

## rimfire pacific mining nl (ASX "RIM")

John Kaminsky Executive Chairman <sup>&</sup> Exploration Management Peter Temby Colin Plumridge

(AGM 19<sup>th</sup> November 2009)

## Rimfire Pacific Mining NL – Project Areas



Exploration projects within NSW:

### Fifield Platinum

- Only dedicated Pt mining in Australia, alluvial resource was not exhausted, hard rock not understood
- Gold Potential
- Base Metal Potential

### Bingara Diamonds

Copeton-Bingara Australia's first Diamond mining

Searching for the Hard Rock Source(s) in these Projects

# **Company Profile**

(13th November 2009)

### Shares on Issue

- 312M Ordinary FP
- 7.5M call options @ \$0.12 Sept 2010

Market Cap. Approx \$6.6 M (pre-options @2.1 cents)

### Share Price Movement

• 2009 High 2.8 cent, Low 1.0 cent

### **Shareholders Profile**

- Management 14%
- Top 20 Holders 34%
- Top 100 Holders 64% (cut-off 565,000 shares)
- 1700 shareholders (3 years ago 1250)

#### Cash Status 30 Sept 2009

• \$1.1m

## The Board & Management

John Kaminsky (Executive Chairman)	Joined the Board in May 2004, and has a diverse background internationally, in trade, investment & consulting. Has an MBA (MBS), and B App Sci. Chairman since Dec 2004.	
Graham Billinghurst (Company Secretary and Non Executive Director)	Became a Director in May 1999 and has an extensive background in investment banking and corporate development in the Australasian region.	
Ramona Enconniere (Non Executive Director)	Became Director April 2005 and has extensive finance background and B Eco, CPA & MBA (MBS).	
Andrew Knox (Non Executive Director)	Became Director July 2005 and has extensive finance background and B Eco, CPA in Resources industry.	
Colin Plumridge (Exploration Management)	Senior Field Geologist - has over 40 years experience and track record in Australia. Commenced work with Rimfire in January 2005.	
Peter Temby (Exploration Management)	Senior Field Geologist – Experienced in both the Fifield and Bingara project areas and an overall 40 years exploration and project career, started in August 2009 with Rimfire.	

## **Rimfire Share Price**

#### (12 months Comparison chart)



## **Platinum Market and Price Trend**

### Price of Platinum in USD per oz



#### □ Pt at A\$1,500 level mark

- □ Platinum sales in China grew 81% Year on Year
- □ Increased by >400,000 ounces in Jewellery
- **75%** Industrial Demand for Pt (46% Auto & 29% Industrial combined)
  - □ Major growing use "emission control on vehicles" –mainly diesel
  - **Down turn in Automotive has affected outlook in the short term**
- **RSA and Russia still account for 91% of world production**
- Limited major producers world wide
- □ Cost structure high in many existing underground mines a floor?
- Loss of other PGE's that accompany Pt & Pd, if production falters



#### Automotive and Jewellery –key drivers!



## **Rimfire Pacific Mining NL Summary**

#### Technical and Management Team expanded well established Clear exploration plan in place, "focus on commercial Pt opportunity at Fifield" □Further advances in the period Maintaining a regular work rate in the field **Consolidated Processing Capability & Plant Operations** Small and effective bulk sampling and trial mining operations □ 50t feed and 15t/hr processing capacity **Fifield Area exploration has further developed at Platina-Gillenbine** Pit One Area has allowed gravel examination, with bedrock exposure in plan view Attractive conceptual target of 200,000 to 450,000 oz Pt \* Gravity recoverable Pt, likely to be low cost operation, if established Potential Company making opportunity for Pt within the wider district "Ebenezer" Gold Mineralisation concept is advanced further □ Pt & Au bearing Gravels, Tributaries and Leads "a means to an end", possible positive contribution cash **Bingara Diamonds** 2 Pipes discovered 2007, more under exploration at Trevallyn Slower pace, under current environment

#### □Adequate Financial Position

Cash Position Sept 30<sup>th</sup> 2009 – A\$1.1m
 Small initial cash contribution from bulk sampling - \$12k Sept 2009

### > A stronger News Flow should be evident over the next 12 months

\* This represents a conceptual target only, and does not imply a JORC compliant resource or estimate, details slide 39

## Exploration Overview (Major focus on Platina – Gillenbine Pit One Area)

- "Fifield" Mineralised Context
- Platinum Historical background at Fifield
- "Platina-Gillenbine" Area Focus for Pt
- "Pit One" Area Bedrock Exploration
  - "Tile One" Bedrock sampling
- Gravels, Tributaries and Leads
- Other Mineralisation at Fifield
- Bingara Diamond Status

# Fifield Platinum Rimfire Major Project Areas





RIM has five exploration licences

Approx 500km2

2 Mineral claims and a Bulk Disturbance permit "Pit One"



Historic Soil Mine Platina 1920's

# District Trends – Good Address!

#### (Along strike)



Lachlan Lineament

 Major Mineralised corridor

 Tout Complex at Fifield Orientation

- Confirms lineament position
- Pt in some Shears with this orientation at Fifield

# **Fifield Project Area Overview**



#### Project Areas now identified

- Platinum Coarse Grain
- Possible Intrusion related Gold – Larger Target
  - Au in Sediments & Shear Zone (fine)
  - Au in Gossanous Breccia
- Base Metal (Cu, possible VMS)
- Confirms Fifield as "complex" and "highly mineralised"
- Advantage of "on ground presence"
  - Regional Mapping, drilling and Sampling
- Different exploration approaches going forward each prospect area

# **Mineralisation Zoning At Fifield**

- Rift Margins
- Pt is the dominant focus
  - Major Corridor
- Au zoning evident
  - Some dominant areas
- Base Metal Potential
  - VMS Style
  - Other with Au
- Diverse Mineralisation
- > Underexplored historically
- Commercial Potential worth pursuing



## Fifield Platinum (History and perspective)

- Fifield is the only historically significant Platinum field in Australia
  - No substantial workings for more than 70 years
  - Was the British Empire's largest producer in 1890's.
- Platinum and Gold alluvials were discovered in 1887.
  - Reported production in excess of 20,000oz of Platinum
  - Not exhausted and areas remain undiscovered
- The majority of this was mined in areas which RIM holds at Platina-Gillenbine.
- Other companies stopped exploration in 1987~93
  - Land access was an issue at the time
  - Market conditions were not good
  - An approach to the exploration Magnetics alone do not provide the solution

### Fifield remains under explored for Pt and other mineralisation

- The Hardrock "source area" and "A form of Geological Control" defining the "Platina-Gillenbine" Pt system has now been discovered by Rimfire. The Focus is now to locate "grade"
- "Goldengreen; Au", "Sorpesa; Au, Base Metal", "Eclipse Areas; Au & Base Metal"







# **Fifield Platinum**

(Characterisation and Origin)

- The Platinum is of a primary genesis a hard rock source.
  - Not Accretion or Secondary accumulation
- The coarse grain Platinum occurs in the alluvials, eluvium, "subsoil clay" and "weathered bedrock"
- This Platinum is expected to come from high grade structures, shears, pipes, veins or shoots.
- Rimfire has recovered the first ever recorded coarse grain Pt from Bedrock at Platina-Gillenbine, and discovered "a form of geological and structural control operating within the system"
  - Most Grains > 0.25mm (typical 1.0mm Pt Grains)

## **Untraveled Coarse Primary Pt Grains**

### (Binocular Examination)

Bedrock Source, Trenches and Pit One

Repeatable in various locations

"In situ" in several instances

Re-entrant angle Pt grains

Pt Crystals

Beneath Sub Soil Clay Contours and Pit One

Within new Clay Weathered Bedrock Breccia and Shears

Discrete zones of Pt forming

Also occurring within an interpreted geological & structural control



Short travelled Pt Grain, angular and indented with unidentified intergrown mineral inclusions



### Advances in Knowledge of Pt Mineralisation at Fifield

Issue of Difference in the modern era of Exploration	Prior to Rimfire	Rimfire Advance
Drainage Direction Interpreted from Owendale & Tout complexes to Fifield	North to South	South to North
Rift Valley Setting	Not seen	Recognised
Coarse Pt recognised and recovered from Bedrock in "Plan View"	No	Yes
Sampling size and system	Inadequate	Customised Plant & larger samples
Focus on Magnetic Features mainly	Excessive	Integrated Field Based
A Geological Control Discovered	No	Yes
Large scale Gold and Base Metal Potential - Exploration & Recognition	Minor	Major
Geological Model "Shear Zones"	No	Yes
Importance of "distinct Pt and Au zoning ratios"	No	Yes

# **Exploration at Fifield**

- Main Presentation Objectives





#### **Discussion on Pit One Platinum Exploration**

**Bedrock Sampling and Gravels at Pit One** 

#### **Priorities and Target Potential at Fifield**

### **Primary Platinum Conceptual Mineralisation Model**



### **Shear Zone Model for Pt Mineralisation**



## Key Pt Exploration Observations at Platina-Gillenbine

Mapping

- RC Drilling & Aircore
- Ground Geophysics
  - Magnetics, Gravity, Radiometrics, EM
- Trenching (current)
- Auger drilling (current)
- Soil sampling (current)
- Topographic drainage survey
- Geochemistry planned
- Bulk Sampling (current)

Pt Bedrock Source

- A Geological control discovered
- We have a model, shear zones
- Manifestation of shear zones will have diversity

Surface and near surface Pt delineation is significant – mining? Ongoing auger

- •Top veneer of gravel material is significant for Pt with mining potential
- •Low mining & recovery costs will possibly allow low Pt grade (0.3g/t and above) to achieve ore status

Pt Bedrock Mining Potential, beneath surface veneer

> "The Major Focus"

- Extremely large tonnage potential over an extensive area
- Platina- Gillenbine focus
- Bulk sampling strategy current phase

Extensive

work

programs

already

conducted

at Platina -

Gillenbine

### Rimfire's Bedrock Pt Exploration Approach to Date



### Ebenezer Platinum in Soil Anomaly - Technique using Auger Drill for detailed early stage examination "Pit 1 Area"



Auger Drill Traverse 10m Spacings (Rimfire Freehold & start of determining Pit One area)



## "Eastern Pt Shear Zone" Platina-Gillenbine - soil sampling contours & mapping



- Extensive Shear Zone identified (2008)
  - → >1km length (open)
- Parallel to Platina-Gillenbine Shear (2006)("Central Shear")
- Evidence of probable additional shears
- Forms the basis for major work area
- Interaction with "Pit 1 Area"
  - Geological control "plan view window"



#### Arena Dimensions Comparison

The MCG arena has a total of approximately 20,290 square metres in area

The Pt "target mineralisation" at Platina – Gillenbine (Central and Eastern Shear areas) is 10 times larger alone

## Pit One Exploration commenced 2008 - A Geological Control Discovered on Pt Trench 24 & 24A



## Pit One Exploration - A Geological Control Discovered on Pt



9000V.

Trench 21-14 area M'an View Freith 224 C. Berfalog controlles fault available (129) office and socialized inputs Coses controls linear fault with Schederalage **Cross cutting Veins** 

Tr24, Tr24a)

control

contain Pt, Au, Cr (Tr20,

A Geological & Structural

Veins 1cm to 30cm width

Cluster distribution Cr, Pt

samples – evidence of Cr

Cr as a "pathfinder"

**Re-examine previous** 

## Pit One and Mineral Claim Overview



## Pit One and Mineral Claim – Trial Mining



## **Outcomes to date from Gravel Removal Pit One**

- Possible Commercial target generation as a "Means to an end" in determining the hard rock position for Pt
- Mineralogy of Pt & Au recovered was further confirmation on primary nature of Pt
- Bedrock exposure and structure available
- Gravel transport directions resolved assists source location search
  - From East residual soils travelling to West (not North to South)
  - This originates in the Platina-Gillenbine & Ebenezer Areas
- Mining Methods, processing and plant improvements
  - □ Magnetic separation and concentrate properties
  - Not all resolved yet, but parameters better understood



Gravel layer mined in Pit One Panel  $A \not {C} C$ 



Examination the bedrock floor in Panel A, showing the fault lines now exposed, consistent with Trench 24 & 24A observations previously.

### Pit One Bedrock Testing Commenced! - Preparation of Tile One for Sampling



## Tile One within Pit One Mapped

- Complex Geology and dynamic





Spectacular Structural Complexity

- The Pt Shear Zones are dynamic in structure and rock alteration
- Complex fault patterns traverse areas of:
  - Brecciation
  - Curved shear zones
  - Sulphide stock works
  - Alteration zones

#### 19 November, 2009

# Tile One within Pit One - Sections

#### (Sections mapped and sampled)



- First 10m x 10m Tile
- Sections 2.5m x 2.5m
- Bedrock mined off 1 metre below gravel
- Thoroughly cleaned contamination removed
- Incredibly complex geological structure in plan view – "spectacular"

### Tile One within Pit One - Sections (Sampling)







- Sampling all the important positions
  - 30cm into exposed floor
  - 200~400kg scale size
- More than 18 locations sampled
- Pt already recovered in early sampling (plus Au, Cr)
- Geochemistry and mineralogy to follow
- More tiles
- Objective find best Pt
  Grade and a repeatable
  process of identification

## **Tile One - Complex Geology**



## **Tile One - Complex Geology**







altered sediments with vein stockworks



## **Tile One - Complex Geology**



altered sheared and veined sediment





gossanous brecciated veins in altered sediment

Rimfire Pacific Mining NL - AGM 2009

### Auger Grid for Gravels, Tributaries & Lead Extension (Planned and partly drilled mainly on Rimfire freehold)


## Additional Bulk Sample Areas for Discussion (Platina – Gillenbine)



#### New "Ambit Area" being considered for Bulk Sampling Permit

- Approx 30~35 hectares
- Sample selected areas only within this

Subsoil Clay (SSC) previously contoured for Pt grade here

• Central Shear Zone >1,300m length (open)

Other Targets exist within Ebenezer 4km<sup>2</sup> anomaly

## The Work Program Concept for Commercial Definitions

- Layered Bedrock Pits, Gravel Profiles, SS Clay Geometry



## **Critical Next Steps for Review**

Finalise more detailed costings

Disturbance plan refinement and submit application for "ambit bulk" sampling

> Logistics establishment

Proceed to upgrade plant

Invite expert assessment on critical issues Continue cost assessment of larger scale plant

sampling (trenches, slots and pits) •Characterise soil, clay

Tune financial models and exploration outcomes

Go/No Go on bedrock potential and veneer surface mining

## Platina – Gillenbine Corridor Target Objective (Conceptual Target Pt potential)

- Strike 1.3 km strike, open ended
- Width, 200m (open)
- Assuming weathered, easy mining conditions (40~60m approx.)
- Gravity recoverable Pt, low capital cost and low operational cost
- Internally estimated grade seen in Soil, sub soil clay up to 6g/t Pt
- Estimated tonne in the corridor is 20 ~ 30 million tonnes (assuming depth of 40 ~60m)
- Assuming a Pt grade of 0.3g/t to 0.5g/t for entire corridor (historic surface mining grade estimated at "plus 3g/t Pt" in 1920~30's in selected areas)
- Contained ounce potential conceptual target of >200,000 to 450,000 oz Pt \*

\* **Disclaimer** - "That the potential quantity and grade is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource, and that it is uncertain if further exploration will result in the determination of a Mineral Resource."



### "Plus" Ebenezer Pt in Soil Anomaly

- 4km<sup>2</sup> area residual soil
- Shear Zones noted in exposures
- Surface Grade in excess 1g/t in places
- Potential untested to date

Platina –

Gillenbine

Corridor

"Conceptual

Target Size"

## **Other Mineralisation at Fifield - Priorities**



#### <u>Fifield Hard</u> <u>Rock Au</u>

Old workings recently mapped

## Fifield Projects Sorpresa Au Prospect



- Initially prospected with
   Auger drill, limited float
   (8.8g/t Au in rock sample)
- RC Drill program intersection of Au, Pb, Ag, leaching trial
- Dip not determined
- Other workings 700m
   NE...known Pb and Au
- Size potential strike 1km
- Conventional style program
- Next Stage Exploration
  - Soil geochemistry
  - IP Survey

# Initial Geochemistry confirmed at Sorpresa





## When we have a closer look at hard rock workings, geochemistry, petrology and magnetics the Au potential looks interesting.....

# Intrusive porphyry associated with a metamorphic aureole

Possible Larger target Interpreted at Sorpresa



# **Goldengreen Area**

### - Western Rift Margin, Au in Sediments



- Au in Soil remobilised
- Auger drill program confirms Au dispersed in sediments
- We now conclude Auger results are a good proxy for fine Au in bedrock sediments
- RC Drill program shows Au in Shears
- Gridded auger drill program over an area of 600m x 100m
- RC program on the best areas

19 November, 2009

## **Eclipse North**



- Float Examination
- FiR312 18g/t repeatable
- Breccia with sulphide
   Gossan disseminated
- Strike >500m
- Hydrothermalmesothermal style Au & base metal

# Eclipse North (cont.)

- Similar look to Sorpresa
- Wider Breccia Zone at 30m
- Sulphides disseminated in veinlets & veins
- Float examination for Base Metal also
- Elevated Cu (& Pb) results
- Undertake further sampling & auger drill for bedrock geochemistry



## **Beyond Eclipse North Area**



#### 3 new prospects, Venus Peck's & Transit

#### Mapping, soils and rock float

• Along strike from Eclipse North & similar observations in rock float

#### Potential for Au and Base Metal

# Auger Drill best areas in soil orientation



New Rock Chip Sample FiR203 sawn section of breccia showing massive gossan veining.



19 November, 2009

Rimfire Pacific Mining NL - AGM 2009

# Au Potential Summary Fifield

- Mineralised Au styles not fully understood
- Common features at Sorpresa, Eclipse Nth
- Possibly overlying partially roofed intrusive
- At the margins of magnetic anomalies



# **Project Discussion**

# **Bingara Diamonds**



- The Objective is to locate the Primary hard rock Source(s)
- The path to solving the 100 year riddle of known alluvial diamonds
- A geological model, exploration and mounting evidence

## **Bingara Diamonds Project Status**

- Model Established
- Exploration Method Established
- Two confirmed Pipes 2007
  - HV No.1, HV No.2
  - Indicator Mineral Chemistry Positive (Composite grains HV No.1)
  - Further delineation required HVNo.2
- Aggregate sufficient pipes for "bulk testing" (plant utilisation)
- Steep terrain "skid mounted auger drill built"
- Trevallyn Prospect (EL 6106) Indicator Mineral Source
  - Large Garnet anomaly identified "in situ"
  - Garnet chemistry underway
  - Auger drill best chemistry skid auger





#### "DIAMOND INDICATOR MINERAL SOURCE DISCOVERED" - EXPLOSIVE VOLCANIC BRECCIA "PIPE" (DIATREME) CONFIRMED SOUTH OF TOM AND JERRY MOUNTAIN (May 2007)



Auger Drilling on Horton Valley Prospect "pipe"



Portion of garnets recovered auger hole 10 sized 1.0mm to 0.2mm from gross sample weight 15kg



Composite Eclogitic Grain intergrown



Auger hole 10 Rock Chips confirming diatreme genesis



Rock Chip Section Breccia Texture

## "Horton Valley No.1 Pipe" (Tom & Jerry South Peak location)



## "Horton Valley No.2 Pipe" - Back Creek Glen Idle







Crystal Fragments in Breccia? BC Hole 4



## "Horton Valley No.3 Pipe ?" (Trevallyn work area)



Trevallyn auger drill location BCT-Aug6, 50m upslope (22<sup>o</sup> ~ 30<sup>o</sup> incline) from historic stream sediment Trevallyn diamond (0.265K). "Xenocryst breccia rock" recovered (2007) in coarse scree above sub outcrop. The soil is rich in chrome diopside, ilmenite and garnet.





## Trevallyn Area - History and direction

- Garnet chemistry in stream sampling very good (2002)
- Diamond was found previously in drainage (2002)
- "MARID" suite rock newly discovered – Mantle Derived (2007)
- New DIM in soils identified
- Auger drill built for 30 degree slope conditions



Rock sample with large crystals, up to 10cm



## Update on Work Program at Trevallyn



Geophysics Review (airborne, ground)
 Detailed mapping and structure review
 Located additional MARID rock
 Defined wide garnet anomaly (>500m N-S)
 Auger drill for Possible Pipe

- Soil Line sampling for "in situ indicators"
- □ >1,000kgs sampling, processing
- Binocular Review
- □ Chemistry determination



## "In house" Operating Plant and Infrastructure at Fifield

The ability to mobilise quickly, at our discretion, with low cost in customised exploration, on a daily basis – **a core strength** 



Dam 0.5 Hectares



Indoor Sample Processing Facility & Office



**Gravity Recovery Plant** 



Fine Grinder



Hammer Mill



Crusher

## "In house" Operating Plant and Infrastructure at Fifield



Auger Drilling



Field use of Binocular Microscope



Loader Excavation



Skid Auger Drill



Excavation



**Mineral Review** 

## **Summary of Exploration Position**

Important exploration discoveries continue to be made by the Company
<ul> <li>Work in the next year will be conducted in an improving global economic climate which should be favourable to metal prices</li> <li>Pt in Bedrock is still the major focus, but smaller alluvial targets may also be viable</li> <li>Increase in exploration team experience, opportunity for greater progress</li> </ul>
The priority is delineating a minable Pt mineralised corridor at Fifield
<ul> <li>Continue on the Company Freehold</li> <li>Start on targets off the Freehold at Platina-Gillenbine</li> <li>Coarse Grain Pt confirmed in Bedrock within a geological control is well established</li> <li>Likely large tonnage, low capital cost for mining</li> <li>Mineralisation is at surface and near surface, but extending to depth is the next phase</li> <li>Highly favourable metallurgy exists, but needs further refinement</li> </ul>
Other Fifield projects are worthy of continuation
<ul> <li>"Sorpresa", "Fifield Hard Rock" Au projects</li> <li>"Goldengreen", "Eclipse North", Au and Base Metal</li> <li>Other Platinum areas are still under explored</li> </ul>
<ul> <li>Diamond Project at Bingara is well positioned – but longer term</li> <li>2 Discovered "Pipes" in Bingara district with DIM Chemistry</li> <li>Next phase is location of more "Pipes", and to suitably profile these for Diamond</li> </ul>

## Contact us Thankyou



The information in the report to which this statement is attached that relates to Exploration Results is compiled by Mr Peter Temby who is a Member of The Australian Institute of Geoscientists, in collaboration with Mr Colin Plumridge, who is a Member of The Australian Institute of Mining and Metallurgy, each with over 30 years experience in the mineral exploration and mining industry. Mr Temby is employed by Anpet Exploration Pty Ltd, whilst Mr Plumridge is employed by Plumridge & Associates Pty. Ltd. Both Mr Temby and Mr Plumridge have 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 Temby and Mr Plumridge consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

## Disclaimer

This presentation contains "forward looking statements" as defined or implied in common law and within the meaning of the Corporations Law. Such forward looking statements may include, without limitation, (1) estimates of future capital expenditure; (2) estimates of future cash costs; (3) statements regarding future exploration results and goals. Where the Company or any of its officers or Directors or representatives expresses an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and the Company or its officers or Directors or representatives as the case may be, believe to have a reasonable basis for implying such an expectation or belief. However, forward looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward looking statements. Such risks include, but are not limited to, commodity price fluctuation, currency fluctuation, political and operational risks, governmental regulations and judicial outcomes, financial markets and availability of key personnel. The Company does not undertake any obligation to publicly release revisions to any "forward looking statement", or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.