"This exciting initial drill program will provide the first subsurface test on the impressive 'double digit' high grade gold rock chip results achieved in July and August (Figures 1 to 5) and test an associated gold and arsenic soil trend which appears to be connected with a major structural intersection."

"The aim of the Carlisle first pass drilling campaign is to determine the underlying geological features responsible for the high grade gold expression at surface, translate that into drill intersections, and thereby add another discovery at Fifield in addition to Sorpresa. We are looking to grow our discovery inventory over the next 12 months, examining some of the 5 more advanced regional prospects, which include Carlisle. This regional work is a core component of the Company's overall prospect portfolio exploration strategy at Fifield, complementing Sorpresa.

"Importantly the costs of this program are modest. Approximately 50% of the costs of direct drilling at the Carlisle prospect will be offset by the NSW Government Department of Trade and Investment "New Frontiers" Cooperative Drilling grant, of which Rimfire was awarded approximately \$175,000.

"We remain encouraged by the positive direction demonstrated in the regional activities which continue to deliver promising results in parallel to the work at the main Sorpresa area, where the Company is close to finalizing its maiden resource estimation. We look forward to reporting this shortly."

## Carlisle Gold Prospect – Further Context

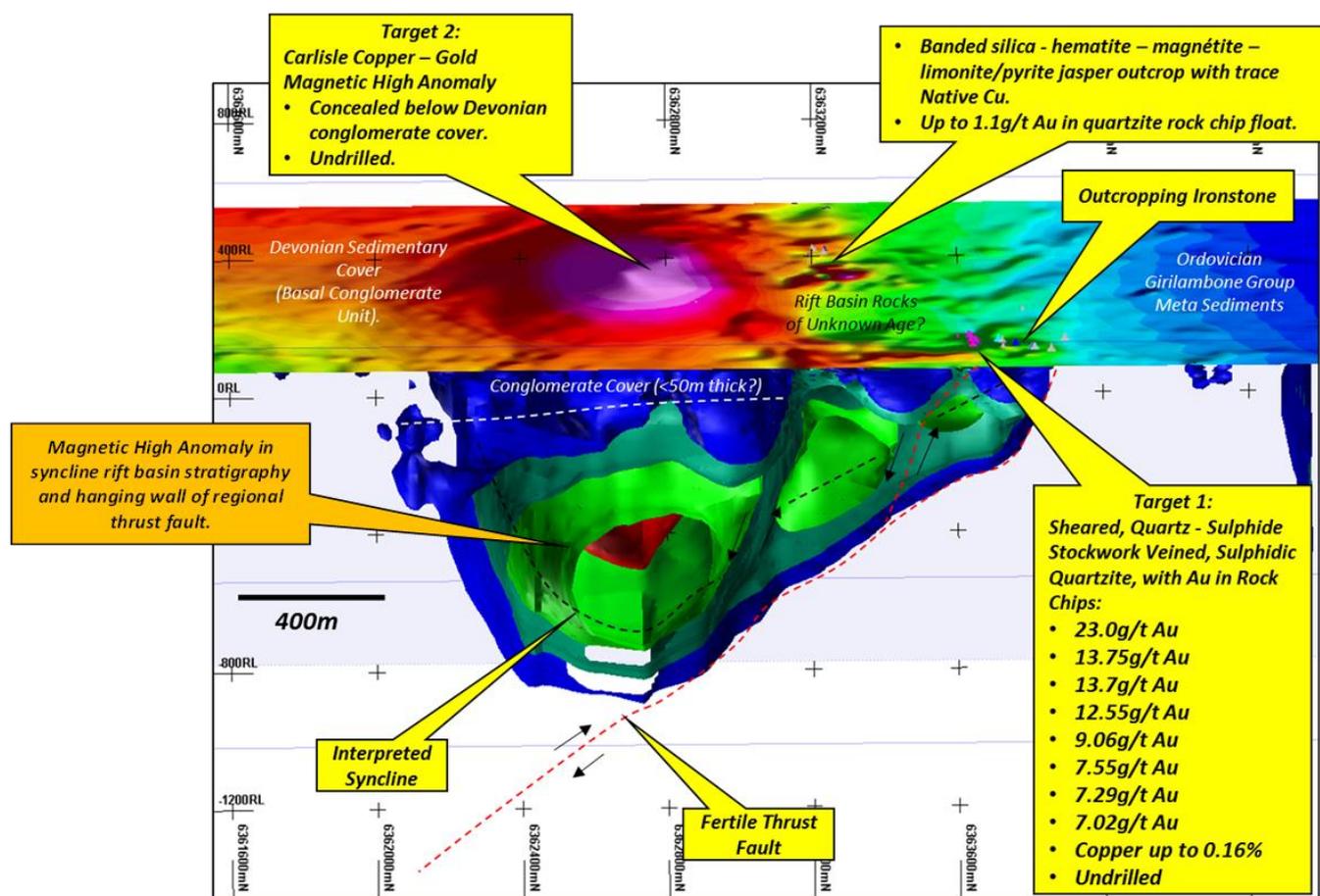
Located approximately 6.8km SW of Sorpresa, field exploration of the Carlisle Target in July discovered outcropping ironstone and two outcrops of fresh sulphides comprising quartz-pyrite-arsenopyrite veined pyritic quartzite in a NNE trending shear zone.

First pass rock chip results including 13.7g/t Au, 7.29g/t Au, 7.02g/t Au & 6.22g/t Au, were followed up with further mapping, soil geochemistry and rock chip sampling which has generated even higher grade results including 23g/t Au, 13.75g/t Au, 12.55g/t Au and 9.6g/t Au. Disseminated arsenopyrite – pyrite is observed pervading the wall rocks & a late gossanous breccia event is interpreted to produce the >10g/t Au results.

A basement window of approximately 85m long x 40m wide of sub-crop and float on a small hill has been identified with 20 rock chip samples taken, of which 85% returned results > 1g/t, and 20% > 10g/t Au up to 23g/t Au. Extensions away from the small hill under very shallow soil cover have now been defined via soil sampling revealing a 350m NNE striking gold and arsenic anomaly.

Concurrent 3D inversion modelling of high resolution aeromagnetic and radiometric data has revealed a compelling structural interpretation underlying the high grade gold rock chips invoking a regional curvilinear ‘fertile’ thrust fault. This potentially daylights close to the high grade gold rock chips.

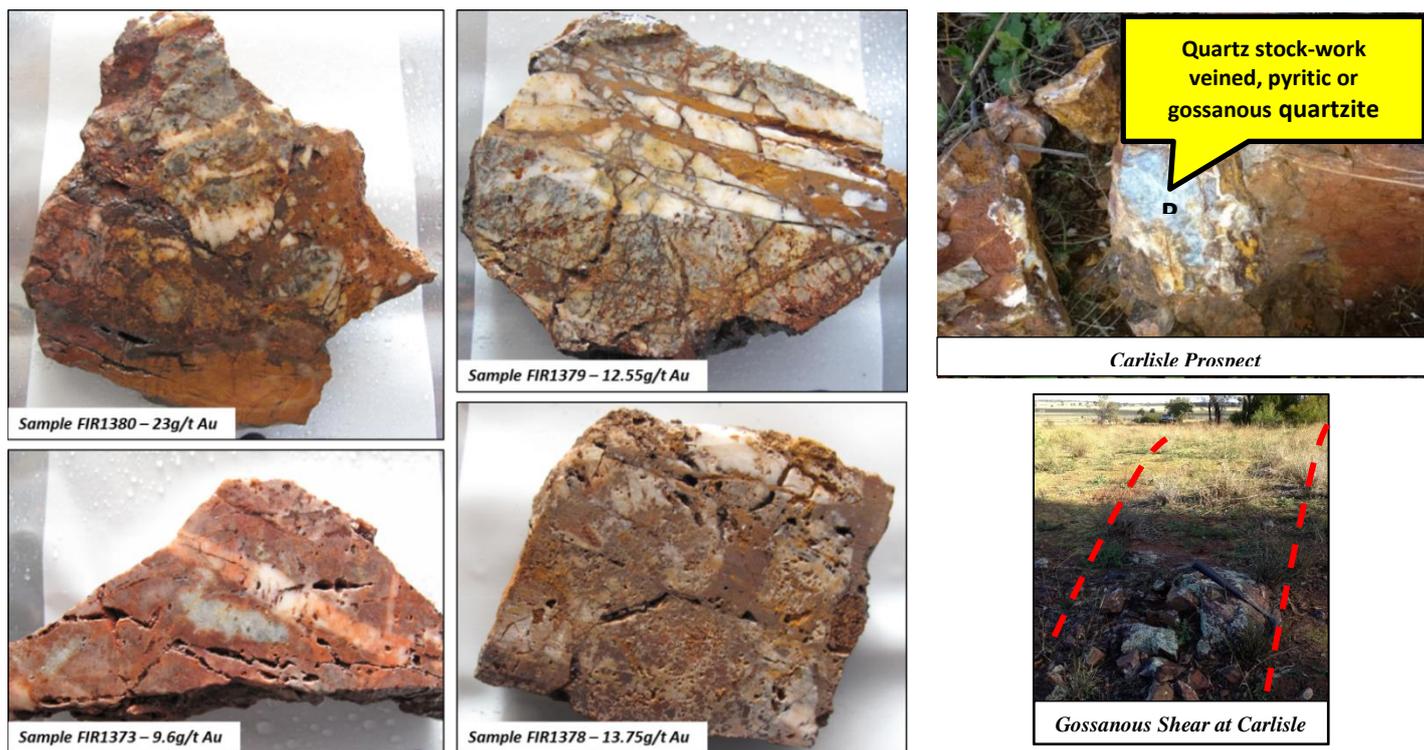
Second order faults from the main thrust fault also display surface gold results up to 1.1g/t Au and trace native copper in sub-crop. This structural model revealed in magnetic inversion modelling shows similarities to the current Sorpresa structural understanding, and rift basin stratigraphy, some 6.8kms to the NE.



**Figure 1: 3D Magnetic Anomaly inversion model at Carlisle showing proximal high grade gold rock chip results**

**Two drill targets have been** confirmed at Carlisle to date, the upcoming RC drill campaign is currently focused on the high grade rock chip Target 1, however a second target comprising a diffuse bullseye magnetic high anomaly obscured by conglomerate cover, with peripheral silica, magnetite, hematite alteration, pyritisation & trace native Cu is also present, currently considered prospective for a **Tritton style Cu-Au target**.

**Figure 2: High Grade Gold Rock Chip Samples at Carlisle Prospect at Fifield**



**ABOUT RIMFIRE PACIFIC MINING**

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 mineralized system of some promise. The gold is predominantly native gold.

Best gold and silver intersections achieved from the period mid-2012 to the current date on the Sorpresa Project area with locations shown include<sup>1</sup>:

<b>14m @ 21.9g/t Au plus 6m @ 93g/t Ag</b>	Trench 31
<b>14m @ 24.4g/t Au plus 26m @ 155g/t Ag</b>	Roadside
<b>10m @ 535g/t Ag plus 1.0g/t Au</b>	Roadside
<b>20m @ 230g/t Ag</b>	Roadside North
<b>1m @ 114g/t Au plus 1m @ 33g/t Ag</b>	Boundary Gate East
<b>16m @ 5.32g/t Au plus 20m @ 81g/t Ag</b>	Roadside
<b>4m @ 21.9g/t Au</b>	Join Up
<b>26m @ 90g/t Ag plus 26m @ 0.37g/t Au</b>	Roadside

The current main Sorpresa Strike line containing gold and silver mineralization is approximately 1.5km in length and is at various stages of further discovery extension drilling.

The Company has now established multiple project areas of importance involving hard rock Gold (Au), Silver (Ag), Platinum (Pt) and Base Metal within a 6km radius of the Sorpresa discovery covering an extensive prospective 35km<sup>2</sup> area at Fifield, which is part of the contiguous 313km<sup>2</sup> tenement position held.

The latest presentations on the Company are at hyperlinks:

[Rimfire Exploration Presentation - AGM 14 November 2014](#)

<sup>1</sup> Please refer to Table 1: **Dates and Hyperlinks for previously referred to results in this report**

A 3D Exploration Model, as at May 2014, depicting gold mineralization at Sorpresa with a description of the recent RC drill program goals is available as a [video by hyperlink: Click Here](#).

**Regional Prospects within 6km Radius of Sorpresa Project Area at Fifield**

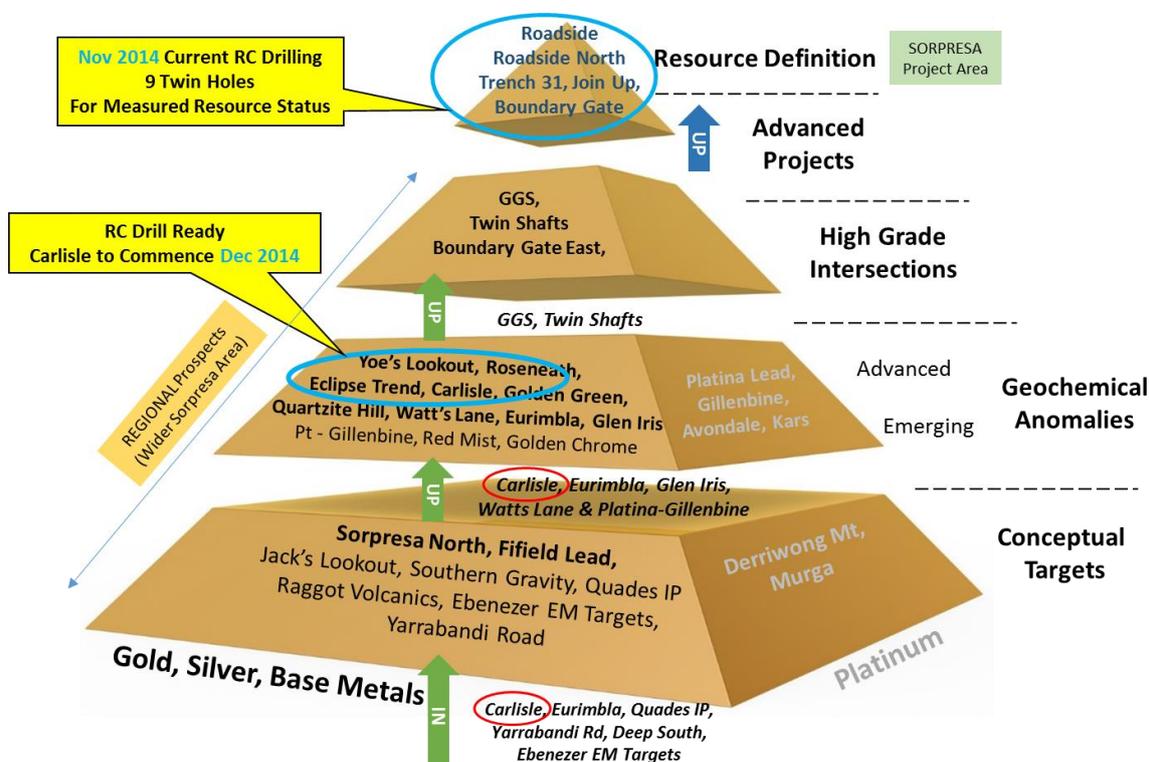
Prioritized current prospects and targets within 6kms of Sorpresa are being systematically assessed. Rimfire interprets a rift basin setting at Fifield, Back Arc to the World Class Macquarie Arc, and traversed by the crustal scale Lachlan Transverse Zone (LTZ) is host to multiple styles of significant mineralization, with combined multimillion ounce gold equivalent potential. To date approximately **25 targets are revealed**.

Figure 2 shows the location and setting for 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;

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-VMS / Epithermal)** - McConnell's, Transit, Eclipse North, Eclipse, Eurimbla, Golden Chrome, Roseneath, Watt's Lane, Carlisle.
4. **Yoes Lookout (Skarn and Structurally controlled Greenstone and Sediment hosted Au)**
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.

**Ranked Prospect Portfolio at Fifield NSW**



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 at Sorpresa.

**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 Au g/t	Open	Other	Historic Workings
Sorpresa	8.8	10~50	20~1,000	1.5km	14 @ 24.4	yes	IP/Gravity	Minor
Yoes Lookout	3.4	10~300	20~1,000	1.7km	N/A	yes	Magnetic Feature	No
Eclipse	18.7	N/A	20~500	2.2km	N/A	yes	Ag	Minor
Golden Green Group	8.1	N/A	10~100	0.5km	2m @ 9.11	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	0.4km	N/A	yes	Magnetic Feature	Minor

### **Company Strategy**

The Company has been 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 pursued include Gold, Silver, Platinum and Base Metals
- 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
- Establish an initial resource at Sorpresa, to inferred, indicated in 2014 and measured in early 2015**

### **Competent Persons Declarations**

*The information in the report to which this statement is attached that relates to Exploration Results is based on information compiled by Colin Plumridge and Darren Glover. Both gentlemen are deemed to be Competent Persons and are Members of The Australasian Institute of Mining and Metallurgy.*

*Mr Plumridge has over 40 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 mineralization 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 his historic information in the form and context in which it appears.*

*Mr Glover is employed by Rimfire Pacific Mining and has 18 years' experience in the mineral and mining industry. He has sufficient experience that is relevant to the style of mineralization 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'. Mr Glover consents to the inclusion in the report of the matters based on his 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 announcement.*

*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 was the Competent Person at that time and consented to the inclusion in the original reports in the form and context in which it appeared, please refer to the Competent Persons declaration above for additional information.*

**Table 1** Dates and Hyperlinks for previously referred to results in this report

ASX November 9th 2007	<a href="#">Golden Green Gold Prospect Returns Encouraging Assay</a>
ASX July 25th 2008	<a href="#">Quarterly Report For the period April 1st to June 30th 2008</a>
ASX March 30th 2012	<a href="#">Coherent Gold geochemistry at Yoes Lookout Confirmed – Fifield NSW</a>
ASX September 17th 2012	<a href="#">First Gold Sections Created at Sorpresa Project, Fifield NSW</a>
ASX June 13 <sup>th</sup> 2012	<a href="#">High Grade Gold Intersection Sorpresa Project – Fifield NSW</a>
ASX July 26 <sup>th</sup> 2012	<a href="#">Successful Intersections at Sorpresa Gold Project</a>
ASX October 10 <sup>th</sup> 2012	<a href="#">Highest Gold and Silver Grades seen to date at Sorpresa Project</a>
ASX December 18 <sup>th</sup> 2012	<a href="#">Sorpresa Project Produces More Encouraging Results</a>
ASX March 27 <sup>th</sup> 2013	<a href="#">Additional Assays at Sorpresa Gold Project</a>
ASX June 13 <sup>th</sup> 2013	<a href="#">Further Positive RC Drilling Results at Sorpresa Project</a>
ASX July 17 <sup>th</sup> 2013	<a href="#">Diamond Drilling Reveals Bonanza Grade of 1m @ 114g/t Au</a>
ASX October 21 <sup>st</sup> 2013	<a href="#">Results Confirm Extensions of Gold and Silver at Sorpresa Project</a>
ASX December 20 <sup>th</sup> 2013	<a href="#">High Grade Silver extensions continue at Roadside</a>
ASX February 14 <sup>th</sup> 2014	<a href="#">Gold Intersections Confirm New Intersections at Sorpresa</a>
ASX May 16 <sup>th</sup> May 2014	<a href="#">4,000m RC Drilling Program at Sorpresa Project - Regional Intersection 2m @ 9.11g/t Gold</a>
ASX May 30 <sup>th</sup> May 2014	<a href="#">Drilling Update and 3D Exploration Model for Sorpresa Project - 2m @ 7.49g/t Gold intersected</a>
ASX July 23 <sup>rd</sup> 2014	<a href="#">Encouraging Regional Rock Chip Results up to 13.7g/t Gold, Fifield NSW</a>
ASX August 18 <sup>th</sup> 2014	<a href="#">New High Grade Rock Chip Results up to 23g/t Au at Fifield NSW</a>
ASX August 26 <sup>th</sup> 2014	<a href="#">Sorpresa Gold and Silver Mineralization Extended at Fifield, NSW</a>
ASX November 28 <sup>th</sup> 2014	<a href="#">Encouraging Gold Results Intersected in New Shallow Oxide Position at Sorpresa</a>
ASX December 8 <sup>th</sup> 2014	<a href="#">High Grades Intersected in Sorpresa Resource Definition Drilling</a>

### **Metal Prices**

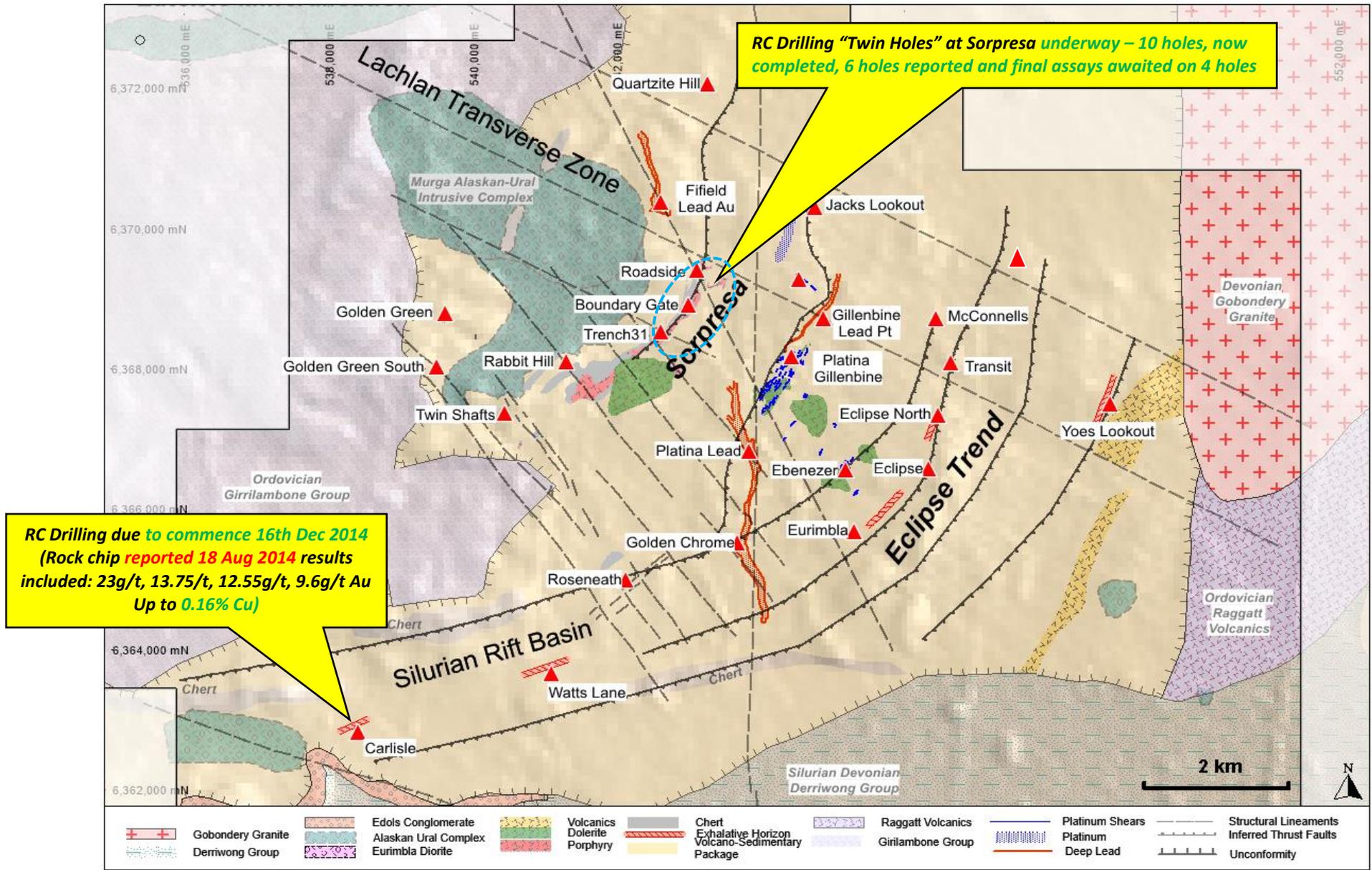
As at 9<sup>th</sup> December 2014, the trading prices ([www.kitco.com](http://www.kitco.com)) for metals in New York, closing Ask in USD were:

Gold	\$1,233/oz
Platinum	\$1,252/oz
Silver	\$17.21/oz



**JOHN KAMINSKY**  
Executive Chairman

Figure 3: Fifield Prospect and Concept Map with **Current RC Drilling Locations, and planned Drilling at Carlisle (December)**



**Figure 4:** Gridded image of Au (ppb) in soils, rock chip locations, overlaid on satellite image with proposed RC drill holes at Carlisle

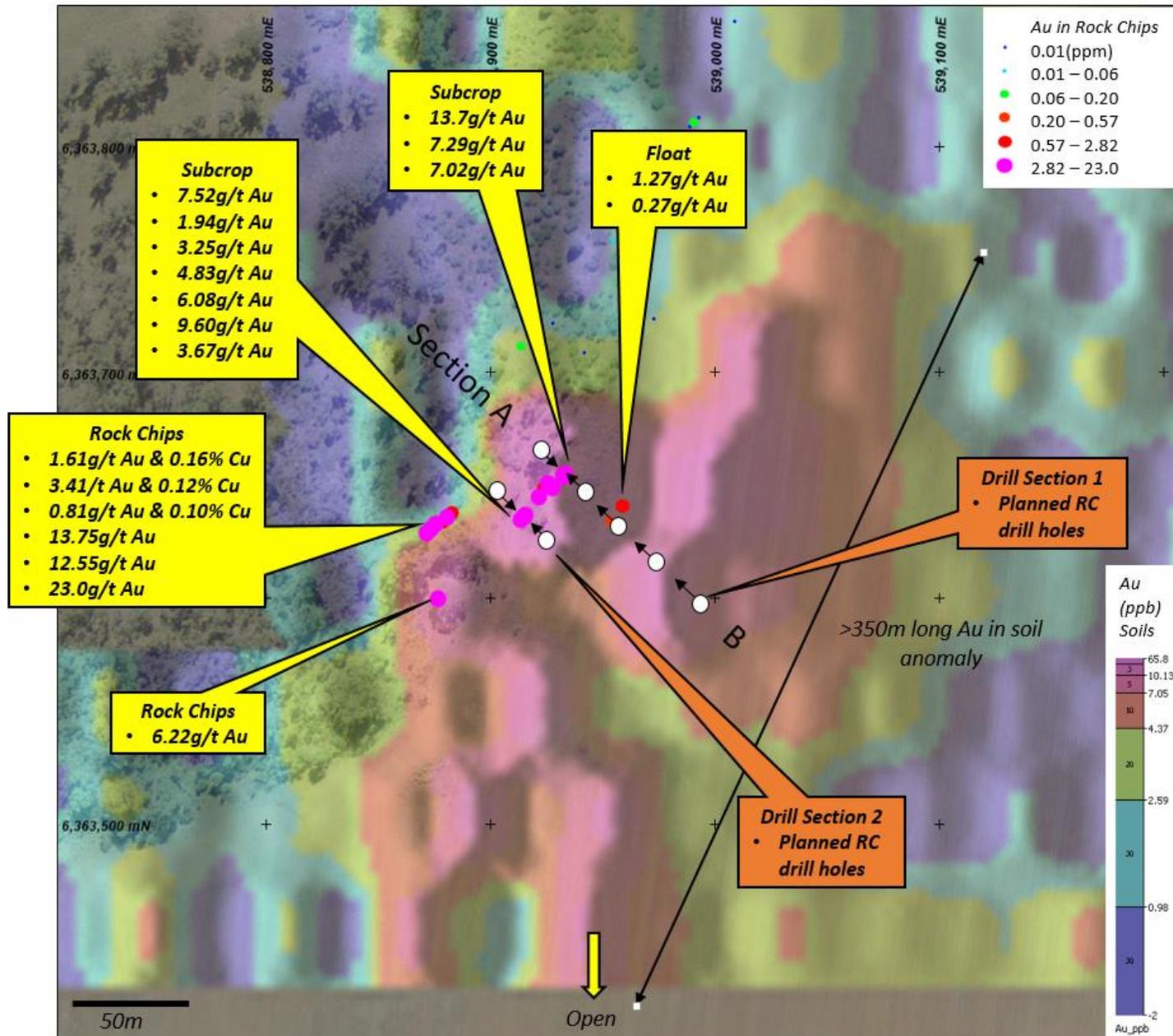


Figure 5: Carlisle Au Target 1: Oblique Cross Section looking NE – 3D magnetic inversion model, gold (ppb) in soils, rock chips & proposed RC drill target.

