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ASX Code "RIM"

Exchange Tower Suite 411, 530 Little Collins Street Melbourne Victoria Australia. 3000

61 3 9620 5866
 61 3 9620 5822
 <u>rimfire@rimfire.com.au</u>
 www.rimfire.com.au

# <u>Gold mineralisation confirmed from surface at Carlisle, Fifield NSW</u> Intersections include 7m @ 1.47g/t gold in reconnaissance RC Drilling

Rimfire Pacific Mining NL (ASX:RIM) ("Rimfire" or "The Company") is pleased to announce encouraging gold results from its initial reconnaissance reverse circulation (RC) drilling program at the Carlisle – Target 1 Prospect, within the Company's Fifield Region Exploration Portfolio (Figure 1).

The objective of this reconnaissance program was to investigate the potential for near surface gold mineralisation underlying high grade rock chip results up to 23g/t Au, as first announced in a November 2014 ASX Release *(Carlisle RC Drilling to Commence 16<sup>th</sup> December)*. The recently completed RC drilling program consisted of 8 holes for 512m (Fi0429 to Fi0436). Each of the 8 holes intersected gold mineralisation.

# Highlights

- Assay results have confirmed gently east dipping gold mineralisation from surface which remains open in multiple directions.
- Latest results include: (Table 2)
  - 7m @ 1.47g/t Au from 0m (Fi0429) (Incl. 2m @ 4.35g/t Au from 3m)
  - 4m @ 1.79g/t Au from 6m (Fi0434) (Incl. 2m @ 2.29g/t Au from 8m)
  - 4m @ 1.02g/t Au from 12m (Fi0436)
     \*Screen fire assay of this interval returned 1m @ 4.16g/t Au from 13m.



Drill rig operating at Carlisle

- Highly anomalous fpXRF Cu results up to 854ppm Cu has also been observed, consistent with the geological / mineralisation model – namely as a possible Tritton style
- □ The drill results now confirm previously reported high grade gold rock chip results of 23g/t Au, 13.7g/t Au, 7.29g/t Au, 7.02g/t Au and 6.22g/t Au, continue into the subsurface and represent a significant emerging drill target.
- Geological logging indicates the mineralisation occurs along a gently east dipping (-32 degree) silica-gossan/sulphide zone, hosted at the contact between meta-sediments and a dolerite sill.
- Follow up RC drilling is being designed along strike where soil geochemistry and aeromagnetics indicate strike extensions (Figure 2). A second magnetic target (Figure 5) has been 3D modelled in preparation for drilling, anticipated in the coming months.
- The Carlisle Prospect is located approximately 6.8 km from the Sorpresa Au/Ag deposit. The Company announced a JORC 2012 Compliant Inferred & Indicated Maiden resource for Sorpresa in December 2014.



Carlisle Rockchip Sample FiR 1380 - 23g/t Au

#### Executive Chairman, John Kaminsky stated:

"The initial Carlisle assay results are highly encouraging and provides incentive for a further 2<sup>nd</sup> stage of field program activity to occur. The completed program has successfully achieved its objectives, namely, to identifying near surface gold mineralisation, provide a better understanding of the underlying geology and form a foundation for next stage detailed targeting to occur. The gold intersections at Carlisle represent an additional milestone for the Fifield district, with the continued growth of the greenfields regional prospects.

We appear to have quite a precise geological location for the gold at Carlisle, occurring within the silica event. Accordingly, the better parts of this geological unit may have good potential for further gold mineralization at Carlisle. Whilst the gold mineralisation has a subtle surface expression, it appears responsive to geochemical and geophysical methods.

Approximately 50% of the Carlisle – Target 1 direct drilling costs will be offset via the NSW Government Department of Trade and Investment, under the "New Frontiers" Cooperative Drilling Scheme, of which the Company was awarded \$175,000.

The Company maintains a keen interest to advance the Carlisle prospect series of targets in parallel with the Sorpresa Au/Ag Project and the other near surface opportunities identified by the Company in the Fifield district.

A second target at Carlisle consisting of a diffuse bullseye magnetic high anomaly (Figure 5) obscured by conglomerate cover, with peripheral silica, magnetite, hematite alteration, pyritisation & trace native Cu, is considered a prospective **Tritton style Cu-Au target** and remains to be drilled. Encouraging XRF Copper results in the current drilling are considered very prospective.

Rimfire is evaluating the next phase of investigation for **Carlisle – Target 1**, and a first phase for **Carlisle – Target 2**. The program will likely comprise shallow RC drilling to investigate the strike and shallow depth extent of the prospects.

In the meantime, elsewhere at Fifield, the Company awaits further assay results from "the Gap" drilling within the Sorpresa project area, where mineralisation, including visible gold was noted in the field.

Similarly, assessment of additional key geophysical targets has been undertaken that will result in drilling programs at Sorpresa, South of Trench 31, and a range of regional prospects, including Yoes Lookout. This program has the potential to produce "Company Making" outcomes, given the high quality of some of the geophysical targets, including IP/Gravity and Magnetic targets. The Company will issue more details on this shortly."

#### Carlisle Prospect - Background including Base Metal Potential



**Located approximately 6.8km SW of Sorpresa**, field work at the Carlisle Target **in July 2014** discovered outcropping ironstone and two outcrops that included fresh sulphides comprising quartz-pyrite-arsenopyrite veined pyritic quartzite in a NNE trending shear zone.

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

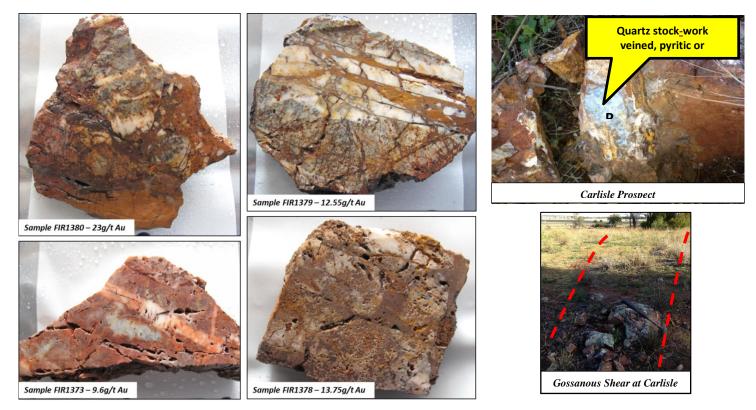
A basement window of approximately 85m long x 40m wide of sub-crop and float on a small hill was identified with 20 rock chip samples taken, of which **85% returned results** > **1g/t**, **and 20%** > **10g/t Au** up to **23g/t Au**.

3D inversion modelling of a recently flown high resolution aeromagnetic and radiometric survey revealed a compelling structural interpretation underlying the high grade gold rock chips invoking a regional curvilinear 'fertile' thrust fault.

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

Multispectral ASD scanning may assist determination of the hydrothermal alteration assemblages in the deeply weathered profile aiming to confirm the hypothesis of the alteration and mineralisation representing a silica – pyrite – gold cap to a larger Besshi Style VMS Cu-Au system at depth, **akin to the Tritton Deposit, NSW**. Highly anomalous fpXRF Cu results add weight to this hypothesis.

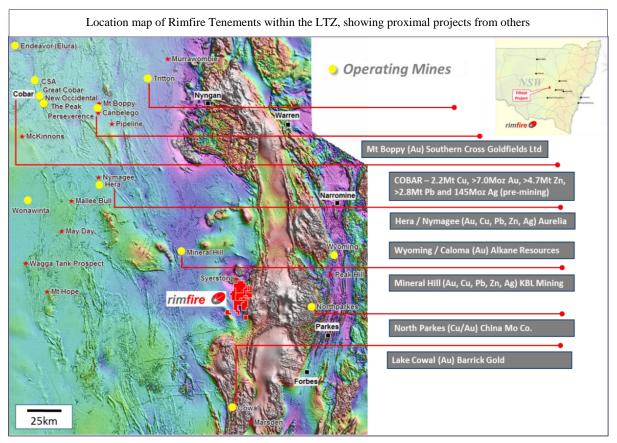
#### High Grade Gold Rock Chip Samples at Carlisle Prospect at Fifield NSW



# **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 mineralised system of some promise. The gold is predominantly native gold.



The best gold and silver intersections achieved from the period mid-2012 to the current date on the Sorpresa Project area with locations shown include (*note Table 2: Dates and Hyperlinks for previously referred to results in this report*):

14m @ 21.9g/t Au plus 6m @ 93g/t Ag	Trench 31
14m @ 24.4g/t Au plus 26m @ 155g/t Ag	Roadside
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 (BGE)
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 mineralisation is approximately 1.5km in length and is at various stages of further discovery extension drilling.

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

The latest presentations on the Company are at hyperlinks:

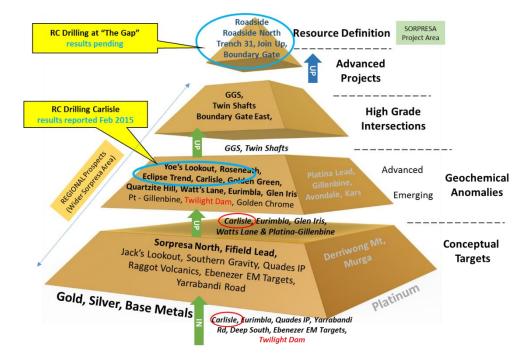
#### <u>Rimfire Exploration Presentation - AGM 14 November 2014</u> <u>Exploration Industry Presentation and Rimfire Benchmarking - AGM 14 November 2014</u>

**A 3D Exploration Model,** as at May 2014, depicting gold mineralisation at Sorpresa with a description of the RC drill program goals at that time 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 mineralisation, 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, and a Resource 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 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	7m @ 1.47	yes	Magnetic Feature	Minor

# **Table 1: Ranked Prospect Portfolio at Fifield NSW**

# 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 being 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
- Grow the maiden resource at Sorpresa (23 Dec 2014), currently published as inferred and indicated comprising **6.4Mt for 7.9Moz of silver and 125kOz of gold (at 0.5g/t Au & 25g/t Ag cutoff)**
- Examine economic potential, as appropriate to the stage of the project area

# **Competent Persons Declarations**

#### 1. <u>Competent Authority Declaration - Resource Estimation</u>

#### Mineral Resources – Sorpresa

The information in this Report that relates to Mineral Resources for the Sorpresa deposit is based on information compiled previously 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 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' (JORC Code). Mr van der Heyden consented to the inclusion of the matters based on the information in the form and context in which it appears, as previously reported.

# 2. <u>Competent Authority Declaration – Historic Exploration Information</u>

The information in the report to which this statement is attached that relates to Exploration Results is based on information compiled by Colin Plumridge who is deemed to be a Competent Person and is a Member 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 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 has previously consented to the inclusion of the matters based on his historic 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: <u>ASX</u> <u>Announcements</u>. 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.

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 26<sup>th</sup> 2012 Successful Intersections at Sorpresa Gold Project ASX October 10th 2012 Highest Gold and Silver Grades seen to date at Sorpresa Project ASX December 18<sup>th</sup> 2012 Sorpresa Project Produces More Encouraging Results ASX March 27<sup>th</sup> 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 21<sup>st</sup> 2013 <u>Results Confirm Extensions of Gold and Silver at Sorpresa Project</u> ASX December 20<sup>th</sup> 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 26<sup>th</sup> 2014 Sorpresa Gold and Silver Mineralisation Extended at Fifield, NSW ASX November 28th 2014 Encouraging Gold Results Intersected in New Shallow Oxide Position at Sorpresa ASX December 8<sup>th</sup> 2014 High Grades Intersected in Sorpresa Resource Definition Drilling ASX December 23<sup>rd</sup> 2014 Sorpresa Maiden Resource Fifield NSW - 6.4<u>Mt for 125kOz of gold and 7.9Moz of silver</u> ASX February 20th 2014 Sorpresa RC Drilling Assays Finalised, New RC Drilling underway to extend mineralisation

Table 2 Dates and Hyperlinks for previously referred to results in this report

# **Metal Prices**

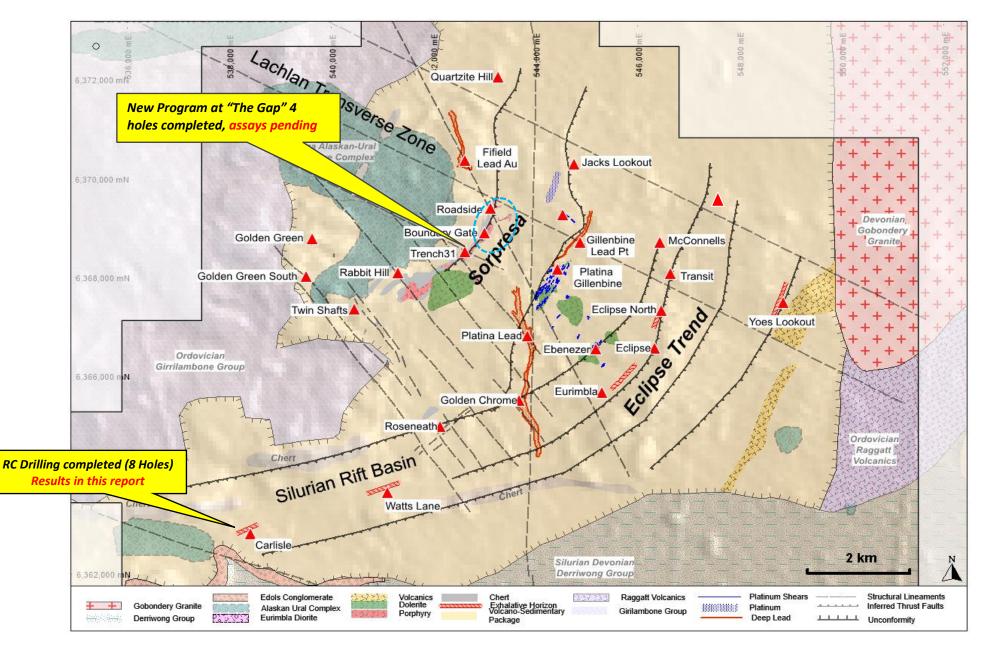
As at 20<sup>th</sup> February 2015, the trading prices (<u>www.kitco.com</u>) for metals in New York, closing Ask in USD were:

Gold	\$1,204/oz
Platinum	\$1,166/oz
Silver	\$16.40/oz

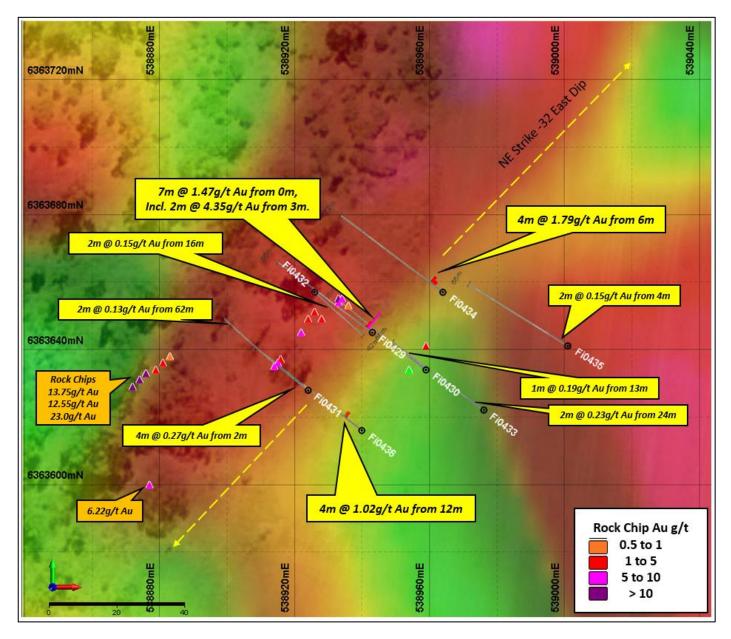
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JOHN KAMINSKY Executive Chairman

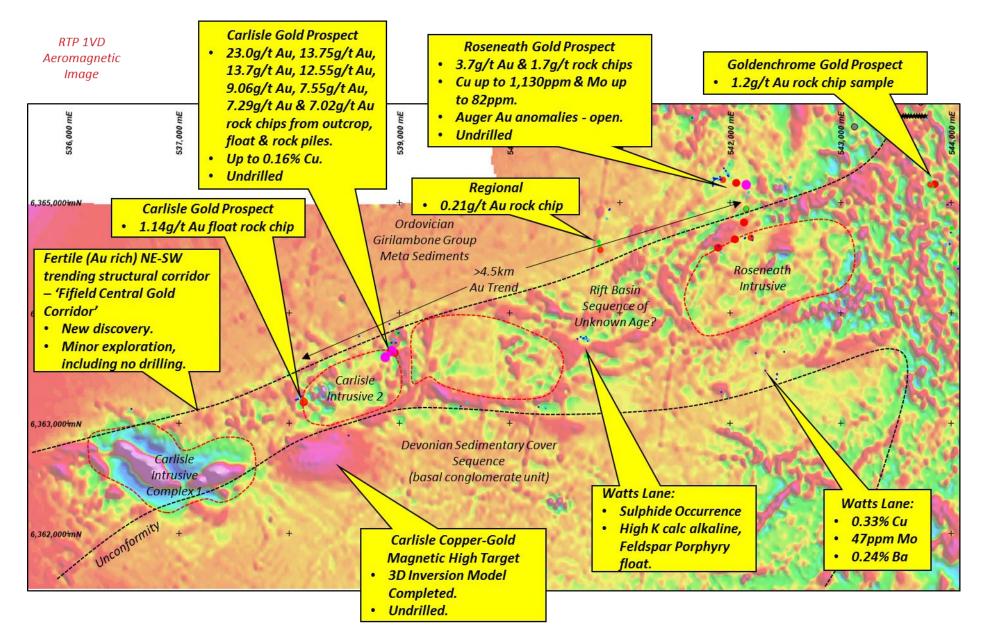
# Figure 1: Fifield Prospect and Concept Map with Current RC Drilling Locations



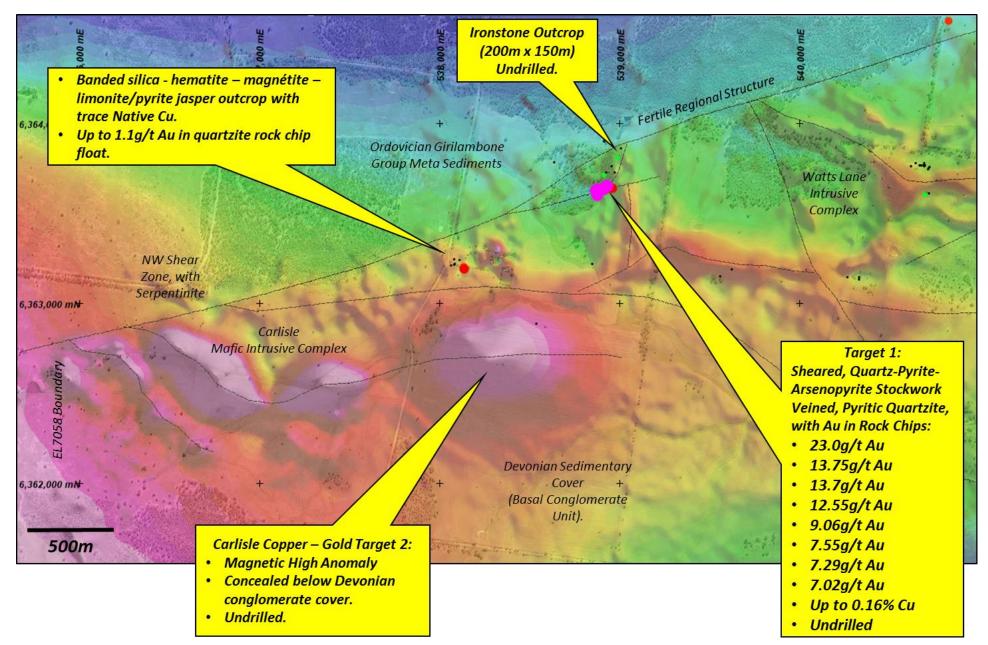
*Example 2: Carlisle Target 1 – RC drill hole location plan illustrating high grade rock chips, drill intersections on Aeromagnetic Image (RTP 1VD). A tight structural and lithological control to mineralisation is evident striking to the NE.* 



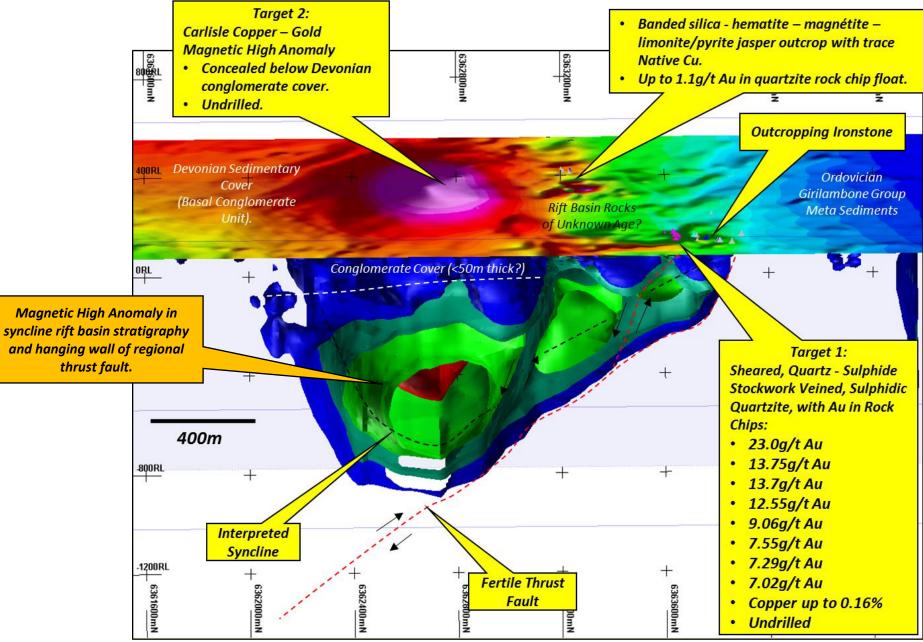
#### Figure 3: Carlisle Prospect Area – Gold and Copper Target – 6km SW of Sorpresa on Magnetic Interpretation



### Figure 4: Carlisle Gold Prospect – Gold in Rock Chips on RTP Aeromagnetic Image



## Figure 5: Carlisle Gold Prospect – 3D Modelled Magnetic Image



# Table 2: Significant Results from RC drilling at Carlisle

Hole ID	Easting (m GDA94)	Northing (m GDA94)	Survey Method	RL (mAHD)	Dip (°)	GDA Azimuth (°)	Depth (m)	Drilling Type	Prospect	From (m)	То (m)	Down hole Length (m)	Au (g/t)
Fi0429	538943	6363645	GPS	312	-60	308	66	RC	Carlisle	0	7	7	1.47
									incl.	3	5	2	4.35
Fi0430	538959	6363634	GPS	311	-60	308	66	RC	Carlisle	13	14	1	0.19
Fi0431	538924	6363628	GPS	311	-60	308	66	RC	Carlisle	2	6	4	0.27
										62	64	2	0.13
Fi0432	538926	6363657	GPS	312	-60	132	42	RC	Carlisle	16	18	2	0.15
Fi0433	538976	6363622	GPS	311	-60	308	66	RC	Carlisle	24	26	2	0.23
Fi0434	538964	6363657	GPS	312	-60	308	72	RC	Carlisle	6	10	4	1.79
									incl.	8	10	2	2.29
Fi0435	539001	6363641	GPS	311	-60	302	66	RC	Carlisle	0	6	6	0.10
Fi0436	538940	6363616	GPS	311	-60	308	72	RC	Carlisle	12	16	4	1.02

# Table 3: 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	<ul> <li>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.</li> </ul>	RC Samples are collected at 1m intervals from the cyclone in plastic bags. RAB Samples are collected at 1m intervals from the cyclone in plastic bags. 1 metre intervals are sampled from all Auger holes within in situ weathered basement geology. Nominal 2 kg samples are collected at the drill rig. Rock Chips samples are a mix of float, sub crop & outcrop (identified in results table).
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Industry standard QAQC protocols with insertion of certified reference samples, blank samples and field duplicates are included every 50, 51 and 52nd sample respectively.
	<ul> <li>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.</li> </ul>	RC Hole collars are surveyed using a Garmin GPS, and Trimble DGPS. Downhole surveying in RC hole is conducted every 20m open hole, and where required every 50m in-rod using stainless steel rods. All other drill and sample locations are surveyed using Garmin GPS.
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 conducted using face sampling hammer (119mm diameter). RAB drilling conducted using blade bit (100mm diameter). Auger drilling conducted by trailer mounted hydraulic driven auger rig with nominal hole diameter of 100mm.

Criteria	JORC Code Explanation	Commentary
Drill Sample Recovery	• Method of recording and assessing core and chip sample recoveries and results assessed.	Poor sample recoveries are noted during logging with percentage estimates. These are compared to results.
	• Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC samples are visually checked for recovery, moisture and contamination. A cyclone is used to provide a uniform sample and these are routinely cleaned. The hole is blown out at the beginning of each rod to remove excess water and to maintain dry sample. Auger and RAB samples are visually checked for recovery and up hole contamination. Auger and RAB drilling not conducted below the water table.
	• 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.	In RC drilling occasional poor sample recovery and also wet samples occur however close examination and comparison to results showed that there is no identifiable bias in the results associated with these samples.
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, grainsize, lithology, alteration, mineralisation and veining including percentage estimates along with moisture content. Drill samples are sieved, logged and placed into chip trays.
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Geological logging of drill chips is qualitative by nature, drill chip trays are retained for future reference.
	• The total length and percentage of the relevant intersections logged.	All metres drilled are logged
Sub-Sampling Techniques and Sample Preparation	• If core, whether cut or sawn and whether quarter, half or all core taken.	No core reported in this release
	• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Reported RC results have been spear sampled with all intervals returning >1 g/t Au checked via resampled using riffle split. Wet samples are not put through riffle splitter but homogenized and subsampled using small spear. Sample returned from 1 metre RAB interval is homogenized and speared and composited and maximum composite interval within significant intersection is provided with result. Sample returned from 1 metre auger interval is homogenized in collection tray and speared. All RAB and Auger samples were dry. Rock Chips are sawn in half with half submitted for analysis.

Criteria	JORC Code Explanation	Commentary
Sub-Sampling Techniques and Sample Preparation	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sub-samples obtained from spearing and riffle splitting are submitted as 1m intervals or composited to 2m (equal weights) to produce a bulk 2kg sample, subsamples of occasional wet metres are composited similarly. Lower priority zones are speared and composited on 4m intervals. QAQC results on the spearing method and also check samples on > 1g/t intervals using a riffle split show that spearing and riffle splitting are both appropriate techniques to the style of mineralisation.
	• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Industry standard QAQC protocols with insertion of certified reference samples, blank samples and field duplicates are included every 50, 51 and 52nd sample respectively. No wet samples are put through the riffle splitter which is checked between samples and cleaned (when necessary) between samples. Equal weights (estimated from equal volumes) are collected for composited intervals.
	• 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.	Analysis of results from Field duplicate samples identify that the methods used are appropriate to the style of mineralisation.
	• 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 mineralisation.
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 are dispatched to ALS Laboratories with Au determined by Au_AA26 or Au_AA22. Selected samples are submitted for Screen Fire Assay Au_SCR22AA. Ag results are determined by ME-ICP41.
		RAB and Auger samples are dispatched to ALS Laboratories with Au determined by fire assay methods Au-AA22 (or PGM-ICP24) which returns Au to 2ppb (or 1 ppb) respectively, PGM-ICP24 includes Pt to 5 ppb and Pd to 1 ppb on a 50g charge. Selected auger samples were also submitted for full suite multi-element analysis are via Four Acid Digest method ME-MS61.
		Rock chip samples are submitted to ALS Laboratories for Au via Fire Assay method Au-AA22 to 2 ppb and full suite multi-element analysis are via Four Acid Digest method ME-MS61.
		Fire Assay analysis for gold and Four Acid digest for multielement analysis are considered as total techniques in the absence of coarse metal. Aqua

Criteria	JORC Code Explanation	Commentary
		Regia comparisons to Four Acid indicate in the oxide zone Aqua Regia can be considered as a total technique for silver. Screen Fire Assay for gold is considered as total technique when coarse gold is present
	• 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. Handheld XRF (Olympus Delta50) is used to determine sample type i.e. 1m riffle split or composite. All data is collected using a 30 seconds reading time for each of the 3 beams in soil mode.
	• 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.	Reviews of internal QAQC results has shown that the field sampling, spearing, riffle splitting and compositing methods used are appropriate to the mineralisation being tested. External laboratory analysis of "umpire" samples assessed occasionally confirm results from the primary laboratory
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.
	• The use of twinned holes.	Hole Twinning has been conducted at Sorpresa and showed good comparison.
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary field data is captured electronically using established templates. Assay data from laboratory is merged and loaded into Access based database after passing QAQC checks.
	Discuss any adjustment to assay data.	"<" values are converted into "-" values and for geochemical analysis results returning less than detection are ascribed to half the detection limit.
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.	Drill collars are located using handheld Garmin GPS and are RC collars are picked up by a Trimble Differential GPS. Downhole digital multi-shot surveys are conducted every 20m, open hole where practical, or in stainless steel rods every 50m.
	• Specification of the grid system used.	GDA94 zone55
	Quality and adequacy of topographic control.	Collar elevation data from digital terrain model derived from geophysical survey data used as an interim measure prior to DGPS pick up of collar location. Other elevation data sourced from handheld GPS.
Data Spacing and Distribution	• Data spacing for reporting of Exploration Results.	RC Exploration currently on nominal 20 X 20m grid. RAB exploration conducted on traverses with coverage on 60 ° dipping holes. Auger exploration currently on a nominal 100 X 20m grid. Rock Chip samples not on a defined grid pattern.
	• Whether the data spacing and distribution is sufficient to establish the	The nominal RC exploration grid is deemed adequate to identify

Criteria	JORC Code Explanation	Commentary
	degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	mineralisation envelopes which are infilled as appropriate. The RAB hole spacing and nominal auger exploration grid are deemed most suitable to identify mineralisation at a scale of interest to the company. This is adequate to establish continuity in this environment however closer spaced drilling may be warranted in certain locations for further definition.
	• 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 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 mineralisation.
	• 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.	The drilling orientation is designed to intercept the mineralisation orthogonally where known; the relationship between the drilling orientation and the orientation of key mineralised 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 mineralisation 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	• Type, reference name/number, location and ownership including	Reported results all from 100% Rimfire Pacific Mining NL tenements at

Criteria	JORC Code Explanation	Commentary
Tenure Status	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.	Fifield NSW, which may include EL5534, EL6241, EL7058, EL7959, EL5565, MC(L)305, MC(L)306. 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 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.	Geological mapping and rock chip sampling was conducted in the Carlisle area by The Shell Company of Australia from 1982 to 1984. There is no record or evidence of other exploration.
Geology	• Deposit type, geological setting and style of mineralisation.	The mineralisation at Carlisle appears to be Sediment hosted orogenic Au/As.
Drill Hole Information	<ul> <li>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:         <ul> <li>Easting and northing of the drill hole collar</li> <li>Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>Dip and azimuth of the hole</li> <li>Down hole length and interception depth</li> <li>Hole length</li> </ul> </li> </ul>	Refer to Tables.
	• 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.	All relevant information is provided in the report, tables and figures.
Data Aggregation Methods	<ul> <li>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.</li> </ul>	No averaging or cut-off values are applied to auger or rock chip results. Only significant RAB results >0.1g/t Au are reported using thickness weighted average for intervals with < or = 2m internal dilution. For RC results thickness weighted averages are reported for all intervals. Reported intervals are calculated using $\geq$ 0.1g/t Au and or $\geq$ 10g/t Ag cut off and $\leq$ 2m Internal Dilution.
	• 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.	High grade intervals within in larger intersections are reported as included intervals and noted in results table. Aggregation utilises thickness weighted mean calculations.
	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	Metal equivalents are not reported.
Relationship Between Mineralisation Widths and	• These relationships are particularly important in the reporting of Exploration Results.	Drill holes are designed to intersect the plane of mineralisation (where this is known) at 90° so that reported intersections represent true

Criteria	JORC Code Explanation	Commentary
		thickness.
Intercept Lengths	• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Drill holes are designed to intersect the plane of mineralisation (where this is known) at 90° so that reported intersections represent true thickness.
	• 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").	All intersections are subsequently presented as downhole lengths. If down hole length varies significantly from known true width then appropriate notes are provided.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures.
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.	This information is provided in results Table.
Other Substantive Exploration Data	<ul> <li>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.</li> </ul>	There is currently no other substantive exploration data that is meaningful and material to report.
Further Work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Further work is discussed in the document in relation to the exploration results. Refer to Figures