

# rimfire pacific mining nl



(ASX "RIM")

John Kaminsky Executive Chairman & Colin Plumridge Senior Geologist Head of Exploration

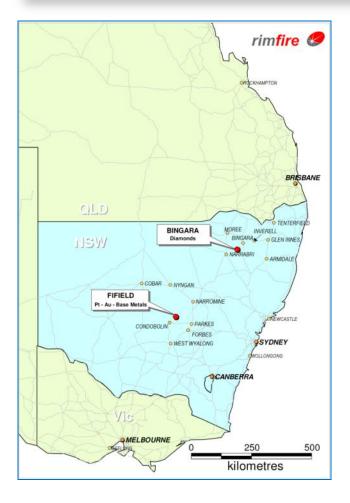
(AGM 25<sup>th</sup> November 2011)

## **Presentation Overview**

- Corporate and Operations Status Summary
- Fifield NSW Mineralised Context
  - > Important Regional and Localised Structural Corridors
  - > Metal Zoning Observations at Fifield
- **Gold Exploration and Discovery Confirmation**
- The Larger Gold Picture at Fifield and Wider Gold Potential
  - > Au receptive Geology, New prospects
- The Platina Lead Assessment
- Platina Valley Platinum Exploration

### All previous exploration work performed to date remains valid

## Rimfire Pacific Mining NL – Project Areas



Exploration projects within NSW:

### Fifield Platinum and Gold

- Only dedicated Platinum mining in Australia, alluvial resource was not exhausted, hard rock not understood
- Major Gold Potential Sorpresa and more
- Base Metal Potential

### Bingara Diamonds

- Copeton-Bingara Australia's first Diamond mining
- On hold currently

Searching for and defining the Hard Rock Source(s)

## **Company Profile**

(24<sup>th</sup> November 2011)

#### Shares on Issue

- Placement 60M shares at 3.7 cents, April 2011, \$2.22M gross
- Exercise of Options 26.8M @ 4.0 cents, August 2011, \$1.07M gross
- 526M Ordinary FP

#### Market Cap. Approx. \$16.3 M @3.1 cents

#### Share Price Movement

• 2011 High 6.0 cent, Low 3.1 cent

### Shareholders Profile

- Management 10%
- Top 20 Holders 33%
- Top 100 Holders 63% (cut-off 1M shares)
- 2025 shareholders (1 year ago 1823)

#### Cash Status 30 Sept 2011

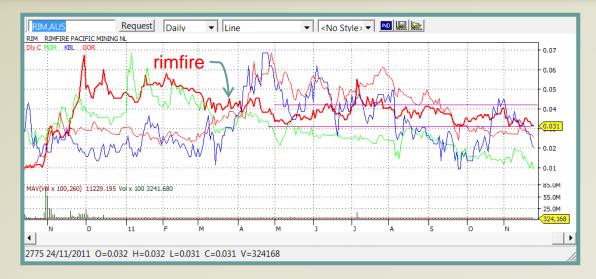
• \$2.83m

## 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).	
Thomas Burrowes (Non Executive Director)	Became Director December 2010 and has extensive resource industry background, including operations, exploration, former analyst, MBA (MBS)	
Colin Plumridge (Head of Exploration)	Head Geologist - has over 40 years experience in the field and track record in Australia. Commenced work with Rimfire in January 2005.	

### **Rimfire Share Price**

(12 months Comparison chart to 18<sup>th</sup> November 2011)





## Platinum and Gold Market - Price Trend



#### Price of Platinum and Gold in USD per oz



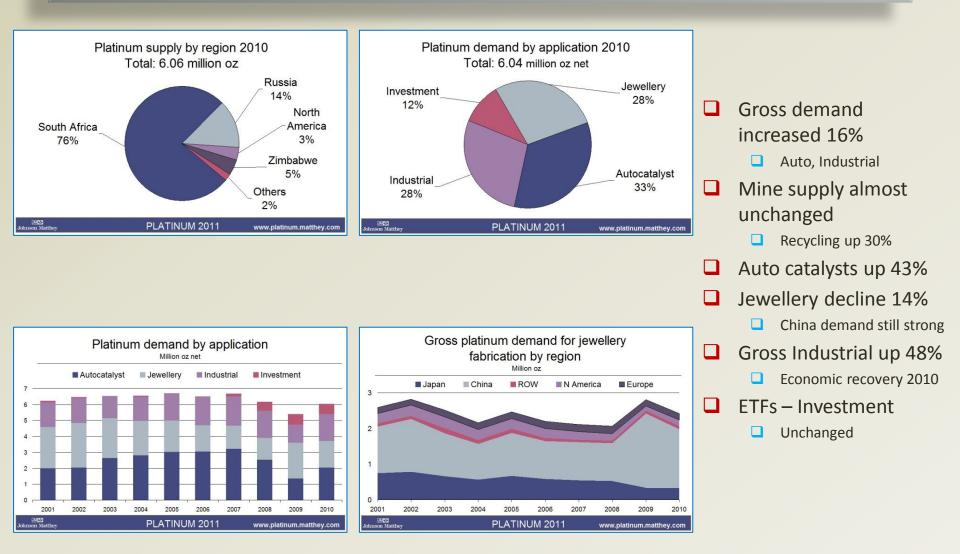




## Platinum and Gold Market Outlook

- Platinum has declined this year. In comparison, gold has rallied this year.
- Platinum's ratio to gold slumped to the lowest level in at least 24 years as concern that the European debt crisis may hamper global growth curbed the metal's use in auto catalysts and boosted bullion's appeal as a haven.
- **Gold traded mostly at a premium to platinum recently** for the first time since the collapse of Lehman Brothers Holdings Inc. plunged the global economy into recession in 2008. An ounce of platinum bought as little as 0.9244 ounce of gold, the lowest ever, according to data compiled by Bloomberg starting from 1987, and compared with an average of 1.3203 last year.
- About 58 percent of the platinum supply is used in industry for catalytic converters, glass and chemicals, according to Johnson Matthey Plc. That compares with about 12 percent for gold, the World Gold Council estimates.
- Some analysts view that "In the short term, gold will continue to trade at a premium to platinum due to safe-haven demand," "From a longer-term perspective, we look for an upside to platinum prices based on the cost to produce it."
- **Production costs in South Africa, the largest producer, are on an "upward trend"** as electricity and labor costs increase, according to RBS Global Banking and Markets.

# Global Platinum Market 2010 Summary



## **Exploration Program Goals 2012**

# Fine Gold Mineralisation Aggressive Pursuit

Sorpresa and immediate adjacent area 4km<sup>2</sup>, extensive drilling, resource definition(s)

Importance of Black Silica – Au receptive horizon

□Nearby within an Area of 20km<sup>2</sup> – scoping started

40,000m of drilling identified (Auger, Aircore, RC) involved in scoping, discovery and delineation

### Platina Lead commercial Pt & Au opportunity whilst exploring Bedrock potential

Platina Lead and its interaction with the bedrock system (Au and Pt)

Commercial assessment and geological test

Financial Position

Cash Position Sept 30th 2011-A\$2.83m

News Flow and Milestones should mount during the next 12 months

- ✓ Resource Definitions
- ✓ New Discoveries

✓ Underpin the growth, potential and expansion of the Fifield Area

## **Company Operations Review Summary**

### Excellent 12 month period - Sorpresa Gold Discovery Confirmed

- Strongly gold mineralised system over a large area (4km<sup>2</sup> prospective)
- High Grade seen (> 60g/t Au; >150g/t Ag)
- "Part" of Trench 31 area likely 13,000 to 21,000 ounce (conceptual exploration target \*)
- Open strike (combined 500m to date) and width
- Mineralisation appears coherent
- Small scale of RC drilling to date < 4,000m</p>
- "Only a fraction of a likely much bigger gold system" within 20km<sup>2</sup>
- A rapidly growing list of new target areas

### A huge leap forward in overall knowledge and "signature of the mineralisation"

**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."

## Company Operations Review Summary (cont.)

### Wider Fifield district potential for Gold has risen to a new level

The Company's proven approach to mapping, geochemistry (soil and bedrock)

### Potential for "Company Making" Discovery in this geology - Target

- "0.5m to 1.5m ounce Conceptual Exploration Target \*" developing within gold receptive Black Silica Horizon in 4km<sup>2</sup> Sorpresa and near surrounds
- Based on grade range 1.5 to 2.5g/t Au and 10m to 20m tonnes mineralised black silica

### Strategy 2012 – pursuit of the discovery and assessment phases at Fifield

- Equipment and personnel more drilling (auger, aircore, RC)
- JORC compliant Resource estimates
- More New Discoveries from 10 additional Prospective Areas

### Platinum is still an important target at Fifield

- Sorpresa geology offering insights into the Pt potential (Cr)
- Platina Lead geology and commercial assessment Permit and Excavator ready

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## **Breaking News**

### Doubling of likely known Gold Receptive "black silica" horizon

- Mapping in the last week
- Likely "Sorpresa-like" black silica increased from 300m tonnes to 600m tonnes
- Along strike and South from known Sorpresa geology
- "Only a small part of a likely much bigger gold system"



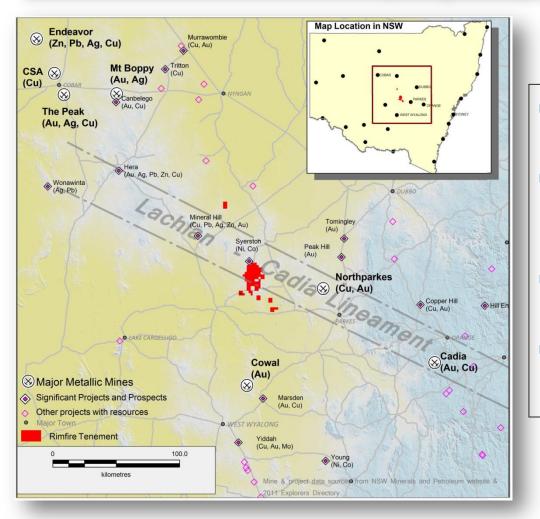
### Various styles of Black Silica, Sheared, Brecciated

## District, Structural Trends, Metal Zoning



# District Trends – Good Address!

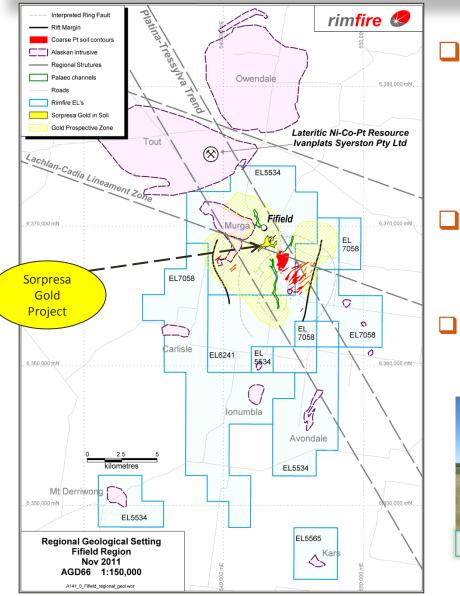
(Along strike)



# Lachlan Lineament Major Mineralised corridor

- Tout Complex at Fifield Orientation
  - Confirms lineament position
- Au and Pt in some Shears with this orientation at Fifield
- Cadia, North Parkes, Ivanhoe, Kimberley Metals

## Fifield Platinum Rimfire Major Project Areas



### **RIM has seven exploration licences**

- Approx. 300 km<sup>2</sup>
- 2 Mineral claims (Mining Licences) and a Bulk Disturbance permit "Pit One"
- **Permit for 6 x 100m trenches Platina Lead**

#### Platina- Tresylva Corridor of Faults

**Contains Pt and Au areas** 

One of the major controls on mineralisation

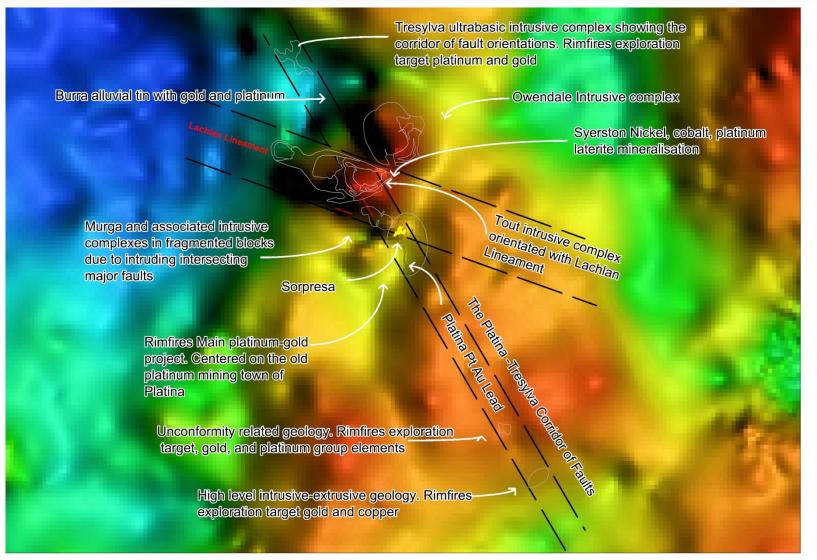
### **Quality focus on 60km<sup>2</sup> area within this**



Platina Lead looking north - influenced by Platina-Tresylva trend

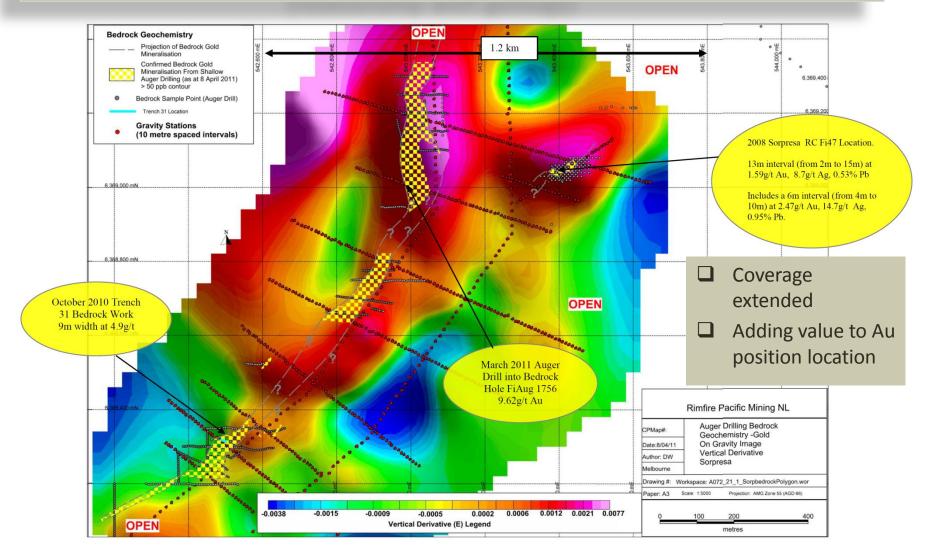
#### 25 November, 2011

## **Gravity Interpretation of Regional Structure**



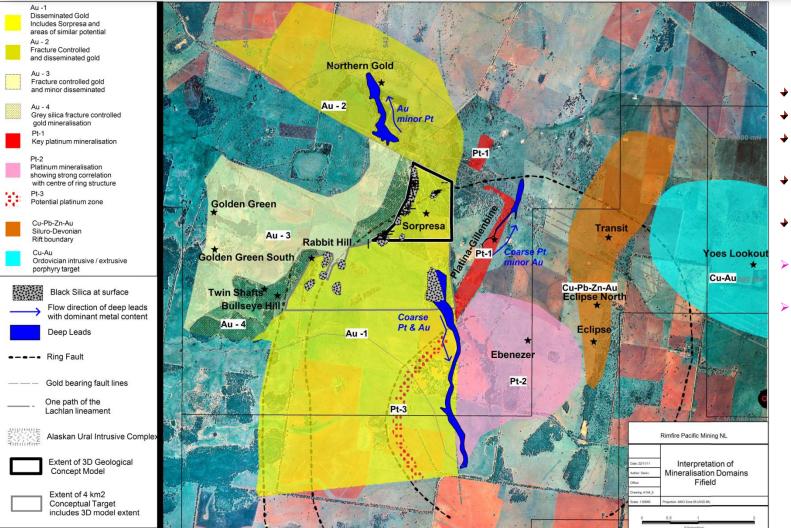
# Microgravity Conducted at Sorpresa

### (relationship with geology)



# Mineralisation Zoning At Fifield

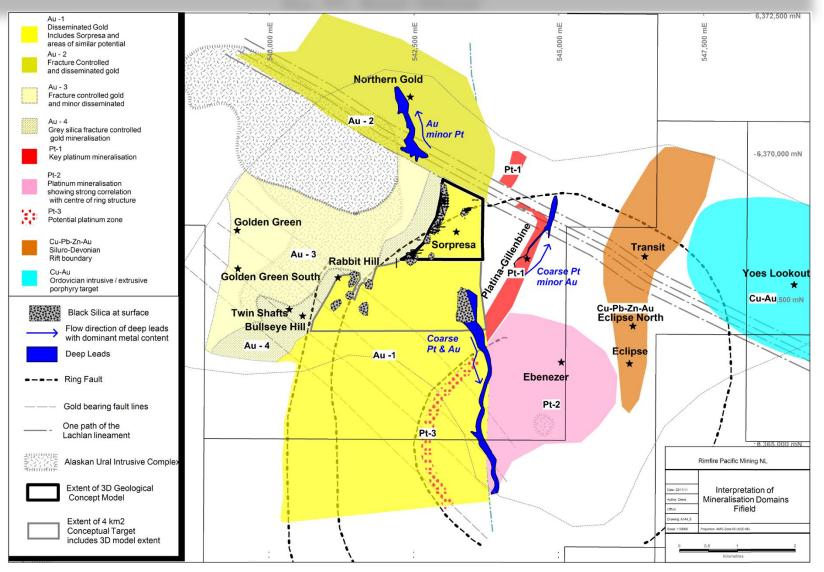
#### Au, Pt, Base Metal



- Rift Margins
- Pt corridor
- Strong Au zoning evident
- Base Metal Potential
- Diverse
   Mineralisation
- Underexplored historically
- Strong
   Commercial
   Potential

# **Mineralisation Zoning At Fifield**

#### Au, Pt, Base Metal



## Advances in Knowledge of Pt & Au Mineralisation at Fifield

Issues of Difference in Exploration	Prior to Rimfire	Rimfire Advance
Drainage Direction Interpreted to/from Fifield	North to South	South to North
Rift Valley Setting	Not seen	Recognised
Coarse Pt recognised and recovered from Bedrock	No	Yes
Sampling size and system for Pt exploration	Inadequate	Larger samples, plant
Excessive Focus on Magnetic Features	Dominant Focus	Integrated Field Based
A Pt Geological Control Discovered Pit One	No	Yes
Large scale Gold and Base Metal Potential – Exploration, Recognition & Discovery	Minor	Major
Disseminated Gold in rock Discovered (Sorpresa)	No	Yes
Geological Models - "Shear Zones", "Black Silica"	No	Yes
Importance of "distinct Pt and Au zoning ratios"	No	Yes
Sorpresa Au Geology interwoven with Cr Geology	No	Yes

# **Exploration at Fifield**

- Main Presentation Discussion Items







Platina Lead Assessment

**Platina Valley Platinum Exploration** 

# **Rimfire Approach to Exploration**

## Use of Wide spread Geochemistry

Soils, Auger drilling into bedrock

## Geological Approach to Mineralisation

Respect the uniqueness of the data, it may not conform to other models

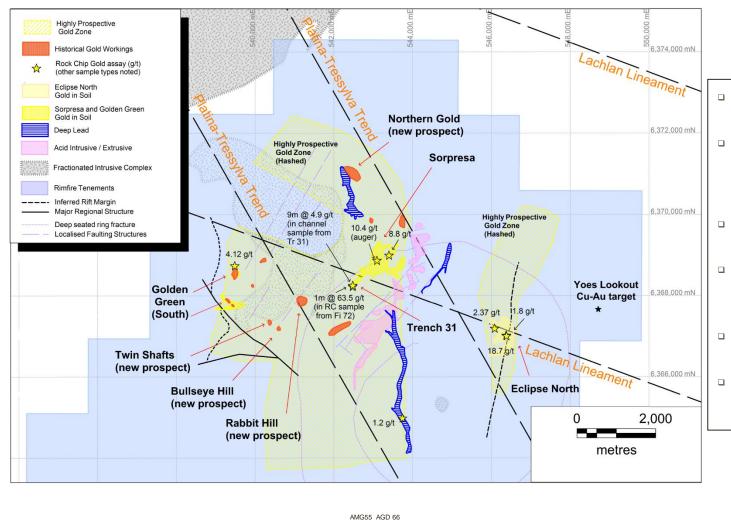
## A Commercial Focus must always be paramount

Favourable mining and metallurgical parameters must be quickly evident

## Exploration Stamina!

- "educated perseverence" to stay the distance on large diverse fields
- Strength of character to do things the right and thorough way
- Large scale mineralising systems are not quick and easy to explore

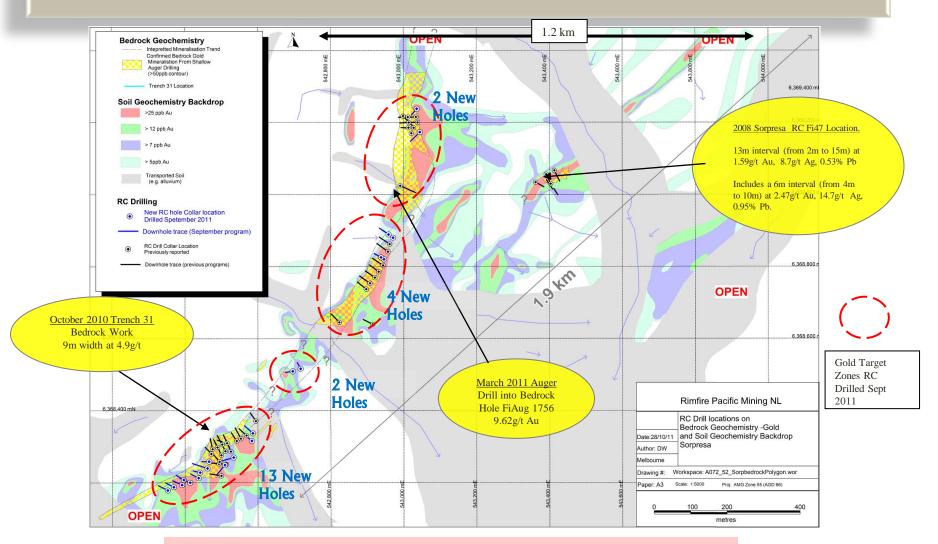
## The Current Gold Snapshot for Fifield Area



- Numerous Fine Au occurrences
- Different to the Coarse Au at Fifield
  - More than one Au mineralised system
- Noted historic "hard rock Au scratchings" mapped
- Mapping, Creeks, Soils, Chips, Bedrock sampled by Rimfire
- Sorpresa discovered open ended
- A much larger Au system operating



## Sorpresa RC Drilling on Soil and Bedrock Geochemistry



### A geochemistry discovery – part of a larger system

## Sorpresa Fine Au Discovery Brief History Line

- Au area of considerable potential Missed historically due to lack of visual surface expression
  - □ Visible prospecting ineffective, disseminated fine Au, no panning
  - No defined quartz association, no surface lag, no outcrop
  - Limited technology 50 years ago (CIP and Heap Leach), Au style was not a target

#### Au detectible at surface and confirmed in the bedrock

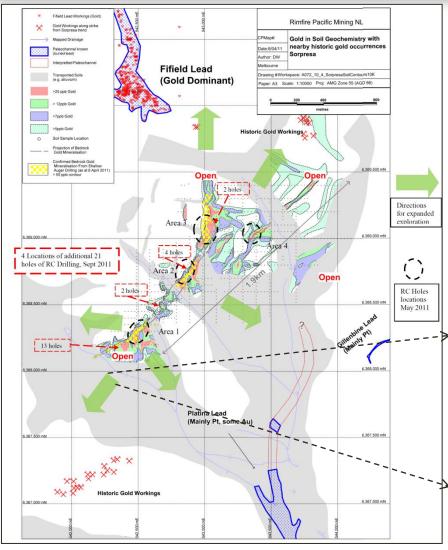
- Residual Soil Surface Chemistry (7~15+ ppb Au)
- Bedrock Chemistry Auger traverse 2~5m (0.05 ~10 g/t Au)
- First Trench (31) true width 9m @ 4.9g/t Au- positioned on Auger traverse



- Brecciated Sediments in Shear Zones with disseminated fine Au in wide zones (40m)
- Conventional style of exploration program Au Assays well understood
  - Soil geochemistry, Auger Bedrock geochemistry, RC drill delineation, Gravity of some assistance
- **Other Fine Au noted at Fifield outside Sorpresa including Au in Sediments**



### Immediate Context for Sorpresa Project Growth



- Drilling across a 1.6km length
- 4 Areas RC drilled, > 500m Au strike
- Definite Open areas
- Black Silica Receptive Geology
  - Mapping increases area to SW in particular
- Part of 4km<sup>2</sup> area highly prospective
- Huge Room for Growth



South West Strike Extension from Area 1 - Sorpresa Au Project

### Sorpresa Fine Au Discovery RC Drilling overview

#### Greenfields RC drilling – 3,546m May & September 2011

- □ 4 areas across strike length of 1.6km
- **Field Microscope, panning visible Au/geology, XRF Chemistry, strong pathfinders in real time**
- **Environmental permitting and performance**

#### □ Au Results of RC Drilling – Excellent first pass!

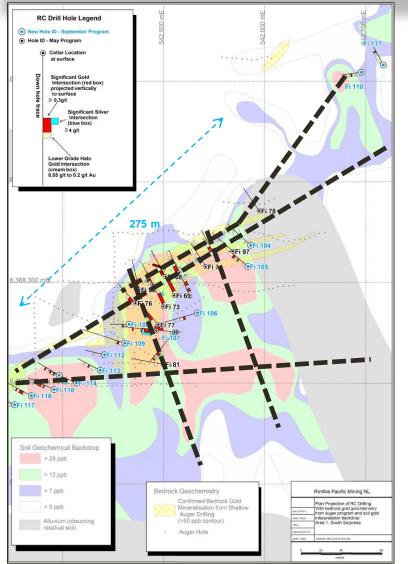
- □ 34 of 56 holes Au 1g/t or more in 2m min. sections
- □ 8 holes Ag of 35g/t or more in min. 2m intervals
- □ Hole depths typical 40m to 80m
- Strike Area 1 275m open ; Strike Area 2 150m open ; Strike Area 3 100m (Fi94 +200m) open
- Strong Au Halo most holes 0.05 to 0.2g/t au
- □ Intersection encountered below base of oxidation Fi107 (6m @ 6.5g/t Au)

#### High Grades Au & Ag

- Au 4m @ 17.5g/t from 10m (incl. 1m 63.5g/t) Fi72
- □ In general, coarse Au fraction likely not captured in assays to date
- Ag 10m @ 73.8g/t from 16m (incl. 2m @ 150g/t) Fi83



## RC Drilling Area 1 (Trench 31 vicinity)



- □ Fi 72: 4m @ 17.5g/t Au (incl. 1m @ 63.5g/t)
- Combined strike approx. 275m
- Significant extension in last RC drilling
- Partial 3D model of geometry done
- Very presentable Au grades
- Primary Au system
- 🖵 Fi 107
  - □ High grade **below base of Oxidation**
  - □ Subtlety of mineralisation (compare Fi 81)
- Higher grade seen than actual Trench 31
  - 📮 E.g. Fi 95 grade 6m @ 8.6g/t Au
  - Large untested area of Soil Geochemistry
  - Gold Receptive Black Silica Horizon
- Only a small Part of Au Potential

### RC Drilling at Sorpresa (Assay Highlights Area 1 – Trench 31)

Hole	Intersection details	Including section	Area of Drilling
Fi72	4m @ 17.52g/t <b>Au</b> from 10m	1m @ 63.5g/t <b>Au</b>	Area 1
Fi95	6m @ 8.59g/t <b>Au</b> from 6m	2m @ 24.4g/t <b>Au</b>	Area 1
Fi75	18m @ 2.08g/t <b>Au</b> from 6m 4m @ 19.0g/t <u>Ag</u> from 12m	4m @ 6.31g/t <b>Au</b>	Area 1
Fi77	14m @ 2.12g/t <b>Au</b> from 16m 4m @ 46.8g/t <u>Ag</u> from 16m <u>and</u> 6m @ 13.0g/t <u>Ag</u> from 24m	4m @ 3.11g/t <b>Au</b> , 6m @ 2.84g/t <b>Au</b>	Area 1
Fi97	4m @ 5.82g/t <b>Au</b> from 20m		Area 1
Fi73	20m @ 1.05g/t <b>Au</b> from 8m	6m @ 2.11g/t <b>Au</b>	Area 1
Fi80	12m @ 1.67g/t <b>Au</b> from 24m		Area 1
Fi68	10m @ 1.92g/t <b>Au</b> from 6m	6m @ 2.92g/t <b>Au</b>	Area 1
Fi70	12m @ 1.42g/t <b>Au</b> from 4m		Area 1
Fi107	6m @ 6.51g/t <b>Au</b> from 48m	2m @ 14.4g/t <b>Au</b>	Area 1
Fi114	20m @ 1.01g/t <b>Au</b> from 18m 2m @ 19.7g/t <u>Ag</u> from 30m	2m @ 2.79g/t Au, 2m @ 3.65g/t <b>Au</b>	Area 1
Fi116	8m @ 1.08g/t <b>Au</b> from 18m	2m @ 3.2g/t <b>Au</b>	Area 1

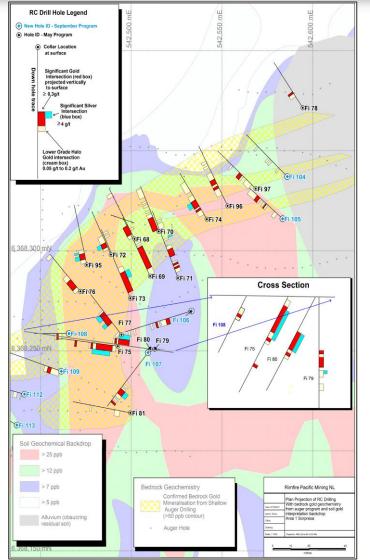
Discovery drilling

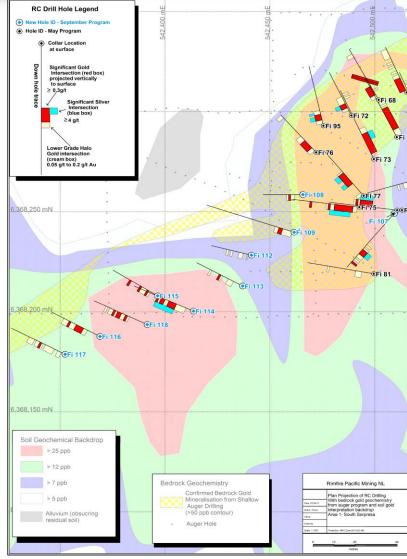
Good contribution to resource establishment



Au was determined by fire assay method AA26 with AAS finish, and Ag used ME-ICP61 at ALS Laboratories

### RC Drilling Area 1 (Trench 31 vicinity)



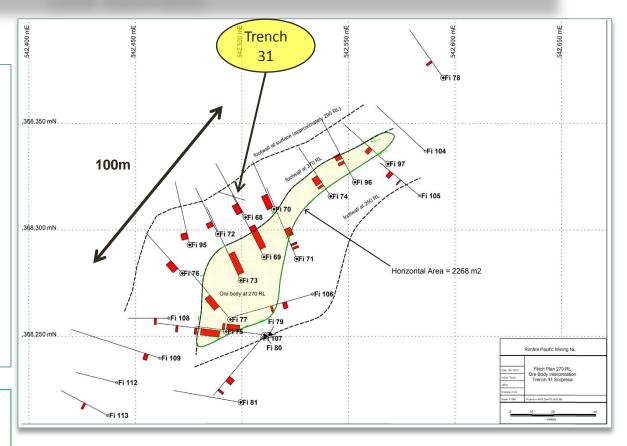


25 November, 2011

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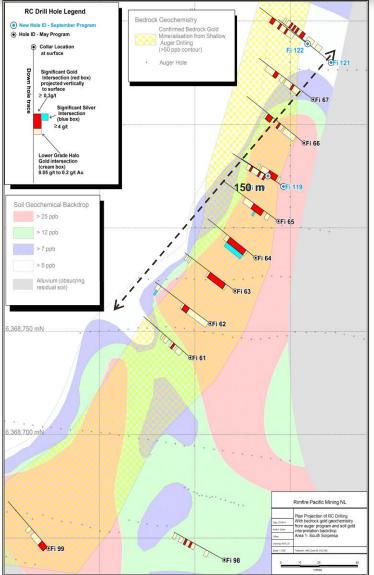
## Area1 – Au Conceptual Exploration Target \* (size estimate)

- Part of Area 1 only (near Tr31)
- Uses known data 16 RC Holes
- Target range 200,000 to 300,000 tonnes
- Au Grade range 2.0g/t to
   2.2g/t
- 40 Vertical metres assumed
- Well reasoned conceptual exploration target of approx. 13,000 to 21,000 oz Au \*
- A "discovery drill program" is close to a delineation.
- ✓ Great Outcome to date!



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### RC Drilling Area 2 (Boundary Gate)

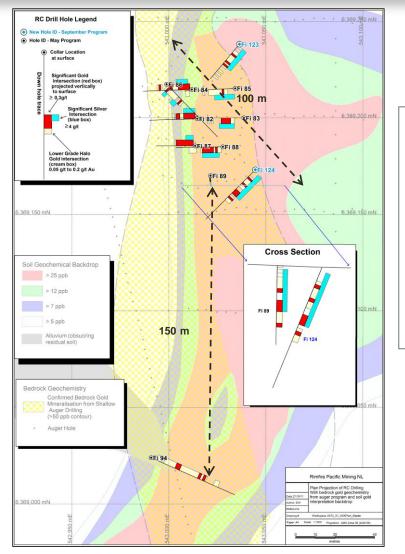


- □ Fi 64: 20m @ 1.6g/t Au
- Strike approx. 150m
- Extension in last RC drilling
- Assays probably understate Coarse Au seen
- Have we seen the best structures yet?
- Fi 99 anomalous Au (12m @ 0.25g/t ) SW, 100m
- Gold Receptive Black Silica Horizon present



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### RC Drilling Area 3 (Roadside)



- 🖵 🛛 Fi 89: 6m @ 2.13g/t Au; 6m @ 63.4g/t Ag
- Strike approx. 100m
- Extension in last RC drilling
- High <u>Ag</u> area, with Au
- Cross cutting structure??
- Fi 94 Au (2m @ 3.2g/t, plus) South 150m
  - □ 5 holes short of original plan

### RC Drilling at Sorpresa (Assay highlights elsewhere)

Hole	Intersection details	Including section	Area of Drilling
Fi64	20m @ 1.06g/t <b>Au</b> from 12m 2m @ 16g/t <u>Ag</u> from 18m	6m @ 2.02g/t <b>Au</b>	Area 2
Fi119	10m @ 0.60g/t <b>Au</b> from 10m		Area 2
Fi82	12m @ 1.19g/t <b>Au</b> from 2m <u>and</u> 4m @ 1.80g/t from 18m 8m @ 27.5gt <u>Ag</u> from 2m <u>and</u> 4m @ 71.9g/t <u>Ag</u> from 10m	4m @ 1.64g/t <b>Au</b> , 2m @ 3.09g/t <b>Au</b>	Area 3
Fi83	2m @ 0.86g/t <b>Au</b> from 14m <u>and</u> 2m @ 1.49g/t <b>Au</b> from 16m 6m @ 49g/t <u>Ag</u> from 10m <u>and</u> 10m @ 73.8g/t <u>Ag</u> from 16m	2m @ 150g/t <mark>Ag</mark> , 2m @ 124g/t <u>Ag</u>	Area 3
Fi84	10m @ 1.38g/t <b>Au</b> from 2m 12m @ 16.4g/t <u>Ag</u> from 4m	2m @ 3.31g/t <b>Au</b>	Area 3
Fi85	21m @ 15.8g/t <u>Ag</u> from 1m	8m @27.9g/t <u>Ag</u>	Area 3
Fi87	10m @ 0.87g/t <b>Au</b> from 2m 8m @ 37.8g/t <u>Ag</u> from 2m	2m @ 2.23g/t <b>Au</b> 4m @ 60.3g/t <u>Ag</u>	Area 3
Fi88	12m @ 1.71g/t <b>Au</b> from 10m 12m @ 38.6g/t <u>Ag</u> from 10m	2m @ 3.29g/t <b>Au</b> 2m @ 58.8g/t <u>Ag</u>	Area 3
Fi89	6m @ 2.13g/t <b>Au</b> from 18m 6m @ 63.4g/t <u>Ag</u> from 18m	2m @ 155g/t <u>Ag</u>	Area 3
Fi123	26m @ 13.2g/t <u>Ag</u> from 2m	2m @ 38.7g/t <u>Ag</u>	Area 3
Fi124	6m @ 1.13g/t <b>Au</b> from 28m 32m @ 16g/t <u>Ag</u> from 2m	2m @ 51.6g/t <u>Ag</u> , AND a further 2m @ 51.6g/t <u>Ag</u>	Area 3
Fi91	8m @ 10.6g/t <u>Ag</u> from 2m		Area 4

Strong Silver in Zone 3 with Au also present in

Open mineralisation

Au was determined by fire assay method AA26 with AAS finish, and Ag used ME-ICP61 at ALS Laboratories

## Sorpresa Scale and Conceptual size Key Features now known

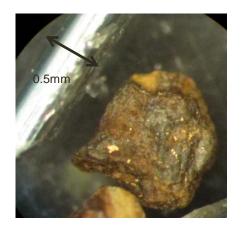
#### Key features of mineralisation seen in RC Drilling

- □ Au in soil anomaly is real, and extensive
- **Primary Au system, and Ag a significant component**
- □ Au and Ag Mineralisation is Near surface amenable access
- □ Combined Strike length Au > 500m in 3 areas and open
- □ Fine dispersed Au, repeatable assays
- Drilling conditions reasonable

#### Size and scale of Au system "just at Sorpresa"

- Sorpresa currently within immediate area of 4km<sup>2</sup> prospective for Au
- Black/Grey silica horizon, Au receptive, approx. 300 million tonnes in size
- Extensively "Underdrilled" Au Halo and success rate in Drilling indicates "strongly Au mineralised"
- Sorpresa likely small part of a larger Au system within target area of 20km<sup>2</sup> identified
- Currently no upper limit on Au potential

#### **Conceptual Au Target for Main body of Sorpresa Area can be well reasoned**



# Sorpresa Conceptual Exploration Target Size \*

#### Conceptual Au target \* of 0.5 to 1.5 mill. oz is being explored for at Sorpresa

- Based on the geological Au receptive horizon, Black Silica, inferred across 4km2 at Sorpresa
- Myriad of exploration done to date, including soils, Auger and RC drilling
- □ The Black Silica horizon is approx. 30m thick yielding a gross target of approx. 300 million tonnes
- Better Au grades have resided within a thickness of 10m Black Silica association
- A refined target of 100 million tonnes of Black Silica geology potentially hosting Au grade
- □ Within the 100 million tonne a probability of 10~20% of the Black Silica to provide higher grade Au, so
  - This Mineralised Black Silica has a range of 10 to 20 million tonnes
  - Say Au grade range of 1.5g/t to 2.5g/t
    - Based on observations from 3,500m RC Drilling this is reasonable
    - □ High hit rate to date, 34/56 RC Holes have  $\ge 1g/t$  Au in min. 2m intersections
- In addition, recent mapping has doubled the observable Black Silica beyond Sorpresa i.e. >600 million gross tonnes
- Risks include wrong assumptions of continuity in the Black Silica Horizon, retreat in gold grade and its lesser Au coverage within the horizon

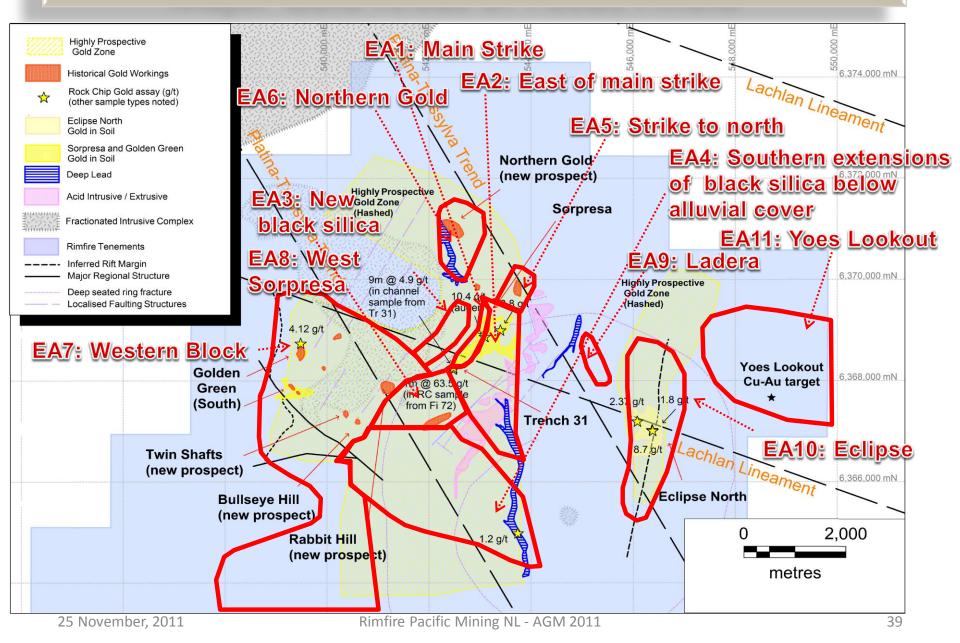
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# Airphoto Fifield Target Area



- □ Large Area
- □ Slight Topography
- Numerous Historic Gold workings
- Sorpresa 800m from Company Freehold
- Capacity for Major Au discovery within 20km<sup>2</sup> zone

# Major Gold Areas of Focus Fifield



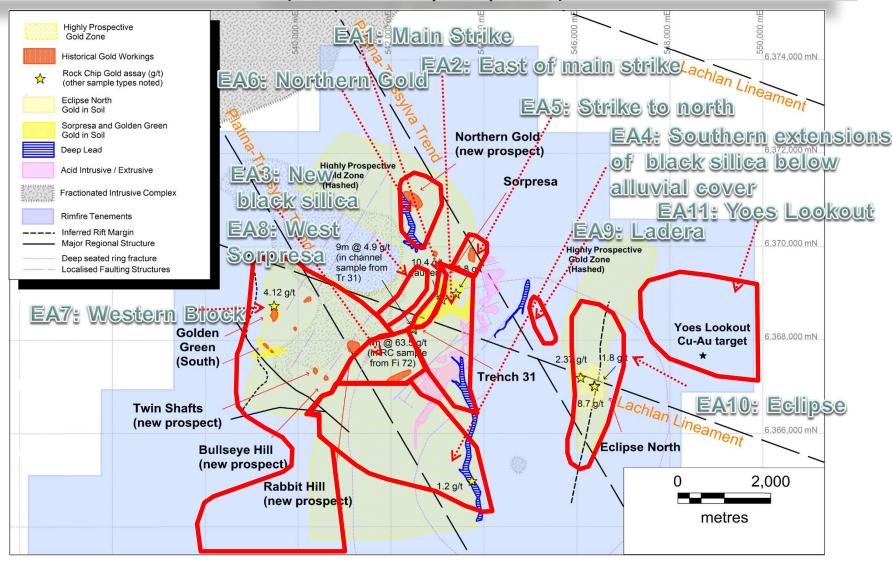
#### Major Exploration Milestones to Advance Rimfire (Priorities)

Delineation of main Sorpresa Strike RC Drilling Exploration of the Au receptive horizon within 4km<sup>2</sup> area Bedrock Geochemistry, Aircore, RC drilling New Black Silica Areas south of Tr 31 Geochemical Exploration **Exploration below Alluvial Cover – Black Silica Belt Search** Search for Au bearing faults in footwall, Aircore and then RC Drilling North of Sopresa Auger, Aircore, RC Drilling Northern Gold Finalise Bedrock geochemistry, then Aircore and RC drilling Western Block Complete surface & bedrock geochemistry. Use auger, Aircore and RC drilling

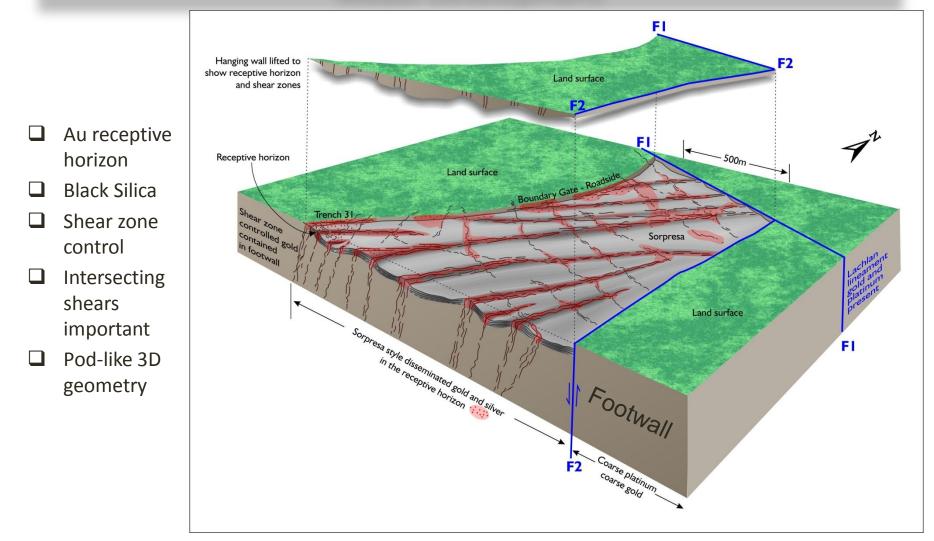
#### Wider Au Potential at Fifield (additional prospects)

Prospect Area Name	Focal Point Area	Ref.	Commodity Focus	Priority Ranking	Auger Drilling	Aircore			RC Drilling		
		EA	(major, minor)		No. Holes	No. Holes	Depth (m)	Total (m)	No. Holes	Depth (m)	Total (m)
Main Sorpresa Strike	Known Strike Down Dip	1	Au, Ag	High					50	70	3500
East of Main Sorpresa Area	4km2 Block, Include Monzonite Corridor	2	Au, Ag	Med/High	500	150	30	4500	100	65	6500
New Black Silica Area South Tr31	Black silica geology	3		High	300	30	20	600	30	50	1500
Covered Black Silica Belt Extensior & Lower Platina Fine Au	Platina Lead Floor and adjacent geology	4	Au, Pt, Cr	Medium	300	300	15	4500	30	50	1500
Main Sorpresa Strike North	North Extension	5	Au, Ag	High	30	10	20	200	4	50	200
Northern Gold area	Fifield Lead Area and adjacent bedrock	6	Au	Medium	300	30	30	900	15	50	750
Western Block 20km2	Many new prospects, BEH, TS, RH etc.	7	Au	Medium	400	200	20	4000	40	50	2000
West of Greater Sorpresa Area	Intrusive Contact	8	Au, Pt	High	100	20	60	1200			
Ladera Iron Cemented Gravel	Elevated structure initial grade test	9	Au	Medium					4	20	80
Ladera Iron Cemented Gravel	Elevated structure second stage	9	Au	Medium					100	15	1500
Eclipse Region Fine Au	Rift margin	10	Au, Cu	Medium	200	10	20	200			
Glen Iris	Porphyry Copper	11	Cu, Au	Med/High	200						
Yoes Lookout	Porphyry Copper	11	Cu, Au	Med/High	200						
					2,530	750		16,100	373		17,530

#### Wider Au Potential at Fifield (additional prospects)



# Importance of Black Silica Geology Association Model Development



### Geology Model Development Mineralised System at Fifield

- What style of mineralisation do we have at Sorpresa?
- In a sense it is unique
- We can draw on experience, where common attributes exist elsewhere
- Nevada USA Carlin?
  - Even this style is not uniform style
  - Discovery Exploration Approach worthy of note
  - Many messages of importance



#### Geology Model Development Sorpresa Mineralised System at Fifield – Geology Notes

#### Carbonaceous Black Shale

- Pervasive Silica Replacement
- 30m thick, 300 m tonnes, within 4km<sup>2</sup> area
- Au receptive horizon
- Shear Zone Controlled Au, Ag
  - Tr31 area Interplay of many shears
- Au mineralisation character
  - Disseminated, coherent, amenable to assay
  - Capacity for High Grade Au, no upper limit for free metal
- Highly promising Geological context
- A Geology setting conducive to large scale deposits
- Drilling Intense work



### Details on the Gold Deposition Character Mineralised System at Fifield – Geology Notes

- Several Styles of Au deposition occur
- Happen at different times in mineralising phase
- Same location for different styles
- Some coarse Au, majority fine Au
- Secondary Au not obvious
- High Au grade achieved below the base of oxidation – "the fresh zone" fi 107
- Ag is mostly associated with the Au
   High Ag in Area 3
  - Expect the Ag to be a primary feature

<image>



# Details on the Gold Deposition - Structural Geology

- Structural Access for the Au, Ag mineralisation
  - Via Shear zones through Black Silica areas
- Hydrothermal and Structural alteration
- Dykes of Chromite bearing rock (Ultrabasic?)
  - Cut through the geology
  - PGE?
- Shear zones controlling the Au
  - Multiple parallel shears
  - Two main orientations
  - Occur over many kilometres
  - □ Approx. 10m widths, 30m to 300m apart
- Gold Lenses formed from Intersecting shears cutting black silica horizon
  - Many intersecting positions expected
- Excellent Geological Plumbing for Au mineralisation
- Platina-Gillenbine Shear Direction
  - Main direction for Coarse Pt, Au and the Sorpresa Strike Direction
- Platina-Tresylva Shear Direction
  - Regional trend for Pt mineralisation and Chromite bearing dykes



#### **Exploration and Discovery Considerations** Noted Carlin deposits Nevada USA – Geochemistry Discoveries!

Deposit	Year	Au (Moz)	Description	Discovery methods	References
Carlin	1961	5.0	Outcropping Carlin-type Au deposit	Mapping and rock-chip geochemistry	1, 2
Cortez	1966	1.68	Outcropping Carlin-type Au deposit	Mapping and rock-chip geochemistry	3, 4
erritt Canyon (Alchem)	1973	0.16	Outcropping Carlin-type Au deposit	Mapping and rock-chip and residual soil geochemistry	5, 6
Alligator Ridge	1977	0.79	Outcropping Carlin-type Au deposit	Mapping and rock-chip and residual soil geochemistry	7, 8
Gold Quarry	1979	>25	Carlin-type Au deposit covered by 30–150 m of alluvium	Drilling (wildcat hole 180 m from known small resource)	6, 9
Fortitude	1980	2.2	Au skarn deposit covered by >45 m of barren pre-ore rocks	Drilling based on metal zoning patterns around known Cu-Au-Ag deposit centered on a stock and anomalous rock-chip geochemistry along fault that cut the barren cover ("leakage anomaly")	6, 10
Paradise Peak	1983	1.6	Outcropping high-sulfidation epithermal Au-Ag deposit	Field inspection of Hg prospect, rock-chip sampling, followed by drilling	6, 11
Gold Bar	1983	0.36	Carlin-type Au deposit covered by 1–10 m of alluvium, buried horst block located 4 km from range front	Rock-chip geochemistry (float, 20-30 ppb) followed by drilling	12
Sleeper	1984	2.36	Low-sulfidation epithermal Au-Ag deposit covered by 20–50 m of alluvium, located 1 km from range front.	Drilling based on projections of geology and rock-chip geochemistry from the range	6, 11
Marigold (8 South)	1985	0.41	Carlin-type Au deposit /distal-disseminated Au deposit covered by 1–150 m of alluvium	Drilling based on projections of geology from range	13
Twin Creeks (Megapit)	1986	15.6	Carlin-type Au deposit covered by 5-200 m of alluvium	Drilling based on projection of geology and sagebrush anomaly (12–15 ppb Au, 5 m of alluvial cover) that was located 1.5 km south of outcropping Chimney Creek Carlin-type Au deposit	6, 11
Cove	1986	3.3	Outcropping distal disseminated Ag-Au deposit	Stream sediment geochemistry, mapping, and rock-chip and residual soil geochemistry	6, 11
Betze-Post	1986	40.2	Carlin-type Au deposit covered by ~200–300 m of upper plate siliciclastic rocks that contained small, near-surface low-grade oxide orebodies	Drilling to test favorable underlying lower plate carbonates	14
Meikle	1988	7.1	Carlin-type Au deposit covered by up to 150 m of alluvium and 250 m of essentially barren upper plate siliciclastic rocks	Drilling based on old Hg prospect, mapping, and IP anomaly	14
Deep Star	1988	1.7	Carlin-type Au deposit covered by sporadically, weakly mineralized upper plate siliciclastic rocks	Drilling below old open pit, based on IP anomaly	15
Lone Tree	1989	4.5	Distal-disseminated Au deposit covered by 0.5–120 m of alluvium	Drilling based on projections of geology from range	6, 11
Mike	1989	8.6	Carlin-type Au deposit covered 120–240 m of alluvium	Drilling based on NW extension of Good Hope fault from gold quarry	16
Jerritt Canyon (SSX)	1990	1.7	Carlin-type Au deposit covered by 140–300 m of essentially barren upper plate siliciclastic rocks	Drilling based on weakly anomalous rock-chip geochemistry (15 ppb Au) along altered dikes that cut the barren cover ("leakage anomaly")	5, 17
Pipeline	1991	17	Carlin-type Au deposit covered by 25–250 m of alluvium	Condemnation drilling	6, 11
Archimedes	1992	2.83	Carlin-type Au deposit covered by 15–150 m of alluvium	Drilling based on projections of rock-chip geochemistry and geology from range	11, 18
Turquoise Ridge	1993	9.5	Carlin-type Au deposit covered by ~500 m of mainly siliciclastic and basaltic rocks that contained small, near-surface, low-grade oxide orebodies	Drilling to test favorable underlying carbonate rocks, based on projections of geology from nearby Getchell deposit	11, 19
West Leeville	1994	3.2	Carlin-type Au deposit covered by 450–600 m of essentially barren siliciclastic rocks	Drilling based on projected intersection of faults and favorable stratigraphy	20
Cortez Hills	2002	14.1	Carlin-type Au deposit covered by ~100–200 m of all uvium	Drilling based on ore-grade intercepts in widely spaced old drill holes, gravity low interpreted to be result of alteration, and projections of geology from the range	11, 21
South Arturo	2005	1.5	Carlin-type Au deposit covered by ~200–260 m of alluvium	Drilling of an untested area underneath old mine dumps	11, 22

Normal typeface = outcropping deposit; italics = deposit covered by pre-ore bedrock; bold typeface = deposit covered by transported alluvium Au (Moz) = estimate of mined Au and remaining Au reserve-resource

References: 1 = Jory (2002), 2 = Livermore (1996), 3 = Hays et al. (2007), 4 = Erickson et al. (1966), 5 = Jones (2005), 6 = Sillitoe (1995), 7 = Nutt et al. (2000), 8 = Schull and Sutherland (2005), 9 = Powell (2007), 10 = Kotlyar et al. (1998), 11 = Muntean (2010), 12 = French et al. (1996), 13 = Theodore (2000), 14 = Bettles (2002), 15 = Clode et al. (2002), 16 = Norby and Orobona (2002), 17 = McMillin (2005), 18 = Dilles et al. (1996), 19 = Chevillon et al. (2000), 20 = Jackson et al. (2002), pre-mining resource, 21 = Hays and Thompson (2003), 22 = Cope et al. (2008)

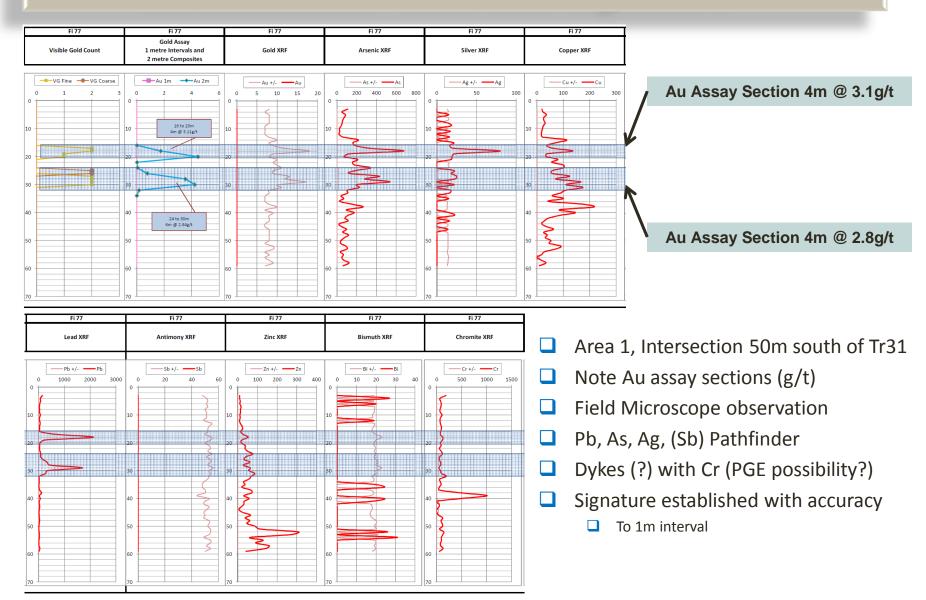
# Mineralisation Structure and Chemical Signature

- Field Microscope (2m)
  - Au, Minerals, Geology
- XRF in the field (1m)
  - Signature elements established Ag, Pb, As, Sb
  - Unusual elements noted Cr, Se
  - Screening tool for likely Au & Ag zones
- Down hole 3D photography
  - Virtual diamond core
  - Structural interpretation
- Enable better orientation
  - Drill hole targeting
  - Some real time field adjustment

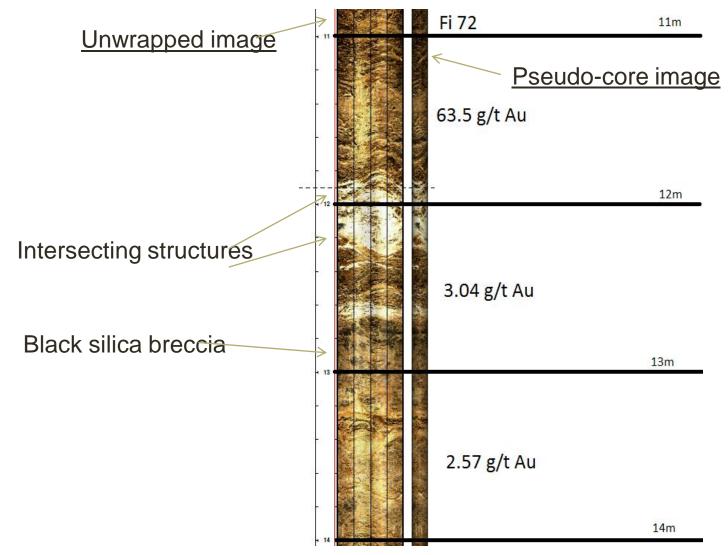




# **Mineralisation Chemical Signature**



# Optical Bore Hole Log Fi 72 Intersection at Sorpresa



Rimfire Pacific Mining NL - AGM 2011

# Au Potential Summary Fifield

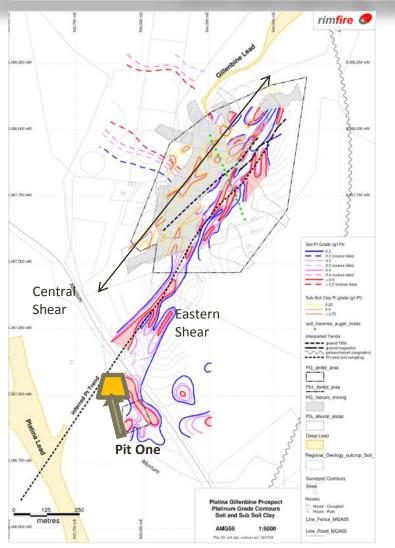
- Sorpresa Au Soil geochemistry confirmed as real in the Bedrock
  - Large scale fine disseminated Au in sheared sediments
  - Capacity for High grade Au evident
- Historically unrecognised Gold Area missed by others for 130 years
- Sorpresa Scale Very Large
- Part of a much larger Au mineralising system
- Au receptive Geology now recognised
- World Class Discoveries are possible in this setting



# Platina Valley Platinum Exploration - Platina Lead



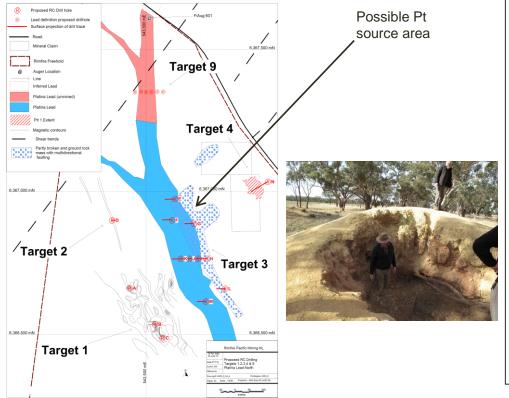
## "Eastern Pt Shear Zone" Platina-Gillenbine - soil sampling contours & mapping



- 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 Platina Valley
  - → Geological control "plan view window"
- Importance of Intersection with Platina-Tresylva Trend

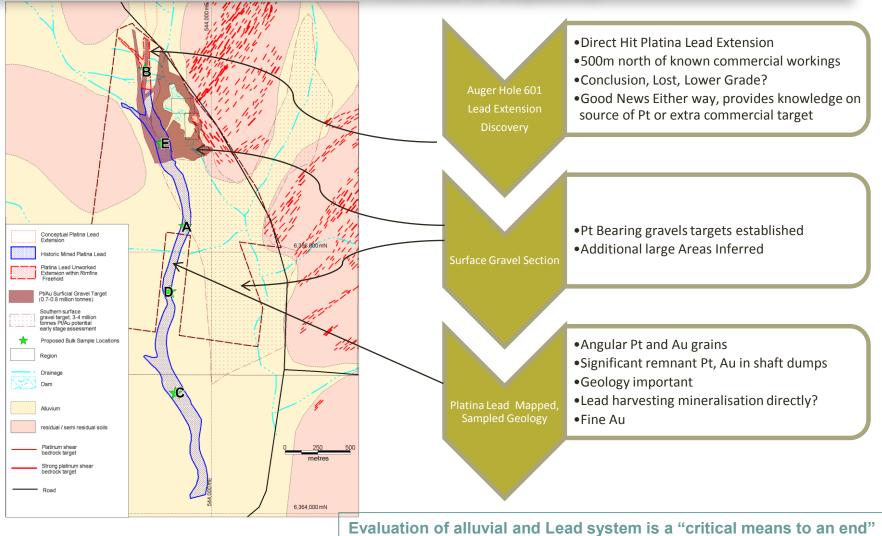
# Platina Lead – 1890's





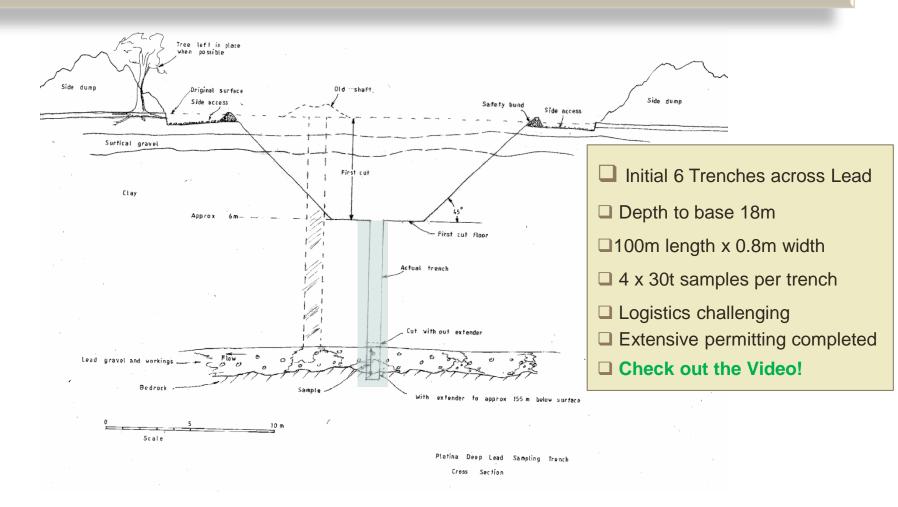
- 120 years ago biggest Pt producer in Commonwealth
- 20,000oz recovered mainly Lead
  - 15g/t recovered Pt equivalent
- Assess unmined portion (500m)
  - On freehold
  - Further extension expected north
- Precise Start of 1890's workings
  - Worked 2.8km Nth-Sth
- Check residual grade
- Adjacent Geology assessment
  - Selected areas to check bedrock
  - Along Lead

#### Pt, Au Bearing Gravels and Platina Lead (on Rimfire freehold or adjacent)



and may give rise to identification of a minable resource in the process

# **Trench Section Plan Platina Lead**



#### List of Conceptual Pt Exploration Targets to Date – Fifield

Table of "Conceptual Platinum Targets" Developed as At March 2010 Fifield NSW <sup>(\*)</sup>

Conceptual Target Area	Assun (HVC Mi unless	Range aption xed Pt/Au stated wise)	Range of Mineralised Tonnage (t) or Area (sqm)		Total Target Ounces Potential Range		Assumed Depth and thickness	Basis for Overall Assumption			
	High	Low	High	Low	High	Low					
Modern Near Surface Gravel on Freehold Area 1	0.4g/sqm	0.3g/sqm	1.1 million sqm	0.9 million sqm	13,600	11,100	1~2m below surface	Bulk Sampling at Pit One and Gravel Auger program.			
Platina Lead Extension (500m) "on freehold	15g/t "recov	vered'	d tonne tonne	45,000	37,000	21,000	00 1.25m to 1.75m mineralised zone in a width of 40–50m at a depth of 10–15m	Historic records, modern work programs, trenching,	Į.		
	historic rep average gra 1890's "wo section"	de in		tonne					C		
only"	No grade es established "unworked	yet in the						auger	C		
Platina Lead (2.8km)	15g/t "recovered' historic reported average grade in 1890's "worked section' Estimate Residual, on		441,000 tonne	225,000 tonne	57,000	14,500	1.25m to 1.75m mineralised zone in a width of 40~50m at a depth of 12~25m	Historic records, modern work programs, trenching, auger, shaft dumps	C		
	"non-select between 2g									_	
Platina- Gillenbine Bedrock	0.5g/t Pt	0.3g/t Pt	30 Million tonne	20 Million tonne	450,000	200,000	From surface to 40m or 60m, along strike of 1.3km, width of 200m	Historic surface mining and Company work programs to 2m depth			

(\*)Qualification - "The potential quantities and grades in the referred table are 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."

sqm = square metre ; m = metre ; g = gram ; t = tonne

- Sorpresa work adds to understanding Pt development
- The list has room to grow
- Pt work to date only reflected here
- Next two target stages are on Platina
   Lead
- Potential for quicker development on smaller targets
- Important part of the Company not to be discounted

#### **Summary of Exploration Position**

The Fifield Gold potential is a significant Opportunity for the Company Sorpresa is an established Greenfields Discovery with substantial room to grow It represents a conventional exploration project – standard assays Large scale, open ended, grades at surface The wider implications for Gold at Fifield, beyond Sorpresa >20km<sup>2</sup> area Excellent scoping of new Au prospects > 10 quality areas to pursue in addition to Sorpresa Large Drilling scale Planned to Delineate Sorpresa and test new Prospects The Potential is real for World Class Size Au Mineral Discovery Pt in Bedrock is still a very important focus Relevance of the Platina Lead to Pt and Au geology Smaller alluvial targets may also be viable in the process The next 12 months should see the Company grow in stature!

#### Contact us Thankyou



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. Mr Plumridge 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 a 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 their information in the form and context in which it appears.

25 November, 2011

### 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.