



Excellent Preliminary Metallurgy Results at Sorpresa Project **- Gold and Silver recoveries exceed expectations**

Rimfire Pacific Mining NL (ASX:RIM) ("Rimfire" or "The Company") is pleased to provide results on recent metallurgical test work for the Sorpresa Gold and Silver project at Fifield in central NSW.

Highlights

- ❑ **The best Gold recovery was 96.8%, occurring at the Trench 31 location**
- ❑ **Roadside location achieved a recovery high of 84.3% for Gold and 68.9% for Silver, which were improved with finer grind and longer leach time to 89.1% and 72.3% respectively**
- ❑ **Testing focused on a wide representation of oxide mineralization from 3 locations at Sorpresa using Carbon In Leach (CIL), standard method**

A series of preliminary metallurgical tests have been conducted on Fifield samples by a NATA registered laboratory (ALS Metallurgy) in Sydney, under the direction and supervision of contract metallurgist of some 40 years experience, Mr David Foster.

The testwork was conducted on three composite samples from the Roadside, Trench 31 and Trench 31 South West locations within the Sorpresa project area.

Samples were selected to give a wide representation of the mineralization in the 0 – 45 metre oxide zone and comprised **a total of 130 metres of mineralization from 30 drill holes** within the 1.6km strike line of the Sorpresa project area, in three distinct locations (see Appendix 1).

The Roadside location sample was a composite of 24, two metre drill intervals. The Trench 31 and Trench 31 South West locations were composites of 21 and 20 two metre drill intervals, respectively. The testwork consisted of basic Carbon In Leach (CIL) tests with the standard industry conditions of 75 microns grind size and a 24 hour cyanide leach time.

The gold and silver recoveries, together with the head grades for the composite samples are listed in the table, below.

Sample ID and Location	Head Assays, g/t		Recovery, %	
	Au	Ag	Au	Ag
Met1 – Roadside	1.22	73	84.3	68.9
Met2 – Trench 31	2.82	7.3	96.8	72.6
Met3 – Trench 31 SW	2.54	7.9	94.5	78.5

Additional testwork on the Met1 composite, involving finer grinding and an extended leaching period, resulted in **improved recoveries to 89.1% for gold and 72.3% for silver.**

The Executive Chairman, John Kaminsky said:

"The metallurgical testwork was conducted on an extensive and diverse spread of mineralized material at Sorpresa. The high recovery figures are most encouraging as the samples are representative for all the important oxide zones seen to date.

This latest information demonstrates that the Sorpresa project area has successfully met preliminary screening criteria for an important part of its metallurgy and this strongly reinforces our motivation for the project potential.

The Company has ongoing discovery work programs underway, with further RC drilling at Roadside North and East of Boundary Gate locations in the Sorpresa project area. We are looking forward to reporting more assay results shortly in relation to the RC drilling, and remain particularly encouraged by field XRF results at the Northern end of Roadside location.”



JOHN KAMINSKY
Executive Chairman

ABOUT RIMFIRE PACIFIC MINING ¹

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-Cadia Lineament.

In 2010 the Company delivered a greenfields gold and silver discovery, named “Sorpresa”, in the Fifield district. Subsequent exploration has provided conclusive evidence that the 8km² wider Sorpresa area is now considered a significant gold mineralized system of some promise.

Best gold and silver intersections achieved to date on the Sorpresa Project area with locations shown include*:

- | | |
|--|--------------------|
| <input type="checkbox"/> 14m @ 21.9g/t Au plus 6m @ 93g/t Ag | Trench 31 |
| <input type="checkbox"/> 14m @ 24.4g/t Au plus 26m @ 155g/t Ag | Roadside |
| <input type="checkbox"/> 10m @ 535g/t Ag plus 1.0g/t Au | Roadside |
| <input type="checkbox"/> 20m @ 230g/t Ag | Roadside North |
| <input type="checkbox"/> 1m @ 114g/t Au plus 1m @ 33g/t Ag | Boundary Gate East |
| <input type="checkbox"/> 16m @ 5.32g/t Au plus 20m @ 81g/t Ag | Roadside |
| <input type="checkbox"/> 4m @ 21.9g/t Au | Join Up |

The Company has now established multiple project areas of importance involving hard rock Gold (Au), Silver (Ag), Platinum (Pt) and Base Metal within an extensive prospective 20km² area at Fifield.

View the latest presentation on the Company main project area at hyperlink: [AGM Nov 2013 Presentation](#)

Metal Prices

As at 3rd December 2013, metal prices had shown some recent weakness, with the approx. trading prices ([Kitco.com](#)) for metals in New York based on closing Ask in USD as follows:

Gold	\$1,225/oz
Platinum	\$1,366/oz
Silver	\$19.30/oz

¹ Historic information referenced in this section is accessible in the Competent Person’s declaration

Competent Person Declaration and References that form part of this Report

For New Information in this report:

The information in the report to which this statement is attached that relates to Exploration Results is based on information compiled by Colin Plumridge, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy with 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 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 consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Information previously published in prior periods under 2004 JORC reporting standard and 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 and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. 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 announcement which operated under the 2004 JORC reporting requirements. Colin Plumridge as the Competent Person, consents to the inclusion in the report of the matters based on his information in the form and context in which it appears'

* Dates of previously referred to results and Hyperlinks
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

Sorpresa Project Information Thread

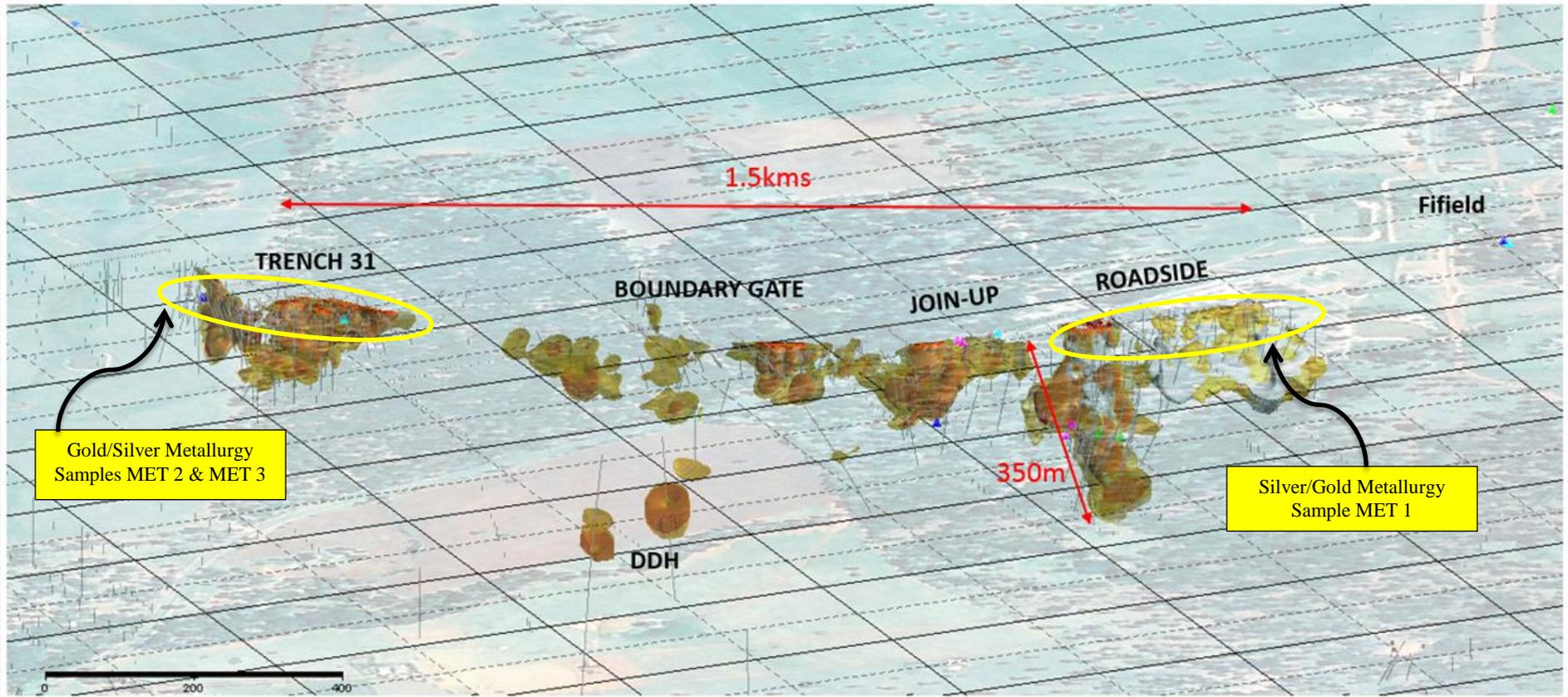
The Company provides a selected **hyperlink thread** of the Sorpresa Gold Mineralization area with materials relevant to the reader reported under the 2004 JORC code as follows. The thread provides important views previously expressed, that will assist the reader with understanding the Company's technical consideration and historic perspective for the work undertaken:

1. ASX October 31st 2013 [Quarterly Report of Exploration Activities](#)
2. ASX October 21st 2013 [Results Confirm Extension of Gold and Silver at Sorpresa Project](#)
3. ASX July 31st 2013 [Exploration Report June 2103 Quarter](#)
4. ASX July 17th 2013 [Diamond Drilling Reveals Bonanza Grade of 1m @ 114g/t Au](#)
5. ASX June 13th 2013 [Further Positive RC Drilling Results at Sorpresa Project](#)
6. ASX May 23rd 2013 [Diamond and RC Drilling Completed, RAB Drilling Extended](#)
7. ASX April 26th 2013 [Mineralized Zones Intersected in Diamond Drilling](#)
8. ASX April 12th 2013 [RAB Drilling program Commences at Sorpresa](#)
9. ASX April 5th 2013 [Diamond Drilling and RC Drilling Commences at Sorpresa Gold Project](#)
10. ASX March 27th 2013 [Additional Assays at Sorpresa Gold Project](#)
11. ASX March 13th 2013 [Sorpresa Gravity Geophysical Survey Commences](#)
12. ASX February 19th 2013 [Continuous 350m Section Established at Roadside Area & New Gold Zone Intersected](#)

13. ASX January 31st 2013 [Quarterly Exploration Activities December 2012](#)
14. ASX December 18th 2012 [Sorpresa Project Produces More Encouraging Results](#)
15. ASX November 22nd 2012 [Presentation for 2012 AGM](#)
16. ASX November 5th 2012 [Best Silver Grades to Date Seen at Sorpresa Project Area](#)
17. ASX October 10th 2012 [Highest Gold and Silver Grades seen to date at Sorpresa Project](#)
18. ASX September 17th 2012 [First Gold Sections Created at Sorpresa Project – New Assay Results](#)
19. ASX August 31st 2012 [New Gold in Soil Zones Located 4km South of Sorpresa](#)
20. ASX July 31st 2012 [Quarterly Exploration Activities June 2012](#)
21. ASX July 26th 2012 [Successful Intersections at Sorpresa Gold Project](#)
22. ASX June 13th 2012 [High Grade Gold Intersection Sorpresa Project – Fifield NSW](#)
23. 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 \(click here\)](#).
24. ASX April 30th 2012 [Quarterly Exploration Activities March 2012](#)
25. ASX January 31st 2012 ([Quarterly Exploration Activities December 2011](#))
26. A video link is provided [January 2012 Sorpresa Gold Project – Trench 31 Area Review Video](#)
27. ASX 28th November 2011 [AGM Exploration Presentation – Including Key Summary Assay results of Sorpresa](#)
28. Rimfire Website Summary [Brief history of Sorpresa Mineralization discovery and style \(to September 2011\)](#)
29. ASX [Assays Confirm Significant Gold and Silver at Sorpresa Project 6th July 2011](#)

Appendix 1
Sample Locations for Metallurgical Testing at Sorpresa Project Area

Diagram looking north west on airphoto: Visualization of 3D Modelled Grade Shells of Sorpresa Mineralization
(yellow) >0.2g/t Au, (red) >0.5g/t Au and (Silver) >31g/t Ag



The metallurgy sample locations are shown on the Sorpresa main project area. Samples were taken in the 0~45m oxide zone, in three locations at Trench 31 (MET 2) & Trench 31 South West (MET 3) and also the Roadside (MET 1) location.

Appendix 2

Details of JORC Compliance Statements Relevant to this Report

Criteria	JORC Code explanation	Metallurgical Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	Samples were selected from historically reported RC and OHH drill holes. Met1 samples taken from Holes Fi82, Fi83, Fi87, Fi211, Fi212, Fi213, Fi214 and Fi216. Met2 samples taken from Fi69, Fi70, Fi71, Fi72, Fi73, Fi74, Fi75, Fi76, Fi77 and Fi80. Met3 samples taken from Fi114, Fi116, Fi141, Fi143, Fi161, Fi162, Fi163, Fi193, Fi194, Fi195, Fi196. All drilling information and significant results from the drillholes included in metallurgical samples have been previously released to the ASX under 2004 JORC Code by Competent Person Colin Plumridge. Links to these relevant releases are 6th July 2011 Fi61-99, 31st October 2011_Fi104-Fi124, ne2012_Fi132-Fi161, 26th July 2012_Fi154_Fi173, 17th Sept 2012_Fi172-Fi195, 5th Nov 2012_Fi195-Fi216,
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Samples were selected in order to give a wide representation of the mineralization in the 0 – 45 metre oxide zone and comprised a total of 130 metres of mineralization from 30 drill holes within the 1.6km strike line of the Sorpresa project area, in three distinct locations. The samples were selected based on grade. Met1 included samples with grades ranging from 0.14 to 4 ppm Au and 8.7 to 270 Ag. Met2 included samples with grades ranging from 1.29 to 4.46 ppm Au, Met3 included samples with grades ranging from 0.86 to 4.69 ppm Au
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	1m drill samples which are stored securely on site were located in sample storage area and individually split on 1m intervals, then composited on 2m intervals to match the original samples previously reported. These were then combined into the larger bulk samples
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Reverse Circulation (Face Sampling) and Open Hole Hammer drilling methods were used to initially obtain the drill samples
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	There was no obvious variation in drill sample size noted during re-sampling for metallurgical purposes
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Re-sampling occurred on samples previously drilled.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship has been established between sample recovery and sample grade.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Previous drilling is currently under a project wide relogging exercise to standardise geological coding and stratigraphic advances made since diamond drill program.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	This logging is qualitative by nature.
	The total length and percentage of the relevant intersections logged.	Relogging of relevant samples is partially complete
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	no core sampled
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Subsampling of the bulk samples was screened/crushed to 100% -2mm, then blended and riffle split into 1kg portions by ALS Metallurgy. Head assays were achieved by riffle out 150g and pulverise.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sub sample technique was conducted by ALS Metallurgy laboratory using industry standard techniques
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Standard QAQC procedures apply to the sub sample of bulk samples conducted by ALS Metallurgy
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	The bulking of many samples was aimed to include a spread of material that was representative. The average grade estimate from individual samples included in each bulk sample was 87, 87 to 89% respectively for MET1,2 and 3 of the head grade values achieved from metallurgical test work. These are regarded as falling within acceptable error margins.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The test work was conducted on bulk samples

Appendix 2 (Cont.)
Details of JORC Compliance Statements Relevant to this Report

Criteria	JORC Code explanation	Metallurgical Commentary
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The test work consisted of basic Carbon In Leach (CIL) tests with the standard industry conditions of 75 microns grind size and a 24 hour cyanide leach time. Additional test work on the Met1 composite, involving finer grinding and an extended leaching period.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Internal Laboratory calibration data was not provided, but can be gained upon request.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Internal Laboratory QC data was not provided, but can be gained upon request.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Work was conducted under the direction and supervision of contract metallurgist of some 40 years experience, Mr David Foster and results are provided in this release.
	The use of twinned holes.	not applicable to metallurgical test work
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Internal Laboratory data management information was not provided, but can be gained upon request.
	Discuss any adjustment to assay data.	Assay data is not adjusted
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	refer to previous ASX reports referenced in the document
	Specification of the grid system used.	refer to previous ASX reports referenced in the document
	Quality and adequacy of topographic control.	refer to previous ASX reports referenced in the document
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Samples were taken from a number of holes in specific areas being Roadside, Trench 31 and Trench 31SW, the sampling was designed to get a spread of mineralisation in each area.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	not applicable to metallurgical test work
	Whether sample compositing has been applied.	Compositing was conducted to produce the Met samples and comprised a total of 130 metres of mineralization from 30 drill holes
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Current observations do not suggest a bias in sampling from the drilling orientation.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	not applicable
Sample security	The measures taken to ensure sample security.	Samples were transported to ALS via private courier company
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Work was conducted under the direction and supervision of contract metallurgist of some 40 years experience, Mr David Foster and results are provided in this release.