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Tuesday, 23nd December 2014
Company Announcement Office
Australian Securities Exchange

Sorpresa Gold and Silver Maiden Resource – Fifield NSW

6.4Mt for 125kOz of gold and 7.9Moz of silver

Rimfire Pacific Mining NL (ASX:RIM) ("Rimfire" or "The Company") is pleased to report the Maiden JORC 2012 Compliant Inferred and Indicated Mineral Resource for the Sorpresa Deposit located in Fifield, NSW (Figure 1). This represents a significant milestone for Company. The mineralized system at Sorpresa is a complex overlap of gold and silver mineralization, particularly in the northern Roadside area (Figures 2 & 3), therefore reporting provides an account of the individual metals, and also the combined metals, within the constraints of the JORC 2012 code.

Important resource growth potential remains at Sorpresa and at emerging regional prospects within approximately 6km of the Sorpresa Resource, where drilling has continued. In addition, the Company anticipates a conversion of parts of the Sorpresa resource to the Measured category within the first quarter 2015, whilst also undertaking a preliminary internal scoping study on the higher grade lenses within the Sorpresa mineralization.

Highlights (refer tables for details)

- **Maiden Inferred and Indicated Mineral Resource for the Sorpresa Deposit comprises;**
  - **6.4Mt for 125kOz of gold and 7.9Moz of silver (at 0.5g/t Au & 25g/t Ag cutoff).**
- **The Gold dominant portion of the Sorpresa system represents;**
  - **3.0Mt @ 1.06g/t Au and 22g/t Ag for 103kOz Gold and 2.1MOz Silver (at 0.5g/t Au cutoff).**
- **The Silver dominant portion of the Sorpresa system represents;**
  - **3.4Mt @ 54g/t Ag and 0.20g/t Au for 5.8MOz of silver and 22kOz Gold (at a 25g/t Ag cutoff).**
- **Mineralization is continuous at higher cutoffs with estimates at a 1.0g/t Au & 60g/t Ag cut off of;**
  - **1.9Mt @ 1.11g/t Au and 68g/t Ag for 68kOz Gold and 4.2Moz Silver**
- **70% of gold ounces and 62% of the Silver ounces are within 100m from surface which includes Oxide material (Table 2), potentially amenable to heap leach extraction, with an initial metallurgy study (Dec 2013) suggesting up to 93% Au and 74% Ag recoveries.**
- **An internal Sorpresa conceptual study will be undertaken, focusing on the oxide zone and higher grade lenses to assist the Company in determining the forward strategy.**
- **Exploration of already defined Sorpresa extensional and satellites targets beyond the current resource boundaries is well advanced, including to the east, south and west.**

Executive Chairman, John Kaminsky said:

"Establishing a Maiden inferred and indicated Mineral Resource for Sorpresa marks an exciting and significant achievement for the Company, representing the conversion from a grassroots discovery to a Mineral Resource which will soon contain a measured component. This has been done on excellent industry metrics, with the Company's success rate and cost effectiveness in discovery comparing very favourably against industry benchmarking (Hyperlink: ***Industry Presentation and Rimfire Benchmarking***)."

Not only does the resource contain approximately **6.4Mt for 7.9 million ounces of silver** and **125,000 Oz of gold** (at a 0.5g/t Au & 25g/t Ag cutoff), but at higher cut off grades we see potential for shallow resources at surface, typified by the fact that 70% of the gold ounces and 62% of the silver ounces are within 100m of surface. This includes **1.2Mt @ 1.22g/t Au (0.5g/t Au cutoff) for 47kOz Au** of Oxide material.

The Mineral Resource estimate is being examined with respect to a conceptual pit optimization, and the influence of higher grade cut-offs, which will provide management with a foundation for exploration activities for the Sorpresa deposit in 2015 and input into a broader economic appraisal.

Approximately 70% of the gold ounces and 75% of the silver ounces in the resource is in the Indicated Mineral Resource category, with a target to cost effectively convert a significant proportion of the near surface mineralization to the Measured category anticipated in the first quarter 2015.

Upside potential for gold is considered likely within the Sorpresa resource with further investigation required on the coarse gold fraction, which is considered under represented currently in existing results. Similarly, the incidence of additional higher grade gold zones being discovered, but currently missed due to wider spaced drilling, seems a reasonable assumption.

As we have stated, in the north of Sorpresa, predominantly at the Roadside location, the system is a combination of silver dominant mineralization with lower grade gold, conversely at the southern end of Roadside we have high grades of both gold and silver (Figures 2 & 3), particularly in the oxide zone. This complex overlap of the metals makes it hard to express this easily in tabulated form, given the gold and silver occur jointly in the same spatial intervals.

By undertaking further metallurgy in the primary zone of the mineralization, we will be better able to express the metal equivalency for gold and silver more precisely with a combined recovered grade for the system.

Already though, in rough terms, the first stage of the resource at Sorpresa equates to approx. a quarter million ounces of gold equivalent, made up of 50:50 gold and silver. *This is an excellent first stage milestone for the Company.*

Finally, the Company remains excited that the Sorpresa mineralization does not occur in isolation. The geological setting is significant and continues to grow in importance at Fifield. As we complete more regional exploration, we are striving for further discovery and resource growth within a 6km radius of Sorpresa and beyond.

The current RC drilling at Carlisle is moving us in that direction already, with positive field observations sighting gold in panned RC cuttings, thus providing encouragement to date. First pass drilling has just been completed and results awaited."

Resource Estimation Details

H&S Consultants Pty Limited were engaged by Rimfire Pacific Mining NL to audit the Sorpresa data and estimate the Maiden Sorpresa Au/Ag Mineral Resource. The Sorpresa Mineral Resource comprises ten structural domains across six areas. The domains which vary in the strike and dip of mineralization were generated by wire-framing of geological data and the use of a nominal grade threshold of 0.10 g/t AuEq where AuEq=(Au + Ag/60) within the host unit.

A breakdown of the Mineral Resources at 0.5 g/t Au and also 25 g/t Ag cut off is shown below in Table 1.

Table 1: Sorpresa Mineral Resource estimate reported under JORC 2012

Resource	Cut off	Category	Mt	Grade		Contained Metal	
				(g/t) Au	(g/t) Ag	Koz Au	Moz Ag
Gold	0.5 g/t Au	Indicated	2.0	1.14	27	73	1.7
		Inferred	1.0	0.9	12	29	0.4
		Total	**3.0**	**1.06**	**22**	**103**	**2.1**
Silver	25 g/t Ag	Indicated	2.1	0.21	62	14	4.2
		Inferred	1.2	0.19	40	7	1.6
		Total	**3.4**	**0.20**	**54**	**22**	**5.8**
Combined	0.5 g/t Au & 25 g/t Ag	Indicated	4.1	0.67	45	88	5.9
		Inferred	2.2	0.51	27	37	2.0
		Total	**6.4**	**0.61**	**38**	**125**	**7.9**

Notes:

1. Sorpresa Mineral Resource reported to JORC 2012 standards, at 0.50 g/t Au and 25g/t Ag cut-off
2. The figures in this table are rounded to reflect the precision of the estimates and include rounding errors.

A summary of the information used in the resource estimation is as follows:

A range of lower cutoffs were used to report grades and tonnages, as shown in Table 2. The estimates at 0.5 cutoff grade represent the entire mineralized domain volumes. Increasing the cutoff grade has the impact of increasing grade. At a higher cut-off grade of 1.0 g/t Au for gold and 60 g/t Ag for silver, the resource contains 1.9Mt @ 1.11g/t Au and 68g/t Ag for 68 Koz gold and 4.2 Moz Ag as shown in Table 3.

Table 2: Sorpresa Mineral Resource estimate for <u>Oxide Mineralization</u> reported under JORC 2012

	Cut off		Mt	Grade		Contained Metal	
				(g/t) Au	(g/t) Ag	Koz Au	Moz Ag
Oxide	**0.5g/t Au & 25 g/t Ag**	**Gold**	1.2	1.22	19	47	0.7
		Silver	0.4	0.28	86	1	1.2
		Total	**1.6**	**0.98**	**37**	**51**	**1.9**

Notes:
1. Sorpresa Mineral Resource reported to JORC 2012 standards, at 0.50 g/t Au and 25g/t Ag cut-off
2. The figures in this table are rounded to reflect the precision of the estimates and include rounding errors.

Table 3: Sorpresa Mineral Resource estimate outcomes based on a range of gold and silver lower cutoff grades.

Cut off	Category	Mt	Grade		Contained Metal	
			(g/t) Au	(g/t) Ag	Koz Au	Moz Ag
0.5 g/t Au & 25 g/t Ag	Indicated	4.1	0.66	45	88	5.9
	Inferred	2.2	0.51	27	37	2.0
	Total	**6.4**	**0.61**	**38**	**125**	**7.9**
1 g/t Au & 60 g/t Ag	Indicated	1.6	1.06	73	55	3.8
	Inferred	0.3	1.35	44	13	0.4
	Total	**1.9**	**1.11**	**68**	**68**	**4.2**

Notes:
1. Sorpresa Mineral Resource reported to JORC 2012 standards, at cutoff grades specified above.
2. The figures in this table are rounded to reflect the precision of the estimates and include rounding errors.

Geological Interpretation

The Sorpresa Mineral Resource has a curved strike length of approximately 1,600m and projected plan width varies from 60 to 450m, averaging around 150m. The Sorpresa Mineral Resource outcrops at surface and extend to approximately 230m below surface. Horizontal lode width varies from 10 to 70m, averaging around 30m. Depth of oxidation averages around 50m, but can vary from 15 to 75m.

The Sorpresa mineralization is spatially associated with rhyolitic sills, has a carbonate base metal Epithermal Au/Ag signature and is structurally hosted in a preferred stratigraphic unit which dips generally to the east with gentle folds. Detailed geological studies were undertaken, including petrography and litho-geochemistry which has identified key rock types and allowed for the compilation of a geological interpretation which was used for the resource estimation.

The geological interpretation of the main mineral deposit is based on identifying the host unit, which can be reliably traced over a distance of 1.6km, so confidence is high. The geological interpretation is based on lithology and geochemical data in ~340 drill holes, which includes both chemical assays and hand held XRF measurements for a wide range of elements. The primary factor controlling geological continuity is stratigraphy, while grade continuity is considered to be controlled by a combination of favourable stratigraphy and structural disruption within the host unit. The primary mineralization is overprinted near surface by weathering and oxidation.

Sampling Technique and QA/QC Methodology

Sorpresa has been sampled via a mix of Reverse Circulation (RC) drilling (68%), Open Hole Hammer (OHH) drilling (26%) techniques and a limited number of diamond drill holes (4%), for a total of 31,653 metres. Nominal hole spacing is typically 15x15m to 20x20m in the better drilled areas to 100x60 m in peripheral areas and at depth.

For recent drillholes, 1 metre samples were riffle split and 2 kg sample submitted and for expected lower grade material surrounding mineralization, the riffle split sample was composited by weight to produce a 2 kg composite over a 2 metre sample length for submission. For earlier drill holes, the 1 metre samples were mat rolled and 1kg measured off by weight. 2 metre composites were then assembled via mixing the two 1kg sub-samples. Diamond core was either cut in half or crushed prior to being homogenized by the rolling method and subsampled by square mouth scoop in same manner as previously described.

Samples were analysed for gold by fire assay using a 50 gram charge; selected intervals have been submitted for Screen fire assay. Silver analysis has been by ICP using either an Aqua Regia or four acid digest methods. Over limit silver results were re-analysed by an appropriate ore grade method.

Sorpresa Resource Model Estimation

Gold was estimated using a recoverable multiple indicator kriging (MIK) technique in GS3 software. Nominal 1.0m sample composites were used. Domains were defined using a nominal grade threshold of 0.10 g/t Eq Au (Au + Ag/60) within the host unit; domains vary in the strike and dip of mineralization. MIK was considered an appropriate method given the strongly skewed grade distributions in some domains. A three pass search strategy was used, with initial radii of 25x25x6m, which were doubled for the second pass and doubled again in X and Y for the third pass. The search ellipsoid orientation varied for each domain and the maximum extrapolation distance was 100m.

Silver was estimated using the ordinary kriging (OK) technique in Datamine software. The same domains were used for both silver and gold. OK was considered an appropriate method given the low to moderate skewness of grade distributions in all domains. Silver used essentially the same search strategy as gold, except the maximum number of samples was set to 32.

The Mineral Resources were classified on the basis of estimation search pass, with passes 1 & 2 classified as Indicated and pass 3 as Inferred. No depth restriction has been imposed but the majority of resources (~70%) occur within 100m of surface.

Appropriate account has been taken of all relevant factors, including relative confidence in tonnage/grade estimates, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data.

The cut-off grades were chosen on the basis of providing reasonable prospects for eventual economic extraction given a number of factors including metallurgical testing, long term market prices, and conceptual mining and processing costs.

The mining method is currently assumed to be open pit extraction. The estimates include some allowance for internal mining dilution, in that the SMU and minimum sub-block size is 5 x 5 x 2.5 metres. Assumptions regarding mining are conceptual at this stage of the project.

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[1]:

14m @ 21.9g/t Au plus 6m @ 93g/t Ag	Trench 31
14m @ 24.4g/t Au plus 26m @ 155g/t Ag	Roadside

[1] *Please refer to Table 1:* ***Dates and Hyperlinks for previously referred to results in this report***

10m @ 535g/t Ag plus 1.0g/t Au	Roadside
20m @ 230g/t Ag	Roadside North
1m @ 114g/t Au plus 1m @ 33g/t Ag	Boundary Gate East
16m @ 5.32g/t Au plus 20m @ 81g/t Ag	Roadside
4m @ 21.9g/t Au	Join Up
26m @ 90g/t Ag plus 26m @ 0.37g/t Au	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^2 area at Fifield, which is part of the contiguous 313km^2 tenement position held.

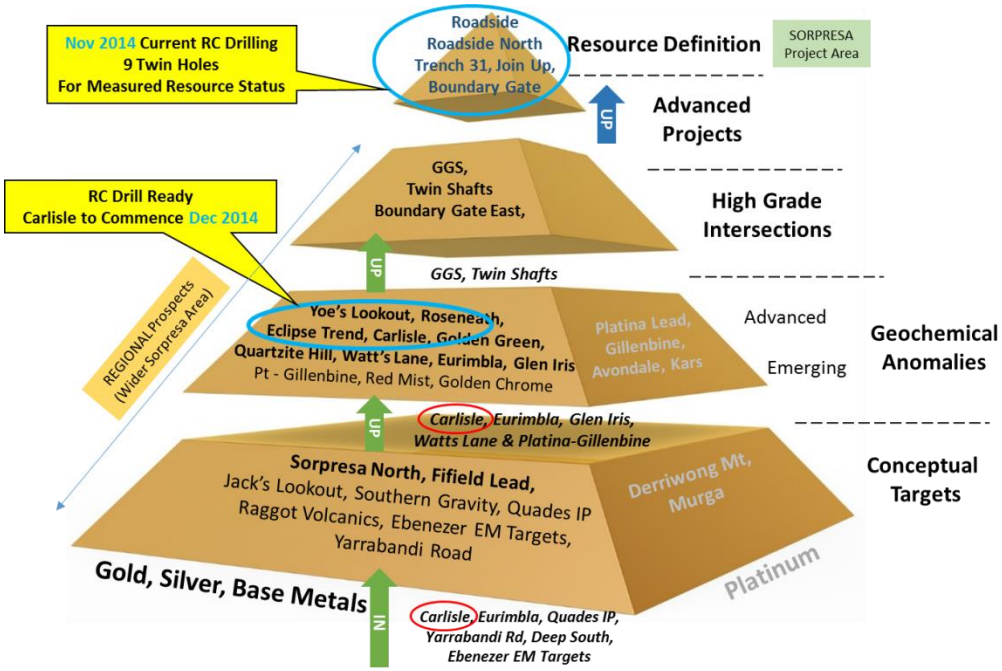
The latest presentations on the Company are at hyperlinks*:*

Rimfire Exploration Presentation - AGM 14 November 2014
Exploration Industry Presentation and Rimfire Benchmarking - AGM 14 November 2014
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**.

The prospect pyramid below 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;



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.

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.

Table 4: Ranked Prospect Portfolio at Fifield NSW

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	0.35km	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

1. Competent Authority Declaration - Resource Estimation

Mineral Resources – Sorpresa

The information in this Report that relates to Mineral Resources for the Sorpresa deposit is based on information compiled by Mr Arnold van der Heyden, who is a Member and Chartered Professional (Geology) of the Australian Institute of Mining and Metallurgy and Managing Director of H&S Consultants Pty Ltd. Mr van der Heyden has sufficient experience 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' (JORC Code). Mr van der Heyden consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

2. Competent Authority Declaration – Historic Exploration Information

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 5 Dates and Hyperlinks for previously referred to results in this report

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

ASX December 8th 2014 High Grades Intersected in Sorpresa Resource Definition Drilling

Metal Prices

As at 19th December 2014, the trading prices (www.kitco.com) for metals in New York, closing Ask in USD were:

Gold	$1,195/oz
Platinum	$1,196/oz
Silver	$16.07/oz

JOHN KAMINSKY
Executive Chairman

Figure 1: ***Fifield Prospect and Concept Map with location of the Sorpresa Resource and RC drilling now complete at Carlisle (results awaited)***

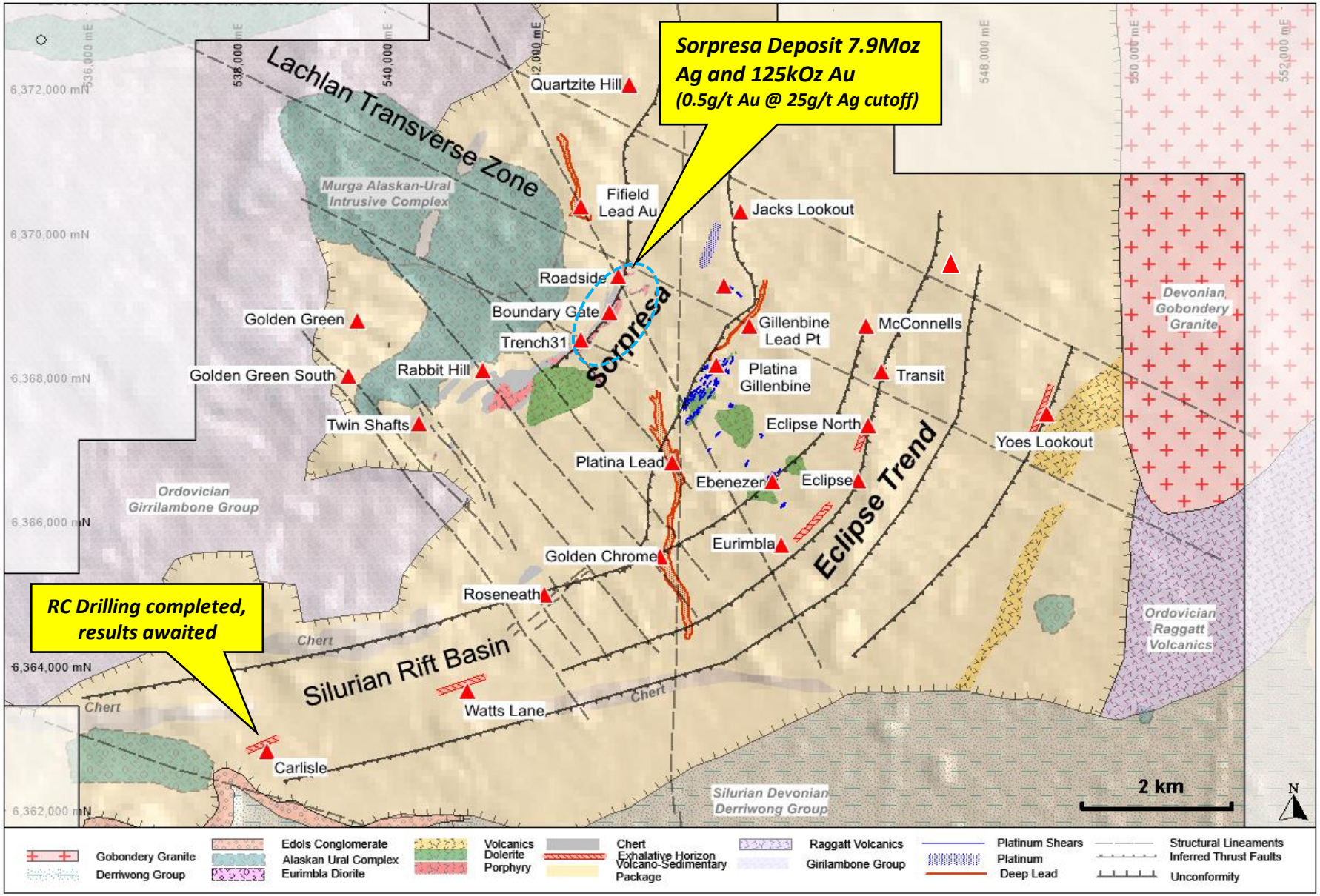
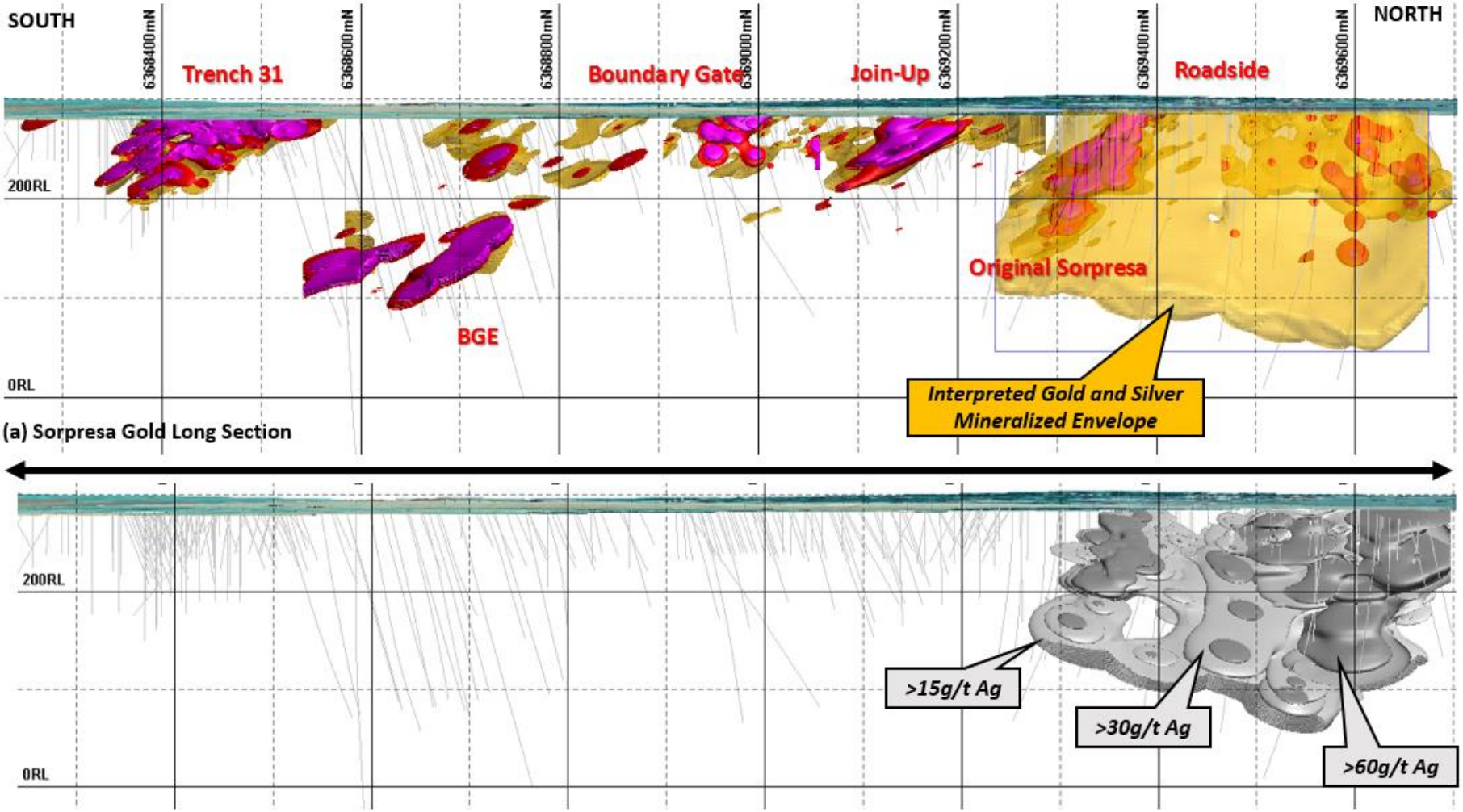


Figure 2: ***Sorpresa Long Section looking west illustrating Gold and Silver mineralization and interpreted Gold and Silver mineralized envelope.***



Sorpresa Implicit Model Long Section looking west illustrating Gold and Silver mineralisation . *(Implicit Model is an interpretive exploration model imaging Gold: yellow >0.2 g/t Au, red >0.5 g/t Au, purple >1g/t Au, and Silver: Light Grey>15 g/t Ag and >30g/t Au, Dark grey >60 g/t Ag.*

Figure 3: ***Sorpresa, Roadside and Roadside North Silver block model, orthogonal view looking NNE, illustrating high grade near surface Ag minralisation.***

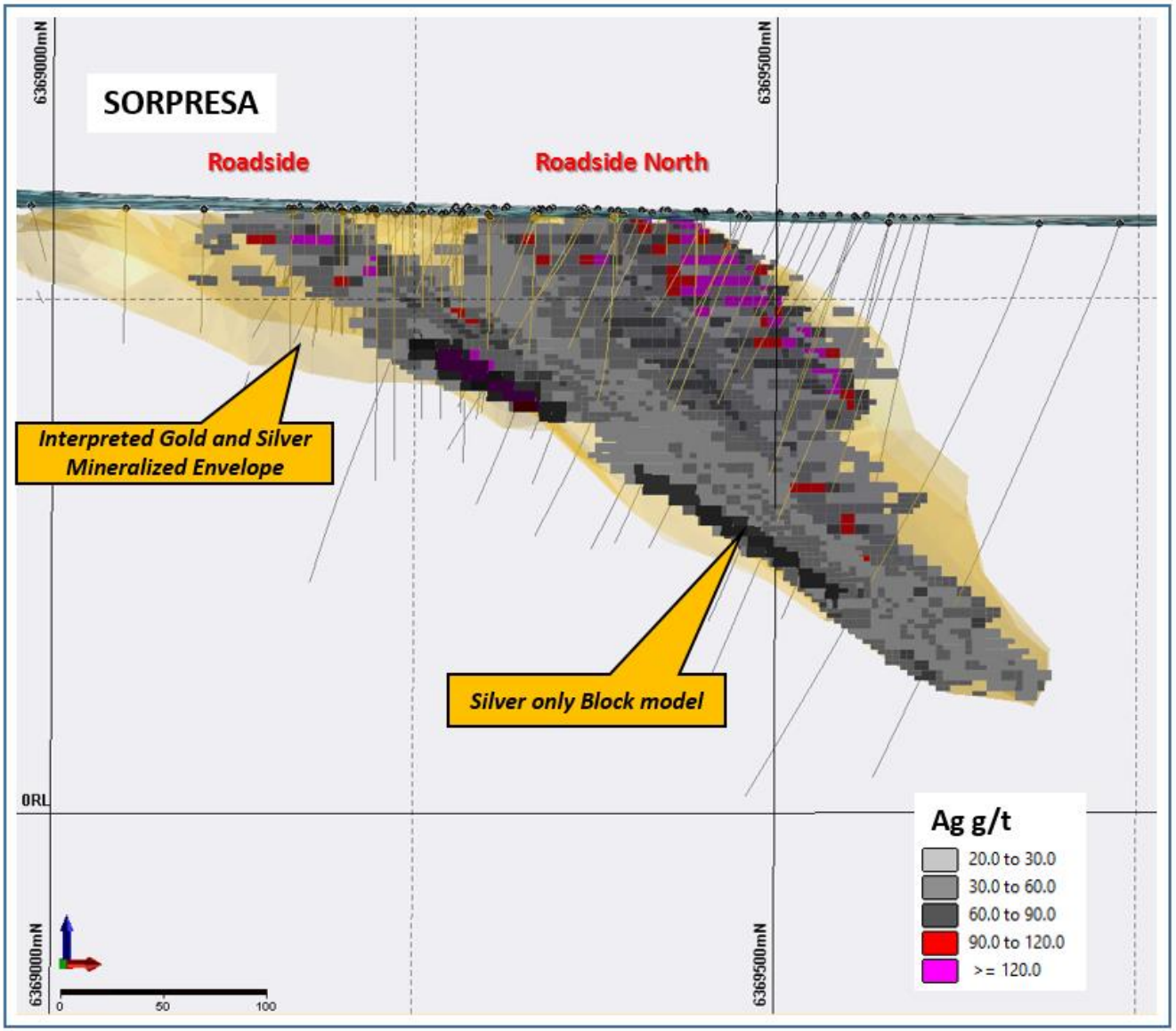


Table 6: JORC Code Reporting Criteria

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code Explanation	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.	Sorpresa has been sampled via a mix of Reverse Circulation (RC) drilling (68%), Open Hole Hammer (OHH) drilling (26%) techniques and a limited number of diamond drill holes (4%), for a total of 31,653 metres which includes 2% of RC Twin holes. Samples from percussion holes are collected at 1m intervals from the OHH and RC cyclone in plastic bags. As the exploration team had developed a good understanding of mineralization indicator minerals, a handheld X-Ray Fluorescence (XRF) unit was used to identify in detail, areas of potential gold/silver anomalism.
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Rimfire utilised OHH drilling methods during the initial Sorpresa discovery, with a policy to immediately stop the hole if water was encountered and only dry samples submitted for analysis. Recovery information of sample from cyclone has been recorded. Sample weights have been recorded and were consistent. Rigorous subsample methods have been employed.
	• Aspects of the determination of mineralization 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 mineralization types (e.g. submarine nodules) may warrant disclosure of detailed information.	Drillholes Fi0364 to Fi478, 1 metre samples were riffle split and 2 kg sample submitted and for expected lower grade material surrounding mineralization, the riffle split sample was composited by weight to produce a 2 kg composite over a 2 metre sample length for submission. For drill holes prior to Fi0364 the 1 metre samples were homogenized by being rolled on a plastic sheet and 1kg measured off by weight. The rolling process involved folding the sample onto itself from one corner of square tarp then from the next corner continuing around the tarp three times so that the sample gets folded 12 times in total. This large sample was then subsampled using a square mouth scoop by taking 10 small scoops to make up 1 kg by weight. 2 metre composites were then assembled via mixing the two 1kg sub-samples. Diamond core was either cut in half or crushed prior to being homogenized by the rolling method and subsampled by square mouth scoop in same manner as previously described.

Criteria	JORC Code Explanation	Commentary
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).	All RC was conducted using face sampling hammer over a number of programs by different external drilling contractors (All Search Drilling Pty Ltd, AMWD, Chief Drilling and Drillit Consulting Pty Ltd) and a Rimfire Pacific owned RC Rig (converted from original OHH method). OHH holes utilising an in-house rig made up the remainder of drilling and this method of drilling was not used below the water table. Diamond drilling by Pinnacle Drilling for core of PQ and HQ triple tube diameter was utilized. Due to shallow drilling depths, the Company encountered some diamond core of poorer quality due to the fractured nature of the rocks, therefore inhibiting complete orientation and depth reconciliation. Over shorter distances it was possible to orientate locally with reference to core blocks for depth and frequent reflex core orientation marks.
Drill Sample Recovery	• Method of recording and assessing core and chip sample recoveries and results assessed.	Chip sample recovery for RC and OHH drilling methods were via a cyclone straight into a large plastic bag. The bag was numbered with Hole No. and depth interval. Poor sample recoveries are noted during logging with percentage estimates. These were compared to assay results. Core recoveries were recorded against core blocks however some areas were difficult due to poor core condition. Sample recoveries are consistently high and very few intervals have recovery problems.
	• Measures taken to maximise sample recovery and ensure representative nature of the samples.	As a standard procedure each RC drillhole is blown out at the beginning of each rod to remove excess water, regardless of water noted or not, plus auto-blow downs, to maintain dry samples. The presence of water was occasionally noted in RC drilling, with RC and OHH samples visually checked for recovery, moisture and contamination. A cyclone and riffle splitter (for RC) are used to provide a uniform sample and these are routinely cleaned. Rigorous splitting methods have been used to subsample. Triple tube diamond drilling method was used to assist core recovery.
	• 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.	A statistically insignificant number of wet sample in RC drilling was recorded and upon close examination and comparison, no identifiable bias in the results was noted. OHH was never used below water table or through loose alluvium. Hole twinning of OHH using RC indicated that there was no notable grade bias by preferential loss/gain of fine/coarse material.
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.	Geological logging of drill chips records colour, grain size, lithology, alteration, mineralization, oxidation and veining including percentage estimates along with moisture content. RC and OHH hole do not allow

Criteria	JORC Code Explanation	Commentary
		geotechnical logging. A very small sample of drill samples are sieved, logged and placed into chip trays. 188 out 203 RC holes have been logged and 59 out of 140 OHH holes have been logged. The coverage and detail of holes geologically logged is sufficient to support mineral resource estimation, mining studies and metallurgical studies.
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Geological logging of drill chips and core was qualitative by nature, drill chip trays, core trays and core photos are retained for future reference.
	• The total length and percentage of the relevant intersections logged.	All metres within a hole are logged where geological logging has taken place. 92% of RC holes, 40% of OHH holes have been logged & 88% of diamond holes have been geologically logged.
Sub-Sampling Techniques and Sample Preparation	• If core, whether cut or sawn and whether quarter, half or all core taken.	The Company aims to retain half core as a rule, if heavily fractured core is encountered, the entire metre was crushed with a subsample taken of the rolled (homogenized) sample as per method described under "Sampling Techniques".
	• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	For drill holes prior to Fi0364 (excluding Fi0220 to Fi0224 & Fi0238 to Fi0244), the samples were rolled which is described under "Sampling Techniques" in this table. All other holes including Fi0220 to Fi0224 & Fi0238 to Fi0244 have had samples riffle split. Lower priority RC intervals were initially spear sampled on 4 metre composites and if found to be anomalous were subsequently riffle split and re-assayed. Wet samples were not put through riffle splitter but homogenized and subsampled using small spear. A small percentage of samples were taken to fill gaps and re-sample 4m mineralized samples, these were taken as 2m spear sample composites of equal weight.
Sub-Sampling Techniques and Sample Preparation	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Assessment of QAQC data that covered riffle splitting and rolling methods for percussion drill samples indicate that there was no significant statistical difference between the sample preparation techniques. The QAQC data supports that the methods used are appropriate to the style of mineralization. Duplicate samples were not submitted from the core. Core sampling is appropriate where there is no core loss, half core is appropriate where the core can be cut. Crushing of core followed by homogenization and splitting is appropriate where the core is highly broken.
	• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	For Fi0364 onwards, industry standard QAQC protocols were employed with insertion of certified reference samples, blank samples and field duplicates were included every 50, 51 and 52nd sample respectively. Certified reference samples were obtained from ORE Research &

Criteria	JORC Code Explanation	Commentary
		Exploration Pty Ltd (OREAS) and were provided with expected grade and Standard Deviation (SD). Criteria of assessment of the certified standard was to fall within +/- 2 SD of the expected result. Criteria for blanks were within 2 X limit of detection and for field duplicate samples +/- 20%. Certified results and duplicates results had to exceed 20 times the limit of detection to fall into the laboratory QAQC target range of +/- 10% before further investigation was pursued. Exceedance of these criteria instigated a process by which lab was queried, results checked and samples re-assayed. Initial exploration techniques incorporated the following technique - The sample rolling technique had a number of quality control procedures including specific task training, work conducted very close to field office (for frequent supervision), visual inspection for obvious contamination, changing tarps if a damp clay rich sample was processed, square mouth scoop used to avoid vertical bias, portable scales used for weighing 1 kg to ensure constant and equal weights in subsample for composite. Four 1 metre samples were selected over very high grade interval returned from 2 metre composites in Fi0072. The repeatability indicated that the gold size allows separate sub samples and still get a similar result. The weight limit of 2kg was to ensure the samples did not get pulverised in an LM5 machine which has problems with cleaning out the bowl. Riffle splitting had a number of quality control procedures including specific task training, visual inspection of sample for obvious contamination, No wet samples are put through the riffle splitter, even spread of material across top of splitter, visual inspection of splitter for contamination and cleaning splitter if required between samples, equal weights (estimated from equal volumes) are collected for composited intervals. For Fi0061 through to Fi0216 no QAQC program was in place and for Fi0217 up to Fi0349 partial QAQC program was in place which included submission of blank and charged samples. A retrospective field duplicate sampling program has been completed along with umpire lab analysis of pulps. For diamond drilling, metres were marked up with reference to core blocks, any material that could be sawn in half was cut and remaining material was put through onsite crusher. The crusher was cleaned with

Criteria	JORC Code Explanation	Commentary
		compressed air between every sample. The 1 metre intervals were rolled on a small tarp and sampled with small square mouth scoop to avoid vertical bias.
	• 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.	5% of samples from within the mineralized envelope have had field duplicates taken. Field duplicate samples underwent the same QA/QC process. The analysis identify that the methods used are appropriate to the style of mineralization.
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	The Company believes the laboratory sample size is appropriate for the fine gold grain size, as identified from basic field petrology tests. The QAQC results of field duplicate analysis also supported the methods used as appropriate to the style of mineralization.
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.	Reported RC samples were dispatched to ALS Laboratories with Au determined either by Au_AA22 to 0.002 ppm Au or by Au_AA26 to 0.01 ppm Au with both methods using a 50 gram charge. Upper limits for are 1 and 100 ppm Au for AA22 and AA26 respectively. Selected intervals have been submitted for Screen fire assay method Au_SCR22AA. Silver analysis has been by either ME-ICP41 which is an Aqua Regia method or ME-ICP61 or ME-MS61 which are four acid digest methods. Over limit silver analysis >100ppm Ag is by Ag-OG46 for Aqua Regia or Ag-OG62 for four acid digest. 50 gram charge fire assay analysis for gold is considered as total techniques in the absence of coarse metal. Screen Fire Assay for gold is considered as total technique when coarse gold is present. Studies in the oxide zone showed no significant difference between Aqua Regia and Four acid digest for silver, indicating that they are both total techniques for silver analysis in the oxide. No study has been conducted to look at the difference in the primary material however it is suspected that Aqua Regia may under report in the primary zone compared to Four Acid digest due to difficulties in breaking down sulphides in the sample.
	• 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.	All significant results reported from NATA accredited laboratory. The Company's handheld XRF (Olympus Delta50) has been used to determine sample length and type i.e. 1m sample or 2m or 4m composite

Criteria	JORC Code Explanation	Commentary
		and subsequent litho-geochemistry interpretation. XRF data has not been used in resource estimation. All data is collected using a 30 seconds reading time for each of the 3 beams in soil mode, which is calibrated daily.
	• 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.	For drillholes Fi0364 to Fi0478 (81 holes), industry standard QAQC protocols with insertion of certified reference samples, blank samples and field duplicates are included every 50, 51 and 52nd sample respectively. For drilling prior to Fi0364 (264 holes), a retrospective QAQC program was conducted, which sampled 5% of intervals within the mineralized envelope as field duplicates. In addition to the retrospective QA/QC program, approximately 5% of all pulps from within the mineralized envelope were submitted to a secondary umpire laboratory. Reviews of internal QAQC results has demonstrated that the field sampling, riffle splitting compositing methods used are appropriate to the mineralization being tested. External laboratory analysis of "umpire" samples has been conducted at SGS Laboratory Services, demonstrating there is no significant bias in the results.
The Verification of Significant Intersections by either Independent or Alternative Company Personnel	• The verification of significant intersections by either independent or alternative company personnel.	All reported intersections are independently reviewed by 2 senior technical company personnel. 77 drillholes had all drilled metres panned in the field and inspected under the microscope. This work was able to confirm gold presence and also verify presence of high grades.
	• The use of twinned holes.	A total of ten (10) twinned holes have been completed. The program twinned seven (7) OHH hammer holes, utilizing the RC method on the same rig, cyclone and driller across the project area. The program also twinned three (3) RC holes drilled by contractor rig. The program has verified the OHH as an effective drilling technique in the oxide zone and confirmed presence of all intersections.
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Initially, primary geological data was captured in the field via pen and paper logs which where digitized. This evolved into primary field geological data being captured electronically using established templates. Sample data was initially created in hard copy in the field however this evolved into digitally created sample data that then had the hard copy checked off in the field. Digital assay data from laboratory is merged and then loaded into a Microsoft Access based database after passing QAQC checks, to ensure merging is correct and the QC samples pass criteria. A selection of 5 % of drillholes (17 holes) spread across the project in time, location and drilling method have been checked by H & S Consultants to

Criteria	JORC Code Explanation	Commentary
		verify the data quality. The database is backed up on a regular basis and ODBC links provide direct export of data to the Company purchased Micromine 3D software.
	• Discuss any adjustment to assay data.	Where"<" values are received in assays, they are converted into "-" values. Where multiple gold assays have been received, the first gold assay is given priority except in the case where screen fire assays exist and then these are given priority.
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.	For drillholes Fi0364 to Fi478, RC Hole collars are surveyed using either a Garmin GPS, or Trimble DGPS, and the post drilling collar position is picked up by a Trimble centimetre accurate Differential GPS (DGPS). For drill holes prior to Fi0364 the collars were surveyed to local grid via optical square and tape. The local grid baselines were picked up by DGPS. 147 holes have multi-shot, and single shot down hole surveys, the remaining 198 holes are short and/or vertical holes and are without downhole survey. Assessment of holes with downhole survey indicates that potential movement of the un-surveyed downhole locations are not likely to materially impact resource calculations due to the size of parent and subblocks used in the block modelling, drill density and also the depth mineralization as intercepted down the hole. This is supported by twinned hole data.
	• Specification of the grid system used.	Prior to Fi0364, exploration was conducted on local grids which approximated AGD66 zone 55, these were picked up and transformed to AGD66 zone 55. In August 2013 the entire grid system and all data were transformed into GDA94 zone 55.
	• Quality and adequacy of topographic control.	Collar elevation data from digital terrain model derived from detailed ground gravity survey DGPS data, the low topographic relief means that this process provides adequate control to within an estimated +/- 0.5m.
Data Spacing and Distribution	• Data spacing for reporting of Exploration Results.	The drillhole spacing varied and is not on specific grid spacing's however near surface oxide material was drilled on approximately 15m X 15m or 20 X 20m spacing's and primary material drilled on approximately 40 X 40m spacing's to 100x60m spacing.
	• 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.	The drill spacing's were individually designed to establish continuity and have largely formed the basis of allocation of resource classification across the project.
	• Whether sample compositing has been applied.	Samples are taken from the cyclone at 1 metre intervals. 2m composites are included in the resource calculation. Equal weights from each 1 meter interval are used to ensure that the composite adequately

Criteria	JORC Code Explanation	Commentary
		represents the intervals sampled. The equal weights are estimated from equal volume measure, used when subsampling or from actual weights.
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; multiple orientations have been tested and there is no observable trend. All drilling has attempted to achieve as close to "true width" intersection with the targeted mineralization.
	• If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The drilling orientation is designed to intercept the mineralization orthogonally where known; the relationship between the drilling orientation and the orientation of key mineralized structures is not considered to have introduced a sampling bias.
Sample Security	• The measures taken to ensure sample security.	During each drilling program, all samples were collected by experienced Company samplers under experienced technical supervision, stored in a secure on-site location, alarmed security, and transported to ALS Orange NSW via Rimfire personnel or licensed couriers.
Audits or Reviews	• The results of any audits or reviews of sampling techniques and data.	Internal and external reviews of QAQC data has shown that the field sampling, rolling method (initial method), riffle splitting and compositing methods used are appropriate to the mineralization being tested**.** The Company has for a significant time employed standard industry techniques during the execution of its field exploration programs.

Section 2 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Mineral Tenement and Land Tenure Status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Reported results all come from EL5534 which is a 100% Rimfire Pacific Mining NL tenement at Fifield NSW. All samples were taken on Private Freehold and/or Common Land (prescribed for mining). No native title exists. The land is used primarily for grazing and cropping. The Common land is host to Inland Grassy Grey Box Woodlands which have been classified as an Endangered Ecological Community.
	• The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	The tenement is in good standing, and all work is conducted under specific approvals from NSW Trade and Investment, Mineral Resources.
Exploration Done by Other Parties	• Acknowledgment and appraisal of exploration by other parties.	There is no record of previous exploration of the Sorpresa mineralization apart from minor surface workings in various locations. Platina Developments conducted exploration of the Platina Lead using Caldwell drilling which traversed across Sorpresa trend but do not identify the

Criteria	JORC Code Explanation	Commentary
		mineralization. Rock chip sampling of George Green's Prospect workings (Original Sorpresa area) by Platina Developments identified anomalous Au and Ag in the rock chips. Various other companies had explored for various metals in the area but with no reference to gold and silver mineralization on the Sorpresa Trend.
Geology	• Deposit type, geological setting and style of mineralization.	The mineralization at Sorpresa appears to have many similarities with typical carbonate base metal epithermal gold (+/- Silver) style.
Drill Hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: o Easting and northing of the drill hole collar o Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar o Dip and azimuth of the hole o Down hole length and interception depth o Hole length	As no exploration results are being reported, this section is considered inapplicable.
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	As no exploration results are being reported, this section is considered inapplicable.
Data Aggregation Methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	As no exploration results are being reported, this section is considered inapplicable
	• Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	As no exploration results are being reported, this section is considered inapplicable.
	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship Between Mineralization Widths and Intercept Lengths	• These relationships are particularly important in the reporting of Exploration Results.	As no exploration results are being reported, this section is considered inapplicable.
	• If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.	As no exploration results are being reported, this section is considered inapplicable
	• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg "down hole length, true width not known").	As no exploration results are being reported, this section is considered inapplicable
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These	Refer to Figures.

Criteria	JORC Code Explanation	Commentary
	should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
Balanced Reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	As no exploration results are being reported, this section is considered inapplicable
Other Substantive Exploration Data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Establishment of the bulk density to enable resource calculations was via a purpose dug trench at Boundary Gate. The trench enabled access for removal of a 2317 kg sample of mineralized weathered rock. The excavated space was accurately measured and sample was accurately weighed with subsample taken for moisture determination. This identified specific gravity (SG) of oxide material to be 2.55 Preliminary metallurgical test work has been conducted under the supervision of an external metallurgist, on various bulked and individual samples across Sorpresa. The early stage results only completed in the oxide zone achieved gold recoveries of 93% and silver recoveries of 74%.
Further Work	• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	As no exploration results are being reported, this section is considered inapplicable.
	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	As no exploration results are being reported, this section is considered inapplicable

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. • Data validation procedures used.	• The Sorpresa database was independently validated by checking the digital database entries against original paper records, including original laboratory assay certificates, for accuracy and completeness. • Validation procedures included detailed checking of all data for 17 holes (~5% of holes in database) covering all drill programs for collar location, down hole surveys, assays and geological logging. The conversion of coordinates from local to GDA was checked, as well as checking screen fire assays for gold. Down hole surveys were checked for potentially excessive deviation.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• The Competent Person visited site over a period of 3 days – September 17-19, 2014. General site geology and layout were inspected, core and chip samples were examined and sample splitting procedures and equipment were observed. No drilling was in progress at the time. Field procedures were being performed in a professional manner and no material issues were identified.
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. • Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral Resource estimation. • The use of geology in guiding and controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	• The geological interpretation of the main mineral deposit is based on identifying the host unit, which can be reliably traced over a distance of 1.5km, so confidence is high. The confidence in the Boundary Gate East area is lower, because mineralization is not entirely confined to the host unit, suggesting structural complications in this area. • The geological interpretation is based on lithology and geochemical data in ~340 drill holes, which includes both chemical assays and hand held XRF measurements for a wide range of elements. It was assumed that the database is accurate and complete. • There appears to be limited scope for alternative interpretations because the main mineralized zone is clearly defined by lithology and geochemistry. It is considered unlikely that alternative interpretations would have a substantial impact on the Mineral Resource estimates due to the generally close spacing of the data points. • The geological model was used as the framework for resource estimation,

Criteria	JORC Code explanation	Commentary
		and mineralized domains were defined using gold and silver grades within the host unit. The mineralized zones were treated as having hard boundaries during grade estimation, while the oxidation was treated as a soft boundary due to its gradational nature. • The primary factor controlling geological continuity is stratigraphy, while grade continuity is considered to be controlled by a combination of favourable stratigraphy and structural disruption within the host unit. The primary mineralization is overprinted near surface by weathering and oxidation.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The Sorpresa Mineral Resource has a curved strike length of 1,600m and projected plan width varies from 60 to 450m, averaging around 150m. Resources outcrop at surface and extend to approximately 230m below surface. Horizontal lode width varies from 10 to 70m, averaging around 30m. Depth of oxidation averages around 50m, but can vary from 15 to 75m. Details for the different prospects are: • Roadside North: dominantly silver-rich mineralization; strike length 270m, projected plan width of 270m, and extends from 2.5m to 230m below surface. • Roadside: gold and silver rich mineralization; strike length 160m, projected plan width of 450m, and extends from surface to 180m below surface. • Join-Up: gold-rich and silver-poor mineralization; strike length 170m, projected plan width of 100m, and extends from 2.5m to 75m below surface. • Boundary Gate: discontinuous lenses of gold-rich and silver-poor mineralization over strike length of 540m; projected plan width of lenses ~60m, and extending from surface to 150m below surface. • Trench 31: gold-rich and low silver mineralization; strike length 270m, projected plan width of 80m, and extends from surface to 85m below surface. • Boundary Gate East: discontinuous lenses of gold-rich and silver-poor mineralization over strike length of 200m; projected plan width of lenses ~220m, and extending from 50 to 150m below surface.
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a	• Gold was estimated using a recoverable multiple indicator kriging (MIK) technique in GS3 software. Nominal 1.0m sample composites were used. Domains were defined using a nominal grade threshold of 0.10 g/t Eq Au (Au + Ag/60) within the host unit; domains vary in the strike and dip of

Criteria	JORC Code explanation	Commentary
	description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	mineralization. MIK was considered an appropriate method given the strongly skewed grade distributions in some domains. A three pass search strategy was used, with initial radii of 25x25x6m, which were doubled for the second pass and doubled again in X and Y for the third pass. The search ellipsoid orientation varied for each domain and the maximum extrapolation distance was 100m. A minimum of 16 and maximum of 48 samples was used to estimate each block, apart from the final pass where a minimum of 8 samples was used. Octant constraints were used to ensure a minimum of two holes in the first 2 search passes. Silver was estimated using the ordinary kriging (OK) technique in Datamine software. The same domains were used for both silver and gold. OK was considered an appropriate method given the low to moderate skewness of grade distributions in all domains. Silver used the same search strategy as gold, except the maximum number of samples was set to 32. • Order of magnitude estimates were generated by Rimfire personnel using implicit modelling and the new MIK/OK estimates compare favourably with these. • Only gold and silver production is anticipated so no by-products are expected. • No deleterious elements or other non-grade variables of economic significance were estimated. • The parent block size for both MIK and OK estimates was 10x10x5m in X, Y and Z respectively. Nominal hole spacing is typically 15x15m to 20x20m in the better drilled areas, so the block size corresponds to about half the data spacing in the horizontal plane. • The recoverable MIK estimates for gold assumed an SMU of 5x5x2.5m, which was also the minimum sub-block size for the OK silver estimates. • Correlation between gold and silver is poor, both globally and within each domain, so no correlation between gold and silver was assumed in the estimates. • The geological interpretation was used as the framework for resource estimation, and mineralized domains were defined using gold and silver grades within the host unit. The mineralized zones were treated having as hard boundaries during grade estimation, while the oxidation was treated as a soft boundary due to its gradational nature. • Grade trimming was applied in some domains for the MIK estimates, where the median rather than mean grade was used in the top indicator class –

Criteria	JORC Code explanation	Commentary
		this was only applied in cases where the difference between the mean and median grades in the top indicator class was extreme. Silver composites were top-cut to 1,000ppm for estimation, which only affected one composite. • The estimates were validated in a number of ways – visual comparison of block and drill hole grades, statistical analysis, examination of grade-tonnage data, and comparison with the order of magnitude estimate generated by Rimfire personnel. The comparisons of model and drill hole data show that the estimates appear reasonable. No reconciliation data is available because the deposit remains unmined.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• Tonnages were estimated on a dry weight basis; moisture content was only determined for a single bulk density sample.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• The cut-off grades were chosen on the basis of providing reasonable prospects for eventual economic extraction given a number of factors including metallurgical testing, long term market prices, and conceptual mining and processing costs.
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• The mining method is currently assumed to be open pit extraction. The estimates include some allowance for internal mining dilution, in that the SMU and minimum sub-block size is 5 x 5 x 2.5 metres. Assumptions regarding mining are conceptual at this stage of the project.
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• Preliminary metallurgical testwork on three composite oxide samples shows that gold recoveries of 93% and silver recoveries of 74% could be achieved. No primary samples have been tested to date.
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts,	• At this stage of the project, limited environmental investigations have been conducted and no environmental assumptions have been made beyond that a conventional open-pit mine and processing facilities should be possible.

Criteria	JORC Code explanation	Commentary
	particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• A number of density measurements were determined on site by Rimfire personnel using an unsealed water immersion method – 11 PQ core samples were tested. A two tonne bulk sample was also taken from a trench, weighed, moisture determined and volume measured. • Unsealed immersion was considered adequate for fresh samples as there is negligible void space and moisture content in this material. The bulk sample did account for void space and moisture content and compared reasonably well with other oxide zone measurements. • Average density values were assigned to fresh and oxidised lode material based on the available samples; different weighting schemes were tested using the core and bulk samples for the oxide zone material and gave similar results. A density of 2.76 t/m^3 was applied to fresh lode and 2.55 t/m^3 to oxide in the resource model.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the Competent Person's view of the deposit.	• The Mineral Resources were classified on the basis of estimation search pass, with passes 1 & 2 classified as Indicated and pass 3 as Inferred. No depth restriction has been imposed but the majority of resources (~70%) occur within 100m of surface. • Appropriate account has been taken of all relevant factors, including relative confidence in tonnage/grade estimates, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data. • The reported Mineral Resources appropriately reflect the Competent Person's view of the deposit.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• No formal audits or reviews have been undertaken to date.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	• The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated JORC Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on the Competent Person's experience with similar deposits. Factors that could affect the relative accuracy and confidence of the estimate include:

Criteria	JORC Code explanation	Commentary
	• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• The interpretation of the mineralized domains, • The continuity of very high grade samples. • The estimates are local, in the sense that they are localised to model blocks of a size considered appropriate for local grade estimation. The tonnages relevant to technical and economic analysis are those classified as Indicated Mineral Resources. • No production data is available as the deposit remains unmined.