

13<sup>th</sup> June 2012 Company Announcements Platform Australian Securities Exchange



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

Telephone 61 3 9620 5866 Facsimile 61 3 9620 5822 e-mail: rimfire@rimfire.com.au website: www.rimfire.com.au

## BEST GOLD INTERSECTION TO DATE AT SORPRESA PROJECT, FIFIELD NSW

**Encouraging high grade zone seen at South West Location** 

The Company has received assay results for selected intervals of the percussion drilling activities undertaken at the Sorpresa Gold project and is pleased to report significant gold (Au) intersections in a number of the holes drilled.

- → The highest Au grade was an intersection of 14m @ 21.9g/t in Hole Fi160 including 2m @ 87.5g/t Au.
- → 19 holes were designed to test for additional Au mineralisation trends along the SW strike of the Sorpresa area starting from the Trench 31 location (partially drilled in 2011).
- → The Au mineralization remains open in many directions
- → In addition, scout drilling (14 holes) was conducted at distances approx. 50m to 150m from the previous known Au intersection at SW Sorpresa. This was to assist in locating further prospective Au areas within the black silica geology, deemed to be the surface based gold receptive horizon.
- → The drilling depths were generally between 40m to 60m. Deeper targets at Sorpresa are yet to be drilled.

## Summary of Drilling - Key Results Received for the Recent Sorpresa Main Strike SW Area

Hole	Intersection details <sup>1</sup>	Including section
Fi160	14m @ 21.9g/t Au from 34m	2m @ 87.5g/t Au from 36m <u>and</u> 2m @ 46.5g/t Au from 34m <u>and</u> 2m @ 7.63g/t Au from 44m
Fi161	16m @ 4.57g/t Au from 36m	2m @ 8.32g/t Au from 46m <u>and</u> 2m @ 21.3g/t Au from 48m
Fi153	14m @ 3.41g/t Au from 22m	4m @ 6.31g/t Au
Fi141	14m @ 1.27g/t Au from 2m	4m @ 2.21g/t Au <u>and</u> 4m @ 1.74g/t Au
Fi143	14m @ 0.96g/t Au from 2m	2m @ 4.69g/t Au from 14m
Fi154	10m @ 1.23g/t Au from 18m	4m @ 2.64g/t Au

Holes Fi 160 and Fi161 represent the best intersections of Au seen to date at the Sorpresa Project area. The results at Fi160 and Fi161 were done in duplicate with excellent repeatability achieved in the assays.

The previous best intersection (July 2011) was Fi 72 with 4m @ 17.52g/t Au. (ASX Release hyperlink: Assays Confirm Significant Gold and Silver at Sorpresa Project 6<sup>th</sup> July 2011)

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

"The drilling programs now completed at Sorpresa, in the context of the known geology, provide conclusive evidence that we are dealing with a significant gold system of considerable promise at Fifield. We have hit a new high grade of 87.5g/t Au at Sorpresa, which is a fantastic result. This comes on the back of excellent results in the first pass drill programs in 2011.

This current Au mineralisation being pursued at Sorpresa in the top 60m, represents an excellent series of exploration targets, with strong commercial potential. Follow up drilling work will continue to define the full extent of the gold and silver discovered at Sorpresa over the coming months.

Au was determined by fire assay method AA26 on 50g subsample charge with AAS finish at ALS Laboratories

We will be looking to add more gold zones to our existing Sorpresa discoveries within the interpreted 4km<sup>2</sup> black silica gold receptive horizon particularly in the 0 to 60m zone, in the first instance.

The bigger picture of course is the prospect of having the mineralization at depth in the greater Sorpresa area, as potentially indicated by the IP Survey and known geological setting. This offers the possibility of an extremely significant disseminated gold system at Fifield, which is very exciting.

The Company will be pushing ahead in June, July and August to make further important progress on the gold story at Fifield in a number of areas with the particular focus on the more advanced Sorpresa project area."

#### The Head of Exploration, Colin Plumridge, stated:

"The recent drilling results continue to demonstrate the very strong gold potential at Sorpresa and the extremely encouraging implication for the wider Fifield district.

Producing high grades of 1 to 3 ounces per tonne gold in intersections across a strike of more than 150m in the Trench 31 area alone at Sorpresa is significant. The Au grade within parts of hole Fi160 is effectively 4 times the previous best intersection that the Company had in prior drilling.

We are building up the 3 dimensional picture for the Au mineralisation from this drilling, and we will follow up with additional drilling to extend the open mineralised areas and infill any knowledge gaps to construct resource estimates in due course.



Drill Rig located within the SW Sorpresa Project Area May 2012

The scout drilling was also encouraging. Au is seen at low levels in some of these holes, which are distanced from previously known Au intersections. We know how subtle the Au system at Sorpresa can be, with drill holes containing high grade intersections sometimes adjacent to drill holes with a low level gold signature.

The interpreted Rift Basin geology at Fifield is stacking up to represent potential for an extraordinary disseminated gold mineralized system. The existing work at Sorpresa, as good as it is looking in the 0 to 60m zone, is likely to be just at the margin of this bigger potential system operating at the Basin centre at Fifield. We have every reason to feel encouraged and excited by what lays ahead."

#### **Concluding Remarks**

A full table of the collar locations and assay intersections 0.1g/t or greater for Au is shown in **Appendix 3.** A diagrammatic representation showing the hole locations is provided in **Appendix 1 and 2.** 

- The total program was designed to test for Au in 33 holes. To date Au assays have been conducted on approx. 50% of the drill cuttings. The balance of Au assays and some Silver (Ag) assays are pending.
- Of the outlying scout drill holes distance of 50m to 150m from known previous Au intersection at Sorpresa, 6 holes of 14 holes returned indications of Au, with 0.1g/t Au or above in a 2m intersection. Experience shows that such a gold indication could be important for higher grade Au in the vicinity of these holes.
- Significant Au mineralisation continues to be confirmed at Sorpresa
  - o There is now a demonstrated capacity to host very high grade Au at Fifield
  - o The Trench 31 and its SW extension location in particular, currently has an open strike length of approx. 300m
  - o Many additional locations at greater Sorpresa are well placed for further exploration (Appendix 4)
  - o The 0 to 60m zone of the Au and Ag seen to date, is particularly attractive as a commercial target
- The latest results enhance the view that Sorpresa is likely part of a much larger mineralised gold system at Fifield.
- The geological context at Sorpresa continues to grow. The Company interprets a **Rift Basin setting with a capacity for** the geology to provide extremely large ore deposits at the greater Sorpresa area.

#### **Immediate Exploration Programs are Ongoing at Fifield**

The Company continues with its drilling programs at shallow depths (40m to 70m) on existing and new areas prospective for gold as follows:

- 1. All locations of the previously drilled Sorpresa Project Area, working towards resource definition
- 2. Extension and Scout drilling of the Sorpresa Project area based on multiple criteria on each location
- 3. Yoes Lookout Area, with a plan of initial drill traverses on Au geochemical anomalies
  - The first ever drill hole was started on Yoes Lookout last week, 5km East of Sorpresa.

### **Recent Sorpresa Information Thread**

The Company provides a **hyperlink thread** of the Sorpresa Gold Mineralisation area of recent ASX and video materials as follows:

- 1. ASX May 28<sup>th</sup> 2012 Sorpresa Gold Project has Increased Potential at Depth
- 2. ASX April 30<sup>th</sup> 2012 Quarterly Exploration Activities March 2012
- 3. ASX January 31<sup>st</sup> 2012 (Quarterly Exploration Activities December 2011)
- 4. ASX January 2012 Sorpresa Gold Project Trench 31 Area Review Video
- 5. ASX 28th November 2011 AGM Exploration Presentation Including Key Summary Assay results of Sorpresa
- 6. Rimfire Website Summary <u>Brief history of Sorpresa Mineralisation discovery and style (to September 2011)</u>

#### **Metal Prices**

As at 11<sup>th</sup> June 2012, the approx. prices (Kitco.com) for metals in New York based on openeing Ask in USD were as follows:

Gold	\$1,594/oz
Platinum	\$1,451/oz
Silver	\$29/oz

JOHN KAMINSKY Executive Chairman

The information in the report to which this statement is attached that relates to Exploration Results is compiled by Mr Colin Plumridge, who is a Member of The Australian Institute of Mining and Metallurgy, with over 40 years experience in the mineral exploration and mining industry. Mr Plumridge is employed by Plumridge & Associates Pty. Ltd. and is a consulting geologist to the Company. He has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which is being undertaken to qualify as Competent Persons as defined in the 2004 edition of the "Australian Code for Reporting of Mineral Resources and Ore reserves". Mr Plumridge consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**APPENDIX 1** 

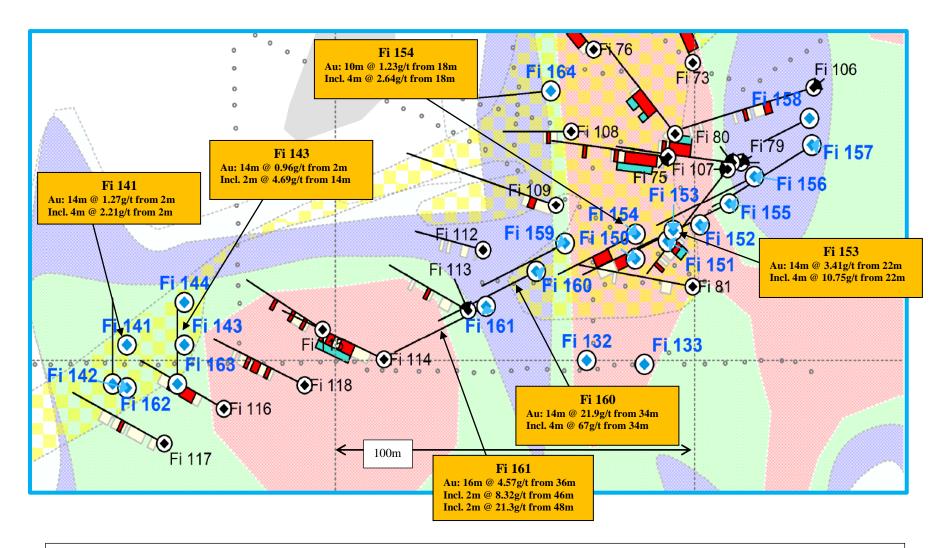
## New (Blue Colour) Completed OHH Drilling Collar Hole Locations at Sorpresa

(On background of 2011 RC Drilling on soil Au geochemistry) \$42,600 mE Soil Geochemical Backdrop Bedrock Geochemistry 542,500 mE October 2010 Trench 31 Confirmed Bedrock Gold New Hole ID: Open Hole Hammer > 25 ppb Bedrock Work Mineralisation from Shallow 9m width at 4.9g/t Auger Drilling Hole ID - previously reported > 12 ppb (>50 ppb contour) Collar Location Auger Hole > 7 ppb at surface > 5 ppb Significant Gold Intersection (red box) projected vertically Alluvium (obsucring to surface residual soil) ≥ 0,3g/t Significant Silver Intersection (blue box) ≥4 g/t Lower Grade Halo Gold intersection (cream box) SW Sorpresa Gold Target Zones 0.05 g/t to 0.2 g/t Au **Drilled March-May 2012 – New Holes in Blue** Fi 149
Fi 146 €Fi,133 6,368,200 mN Scout Scout Fi 136 **Scout** 150m Fi 147 Scout 6,368,100 mN Rimfire Pacific Mining NL Scout Plan Projection of RC Drilling With bedrock gold geochemistry from auger program and soil gold interpretation backdrop and New Completed Drillhole locations Area 1- South Sorpresa Fi 134 Scout

APPENDIX 2

Close up of New (Blue Colour) Completed OHH Drilling Collar Hole Locations at Sorpresa with Previous RC Drilling (Black)

(Shown against Gold in Bedrock Auger Zones and Soils previously established)



Note that only **new hole (2012) assays** of significance are shown, namely **Fi141**, **Fi143**, **Fi153**, **Fi154**, **Fi160** & **Fi161**. Assays are not yet received on a number of **new holes**. All key assay results from previous holes (2011) can be found at the hyperlink ASX 28th November 2011 **AGM Exploration Presentation – Including Key Summary Assay results 2011 of Sorpresa** 

## **APPENDIX 3 (page1)**

## Completed Percussion OHH Drilling - Collar Location and Detailed Au Assays in g/t

Hole ID	Easting (AGD66)	Northing (AGD66)	RL (AHD)	Dip	Grid Azimuth (°)	Depth	Area Name/Location	Gold Section Result	Gold Section Depth From		ssayed to Gold
(units)	(m)	(m)	(m)	(°)	(°)	(m)		(m)	(m)	(m)	(%)
Fi 132	6368197	542470	291	-90	0	45	T31-SE Scout	2m @ 0.11g/t	18	34	76
							and	2m @ 0.21g/t	22		
							and	2m @ 0.14g/t	38		
Fi 133	6368198	542484	291	-90	0	64	T31-SE Scout	4	28	34	53
FI 155	0300190	342464	291	-90	0	04	151-5E 5COUL	4m @ 0.11g/t	20	34	33
Fi 134	6368047	542462	288	-90	0	45	T31-S Scout	2m @ 0.15g/t	36	18	40
Fi 135	6368147	542397	289	-90	0	68	T31-SW Strike Scout	NS		38	56
Fi 136	6368148	542375	289	-90	0	48	T31-SW Strike Scout	NS		22	46
11130	0300140	342373	203	-50		40	131-3W Strike Scout	145		22	40
Fi 137	6368147	542350	289	-90	0	45	T31-SW Strike Scout	2m @ 0.12g/t	32	23	51
Fi 138	6368067	542288	287	-89	265	62	T31-SW Strike Scout	NS		16	26
Fi 139	6368084	542278	288	-87	250	48	T31-SW Strike Scout	NS		12	25
Fi 140	6368099	542269	288	-88	260	48	T31-SW Strike Scout	2m @ 0.13g/t	34	32	67
Fi 141	6368200	542341	290	-90	0	52	T31-SW Strike extension	14m @ 1.27g/t	2	36	69
							incl.	4m @ 2.21g/t	2		
							incl.	4m @ 1.74g/t	8		
Fi 142	6368190	542342	290	-88	238	42	T31-SW Strike extension	2 @ 0 20/+	2	32	76
FI 142	6368190	542542	290	-00	230	42	and	2m @ 0.29g/t 6m @ 0.17g/t	10	32	/6
					<del> </del>		and	2m @ 0.21g/t	18		
							and	2m @ 0.21g/t	24		
							and	4m @ 0.14g/t	28		
								- 5/-			
Fi 143	6368202	542355	291	-90	0	48	T31-SW Strike extension	14m @ 0.96g/t	2	48	100
						$\sqcup$	incl.	2m @ 4.69g/t	14		
							and	2m @ 0.35g/t	16		
Fi 144	6368214	542354	291	-87	260	48	T31-SW Strike extension	NS		48	100

## APPENDIX 3 (page2)

# Completed Percussion OHH Drilling - Collar Location and Detailed Au Assays in g/t

	-				6.11		onar Eocation and				
Hole ID	Easting (AGD66)	Northing (AGD66)	RL (AHD)	Dip	Grid Azimuth (°)	Depth	Area Name/Location	<u>Gold</u> Section Result	<u>Gold</u> Section Depth From	1	ssayed to <u>Gold</u>
(units)	(m)	(m)	(m)	(°)	(°)	(m)		(m)	(m)	(m)	(%)
Fi 145	6368118	542213	288	-88.5	275	51	T31-SW Strike Scout	2m @ 0.17g/t	46	51	100
Fi 146	6368189	542259	290	-88	220	48	T31-SW Strike Scout	NS		48	100
Fi 147	6368106	542208	288	-88.5	240	48	T31-SW Strike Scout	2m @ 0.11g/t	22	48	100
Fi 148	6368111	542193	288	-90	0	50	T31-SW Strike Scout	4m @ 0.1g/t	20	48	96
Fi 149	6368204	542247	291	-90	0	39	T31-SW Strike Scout	NS		39	100
Fi 150	6368230	542478	292	-90	0	51	T-31	4m @ 0.24g/t	0	48	94
							and	6m @ 0.14g/t	22		
							and	4m @ 0.13g/t	32		
Fi 151	6368234	542487	291	-90	0	58	T-31	4m @ 0.27g/t	0	40	69
							and	2m @ 0.42g/t	32		
Fi 152	6368238	542496	291	-90	0	58	T-31	4m @ 1.07g/t	36	26	45
							incl.	2m @ 1.16g/t	36		
							and	4m @ 0.1g/t	42		
Fi 153	6368237	542488	291	-59.5	246	54	T-31	14m @ 3.41g/t	22	40	74
							incl.	2m @ 3.14g/t	22		
							incl.	2m @ 18.35g/t	24		
							and	4m @ 0.12g/t	38		
Fi 154	6368236	542478	291	-61.7	245	50	T-31	10m @ 1.23g/t	18	10	20
							incl.	4m @ 2.64g/t	18		
Fi 155	6368244	542504	291	-60	245	60	T-31	Pendi	ng	0	0
Fi 156	6368251	542511	291	-60	245	60	T-31	Pendi	ng	0	0
Fi 157	6368259	542527	291	-59	240	62	T-31	Pendi	ng	0	0
Fi 158	6368262	542532	291	-60	245	28	T-31 SW	Pendi	ng	0	0

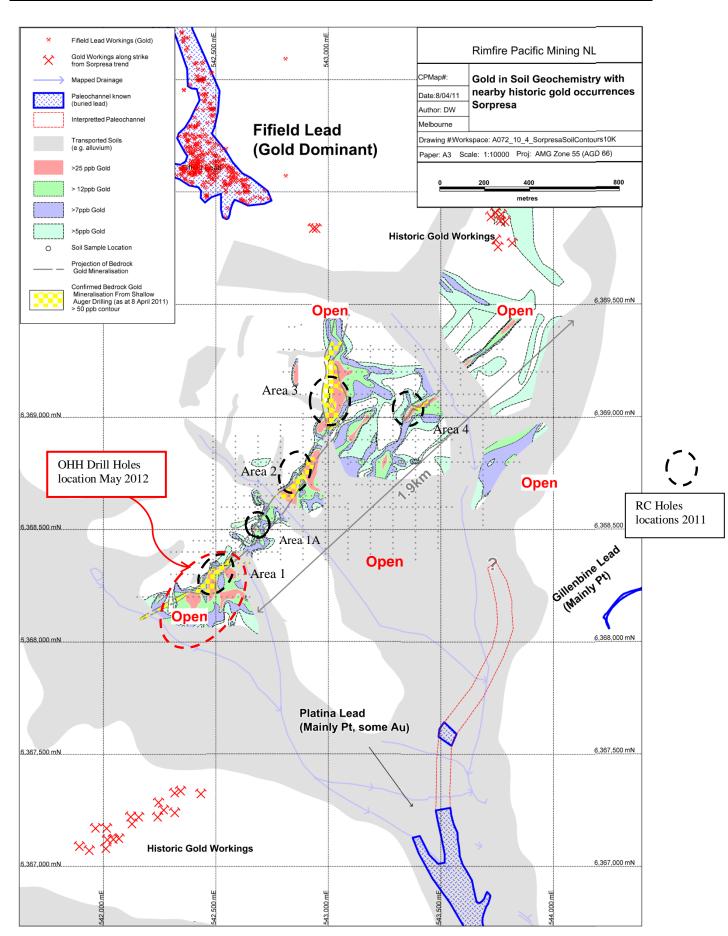
## APPENDIX 3 (page3)

# Completed Percussion OHH Drilling - Collar Location and Detailed Au Assays in g/t

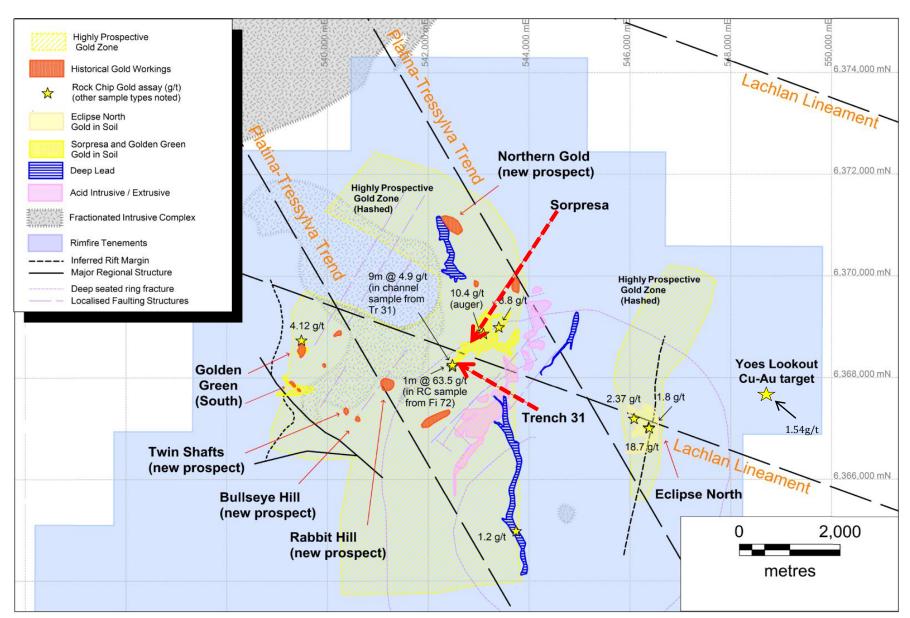
Hole ID	Easting (AGD66)	Northing (AGD66)	RL (AHD)	Dip	Grid Azimuth (°)	Depth	Area Name/Location	Gold Section Result	Gold Section Depth From		ssayed to <u>Gold</u>
(units)	(m)	(m)	(m)	(°)	(°)	(m)		(m)	(m)	(m)	(%)
Fi 159	6368230	542464	292	-60	245	51	T-31 SW	Pend	ing	0	0
Fi 160	6368223	542456	292	-60	245	60	T-31 SW	14m @ 21.84g/t	34	16	27
11100	0300223	342430	232	-00	243		incl.	2m @ 46.5g/t	34	10	27
							incl.	2m @ 87.5g/t	36		
							incl.	8m @ 4.37g/t	38		
							incl.	2m @ 1.5g/t	46		
Fi 161	6368214	542442	292	-60	245	56	T-31 SW	16m @ 4.57g/t	36	20	36
							incl.	4m @ 1.77g/t	36		
							incl.	2m @ 8.32g/t	46		
							incl.	2m @ 21.3g/t	48		
							incl.	2m @ 1.1g/t	50		
Fi 162	6368194	542356	290	-60	0	38	T-31 SW	Pend	ing	0	0
Fi 163	6368194	542356	290	-60	0	38	T-31 SW	Pend	ing	0	0
Fi 164	6368269	542460	292	-60	265	40	T-31	Pend	ing	0	0
ri 104	0308209	542460	292	-60	205	40	1-31	Pena	iiig	U	U
				Tota	l metres	1663		Tr	otal metres assayed	827	50%

LEGEND:	Sample and Assay Method:
	Samples were individually rolled, then composited on 2m intervals. Subsampled (2kgs) then depatched to ALS laboratories. Fire Assay Method AA26 was performed on 50g subsample.
Pending = No Assays yet received for this hole	In the case of Fi160 & 161 duplicate assays were performed with excellent reproducability
T31 = Trench 31 Wider Area	In the case of Fixod & for duplicate assays were performed with excellent reproducability

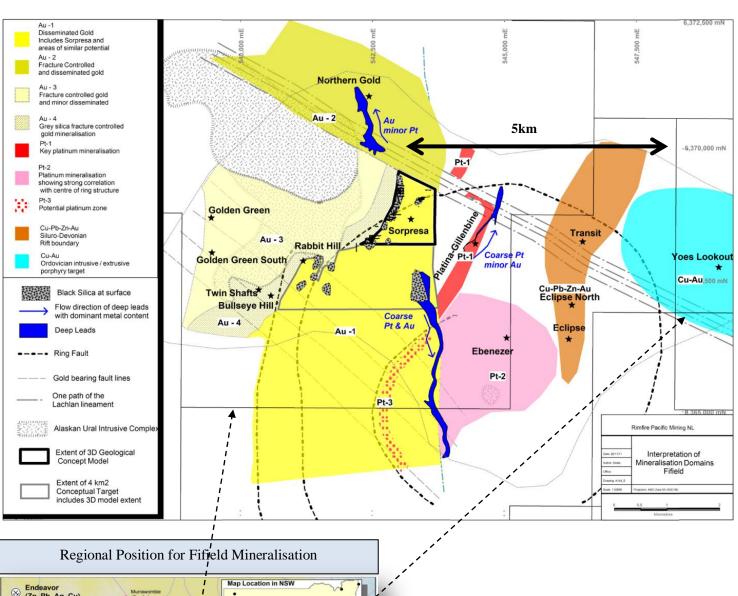
<u>Appendix 4</u> Sorpresa Gold in Soil Anomaly Context – Untested Areas and Adjacent Historic Au Workings

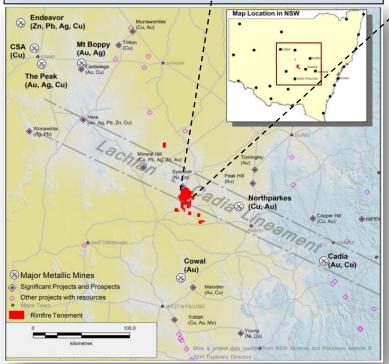


<u>APPENDIX 5</u>
<u>EL5534 The Sorpresa Area Anomalous Gold Zone – within the wider Fifield Gold Observations "Some" New Prospects Highlighted</u>



# Appendix 6 Project Locations at Fifield NSW within Lachlan-Cadia Lineament and Metal Zoning Interpretations at Rimfire Fifield Project Areas





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

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

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