

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

Update on the Sorpresa Gold & Silver Project Area ***Fifield NSW***

Melbourne Mining Club
Cutting Edge Series
Presentation 20th May 2014

John Kaminsky
Executive Chairman





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- ❑ **Competent Person Statement:** *The information in this presentation that relates to Exploration Results is based on information compiled by Colin Plumridge and Darren Glover. Both gentlemen are deemed to be Competent Persons and are Members of The Australasian Institute of Mining and Metallurgy. Mr Plumridge has over 45 years’ experience in the mineral and mining industry. Mr Plumridge is employed by Plumridge & Associates Pty. Ltd. and is a consulting geologist to the Company. Colin Plumridge has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Colin Plumridge has previously consented to the inclusion of the matters based on his historic information in the form and context in which it appears. Mr Glover is employed by Rimfire Pacific Mining and has 18 years’ experience in the mineral and mining industry. He has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Glover consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*
- ❑ **JORC 2012 Compliance:** *All information provided in this presentation has been formally released to the ASX in compliance with JORC requirements. The most recent document released to the ASX provides details and hyperlinks relevant to all information provided in this presentation and can be accessed on the Company Website at hyperlink: ASX Announcements. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement(s).*



Presentation Outline



Introduction and Corporate Update

Correct Geological Setting - Fifield Highly Prospective

Sorpresa Gold & Silver Discovery, 3D Model and Update

Sorpresa Current RC Drilling Program

Fifield Regional Exploration Advancement

Summary Position



Company Profile – 18th May 2014

Shares on Issue 688M Ordinary FP

- Placement and SPP 76M shares at 4.3 cents, Sept 2013, \$3.3M gross, 12% dilution
- No options and No Convertible Notes

Market Cap. Approx. \$16.5M @2.4 cents

Share Price Movement

- 2012 High 9.3 cent (Oct), Low 2.5 cent
- 2013 High 7.5 cent (Jan), Low 2.8 cent (Dec)
- 2014 High 3.6 cent (Jan), Low 1.5 cents (May)

Volume

- Nov-May approx. 326,000 shares/day
- Largest 2.7m shares/day

Shareholder Profile

- Management 9%
- Top 20 Holders 33%
- Top 100 Holders 63% (cut-off 1.35M shares)
- 2,000 plus shareholders

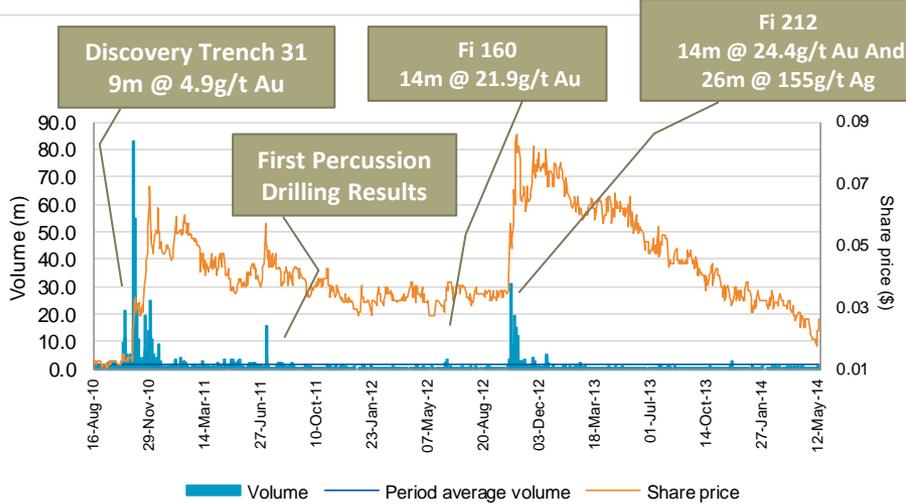
Cash Status 31 March 2014

- \$1.70m
- \$1.1m (AusIndustry due May 2014)
- Application for co-operative drilling funds (up to \$0.2m)



Share Price Performance - RIM

16-Aug-2010 - 16-May-2014



- ❑ Exploration Sector major correction
- ❑ Liquidity and value decline
- ❑ Gold and Silver Price decline 30%
- ❑ RIM above average to indices over 3~4 yrs
- ❑ Last 3 months weak price
- ❑ Recent Price upswing – Activities matter
- ❑ Turning Point, through the bottom?

Relative price performance



Last 12 months

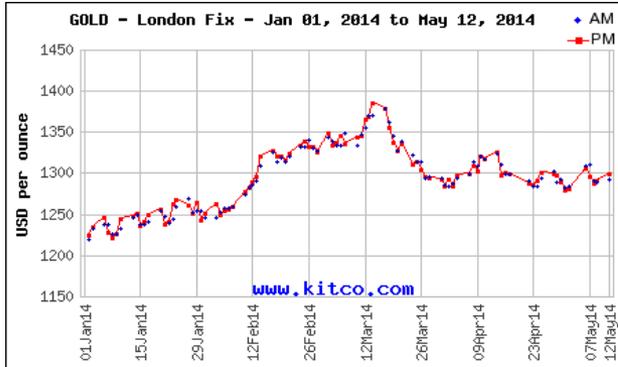


Note: XKR is S&P/ASX 300 RESOURCES; XMR is S&P/ASX MIDCAP RESOURCES;



Key Precious Metal Trends

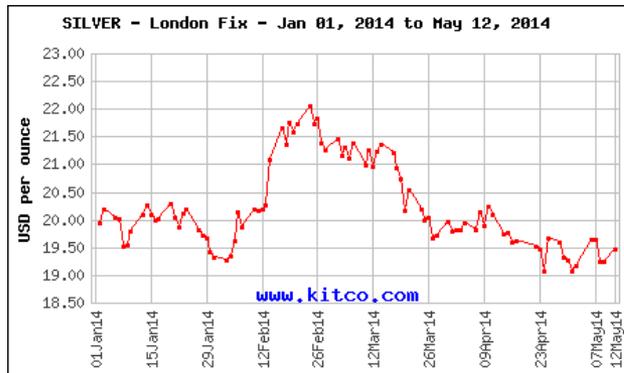
Gold 2014



Gold 2013



Silver 2014



Silver 2013

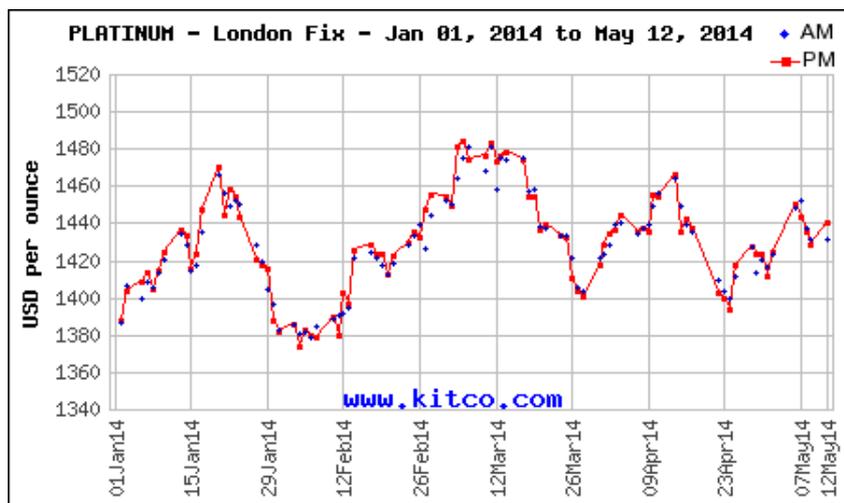


- Major Corrections last 18 months
- Off the bottom - just
- Bulls include Rick Rule, US-based resource investor, Chairman of SPROTT US HOLDINGS



Key Precious Metal Trends - Platinum

Platinum 2014



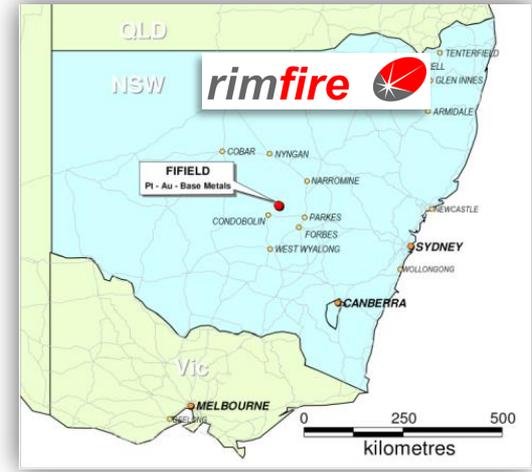
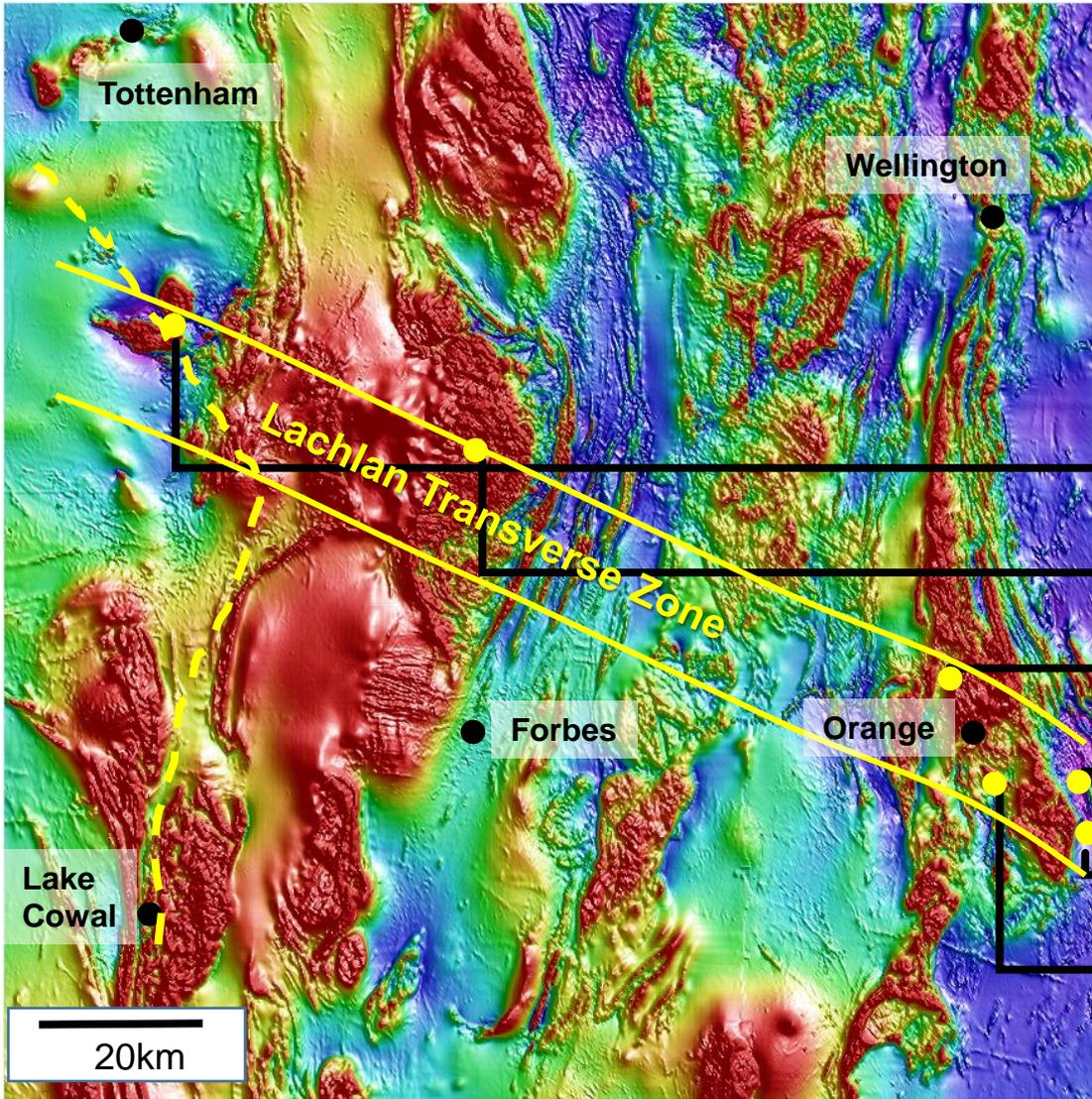
Platinum 2013



- ❑ Corrections but less pronounced
- ❑ The pick of many analysts to outperform in 2014
- ❑ Good timing to investigate the Platina Lead – residual grade



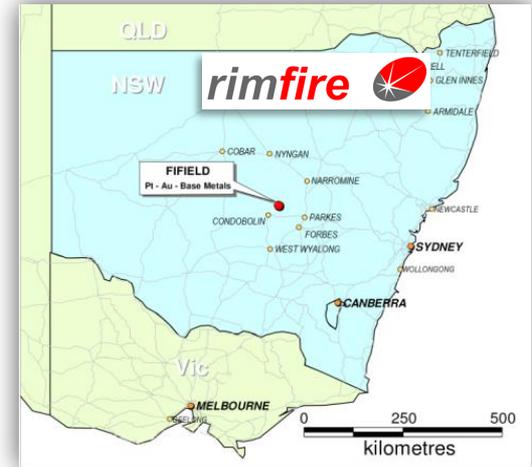
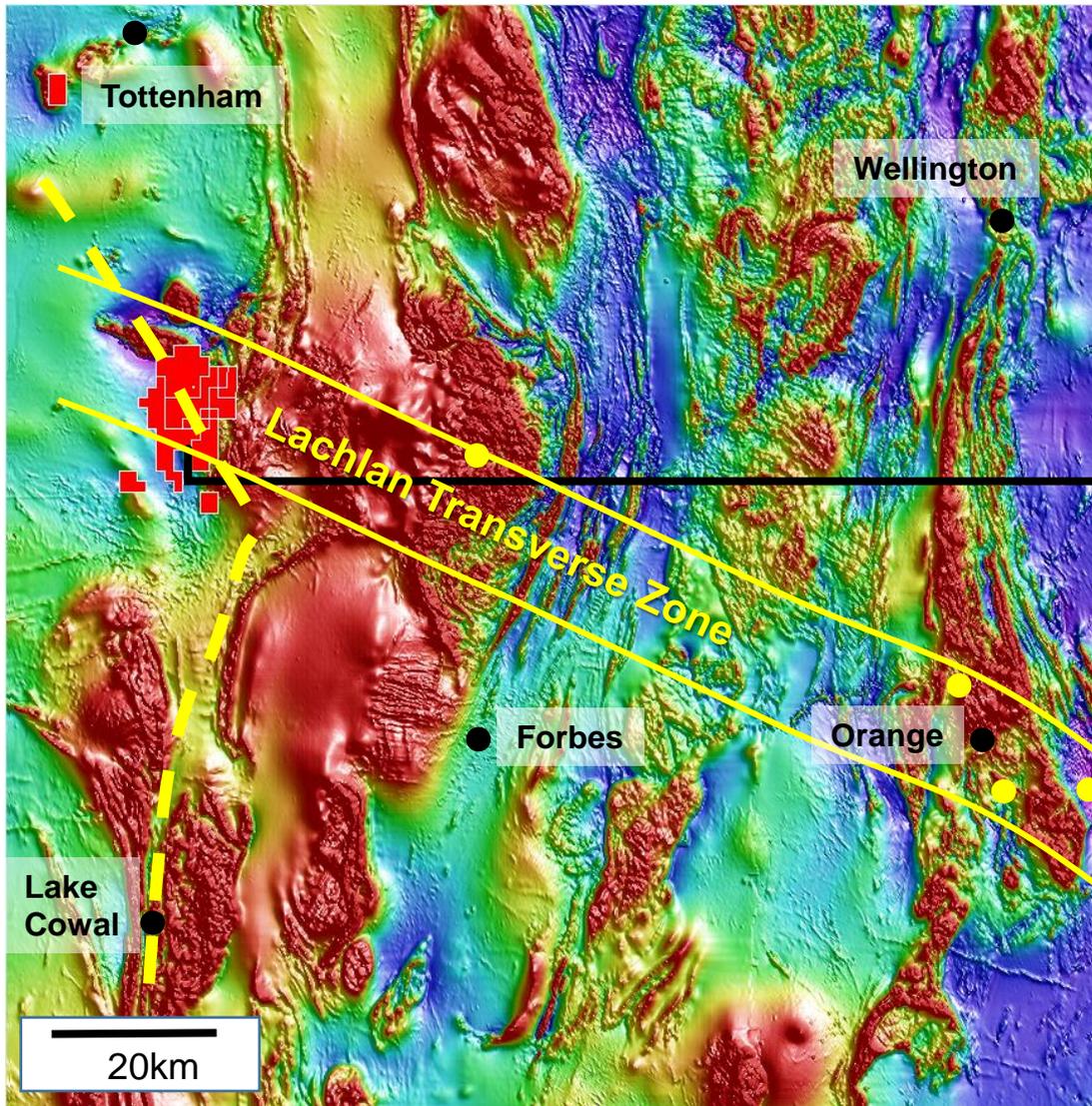
Project Location - East Lachlan Fold Belt



- Syerston (Ivanhoe)
- North Parkes (China Mo Co.)
- Copper Hill (Golden Cross Resources)
- McPhillamy's (REGIS)
- Brown's Creek
- Cadia Valley (Newcrest)



Project Locations

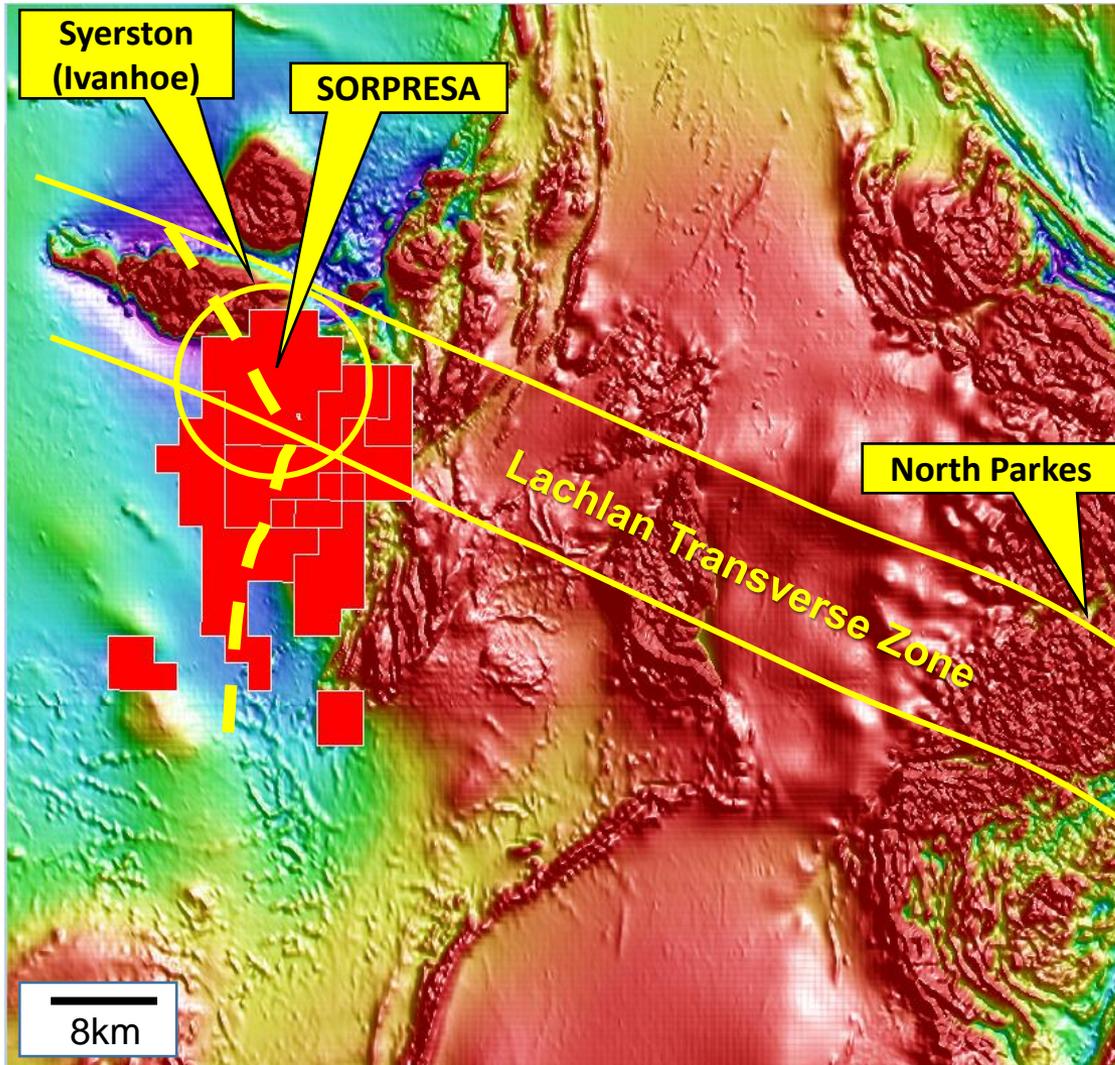


Rimfire Pacific Mining NL

- ❑ 6 Exploration Licenses,
- ❑ Contiguous tenement package,
- ❑ 313 square kms.
- ❑ 210Ha freehold land,
- ❑ Alluvial Gold 1880,
- ❑ Alluvial Platinum 1890,
- ❑ 20,000Oz Pt historical production.



Correct Geological Setting

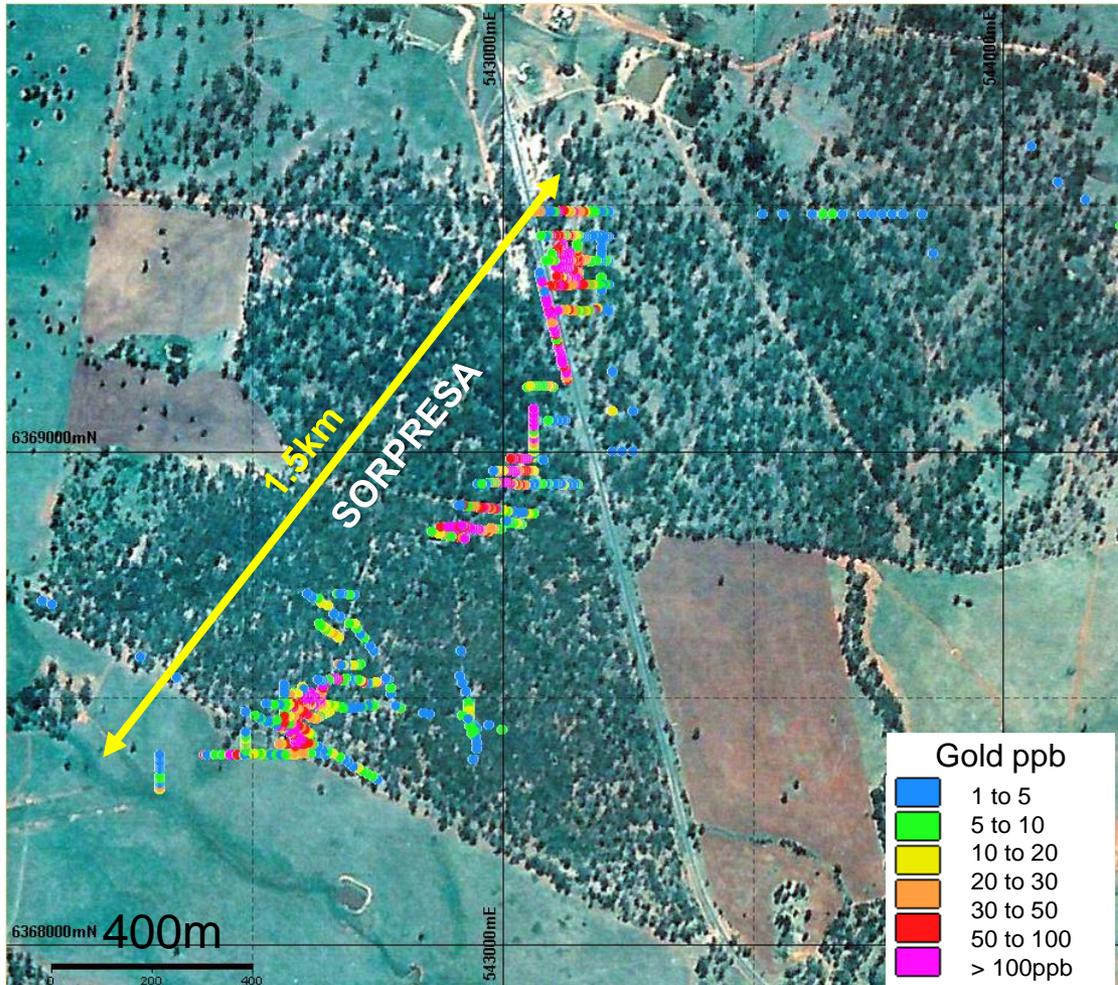


- Crustal scale, long lived and re-activated LTZ NW faults.
- Interplay of second order north – south Gilmore Suture associated faults.
- Structural Intersections and;
- Deep seated Alaskan Ural fractionated intrusives into;
- Siluro-Devonian Rift-basin setting in the Back Arc of the Macquarie Arc.
- Significant history of alluvial gold and platinum production.
- Overlooked by Previous Explorers.

Correct Geological Framework for a significant discovery



Sorpresa Discovery (2007 - 2012)

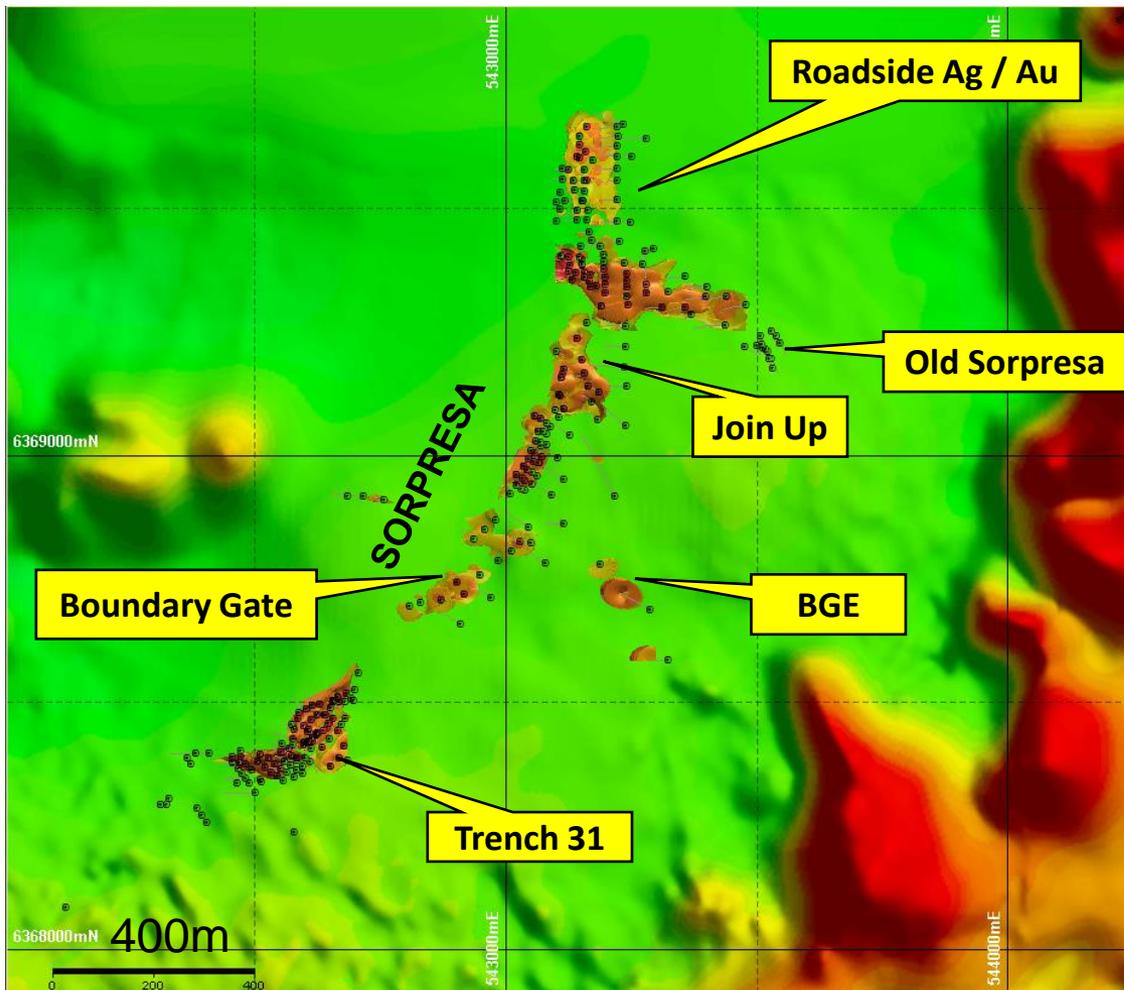


- ❑ Gold in Rockchip, Soil and Auger drilling defines a curvilinear anomaly > 20ppb Au over a 1.5km strike.
- ❑ Trench 31 reveals near surface high grade Gold (9m @ 4.9g/t Au).

The geochem approach has important parallels in the regional exploration



Sorpresa Discovery (2007 - 2012)

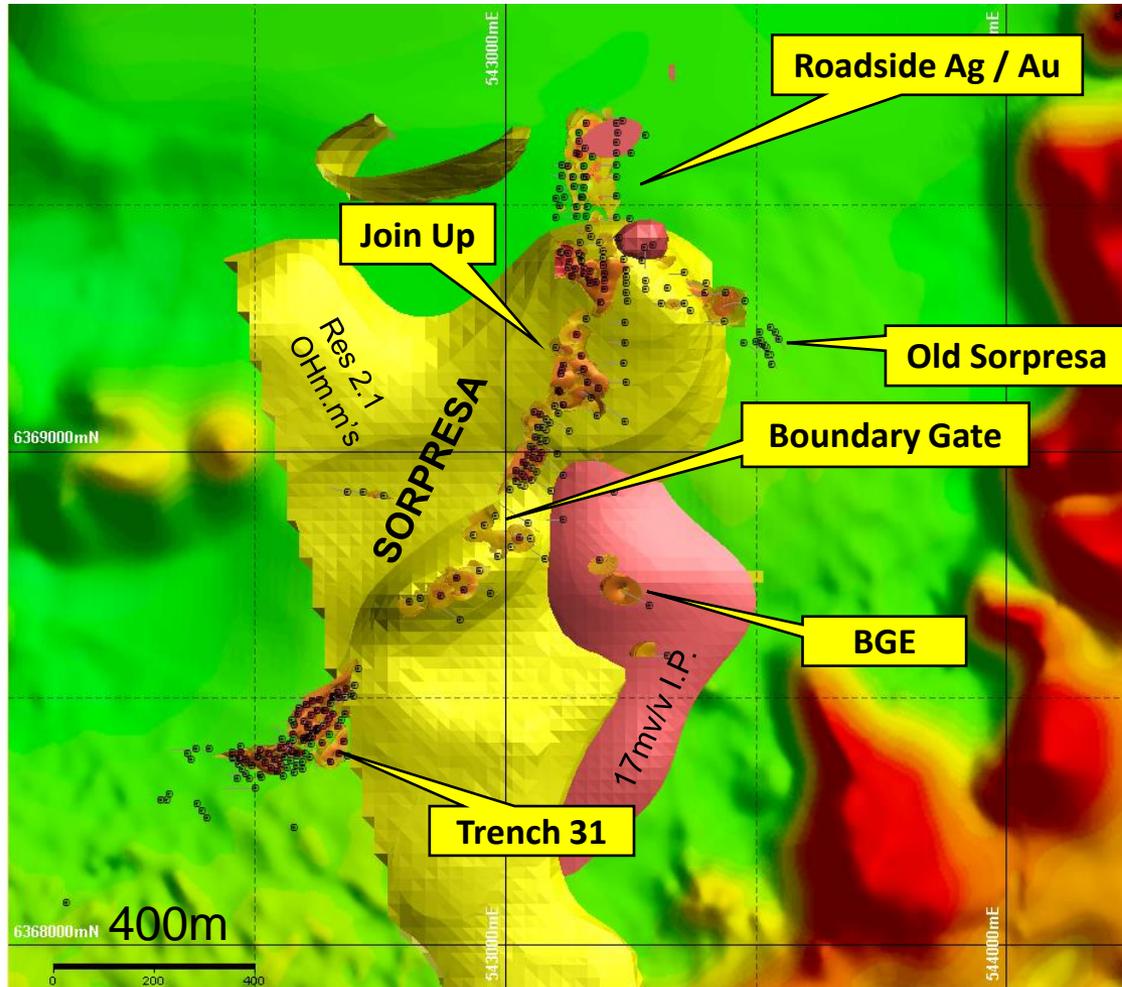


Yellow Outline > 0.2g/t Au
Red Outline > 0.5g/t Au

- ❑ Gold in Rockchip, Soil and Auger drilling defines a curvilinear anomaly > 20ppb Au over a 1.5km strike.
- ❑ Trench 31 reveals near surface high grade Gold (9m @ 4.9g/t Au)
- ❑ **Drilling defines high grade Au / Ag mineralisation** within 5 structurally controlled shoots along the gold anomaly.



Sorpresa Discovery (2007 - 2012)



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Red Outline > 0.5g/t Au

- ❑ Gold in Rockchip, Soil and Auger drilling defines a curvilinear anomaly > 20ppb Au over a 1.5km strike.
- ❑ Trench 31 reveals near surface high grade Gold (9m @ 4.9g/t Au)
- ❑ Drilling defines high grade Au / Ag mineralisation within 5 structurally controlled shoots along the gold anomaly.
- ❑ **Induced Polarization (I.P.)** survey test line completed revealing chargeability and resistivity anomalies associated with the mineralisation.
- ❑ **5 hole Diamond Drill Program** intersects **Bonanza Gold (BGE)** and significant widths to mineralisation.



Sorpresa - Significant Intersections

Gold

Silver (Roadside)

Roadside

- ❑ 16m @ 5.32g/t Au
- ❑ 7m @ 4.24g/t Au
- ❑ **14m @ 24.4g/t Au**
- ❑ 21m @ 1.11g/t Au

- ❑ 12m @ 394g/t Ag
- ❑ 28m @ 119g/t Ag
- ❑ 26m @ 155g/t Ag
- ❑ 20m @ 230g/t Ag

Original Sorpresa

- ❑ 13m @ 1.59g/t Au
- ❑ 30m @ 2.39g/t Au

- ❑ 10m @ 535g/t Ag (incl. 2m @ 2020g/t Ag)

Join-Up

- ❑ 4m @ 21.9g/t Au

- ❑ 26m @ 90g/t Ag

Boundary Gate & BGE

- ❑ 24m @ 2.17g/t Au
- ❑ **1m @ 114g/t Au**
- ❑ 20m @ 2.14g/t Au

- ❑ 16m @ 175g/t Ag

Trench 31

- ❑ 6m @ 12.31g/t Au
- ❑ **14m @ 21.9g/t Au**
- ❑ 9m @ 4.9g/t Au (trench)
- ❑ 16m @ 3.23g/t Au



- *Two Australian Top 10 Greenfields Gold intersections (2012)*
- *Pathfinder Association (Ag, As, Sb, Pb, Zn) allows real time XRF recognition*
- *Oxide and Primary high grade mineralisation*





Sorpresa - Significant Intersections

Fi 328 DDH



- Intersections across a ~1.5km strike,
- Mineralisation comes to surface,
- Mineralisation open in multiple directions,
- Regional Strike extensions are completely un-explored.



Sorpresa Drilling

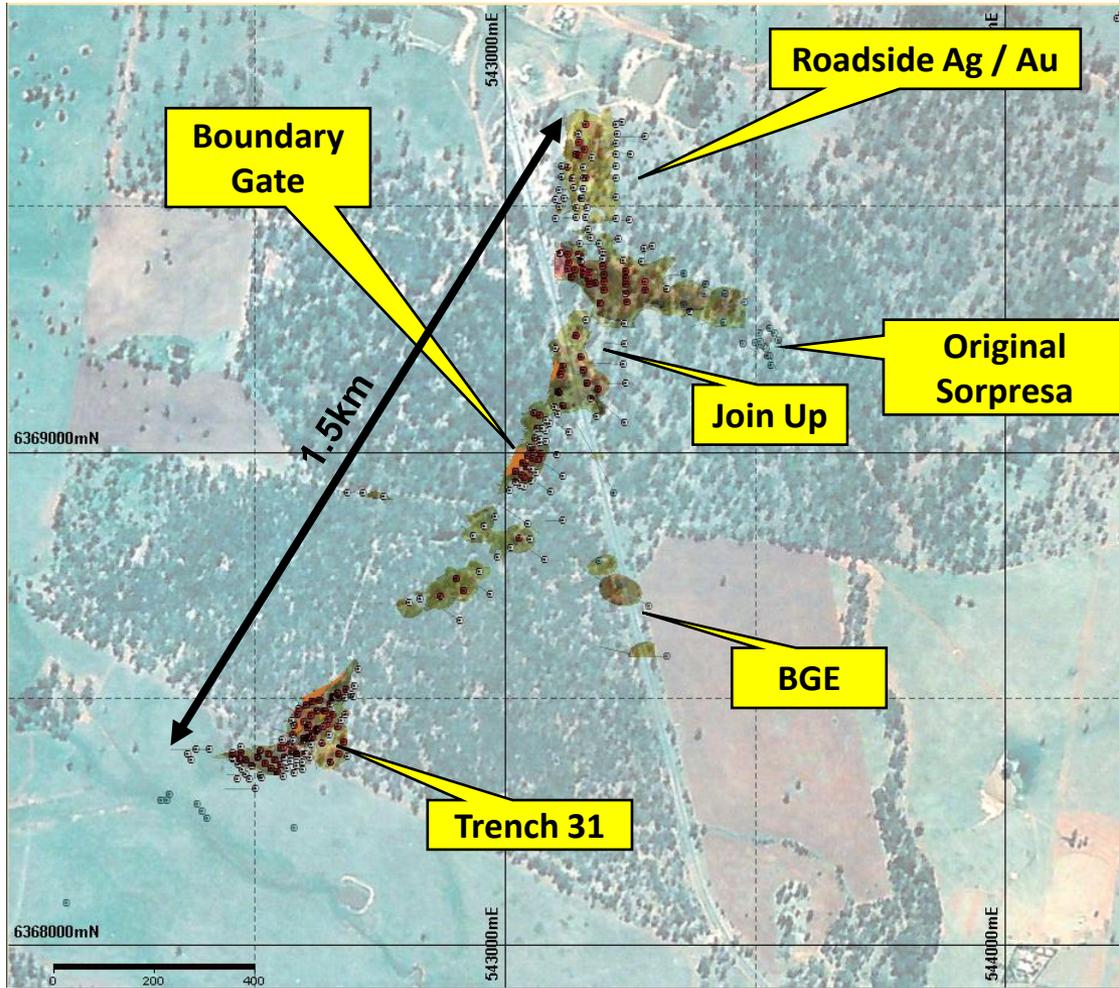
- ❑ Early exploration drilling utilized an in-house RAB / Percussion Drill Rig.
- ❑ Flexibility, inhouse auger rig and freehold workstation
- ❑ Ability to “Drill early, Drill often”
- ❑ Supplemented with Contractor RC and Diamond.
- ❑ ***Current 4,000m RC contractor program started 16 May 2014***



| | 2011 -13 | | 2014 YTD | |
|------------------------------|----------|--------|----------|--------|
| Drilling Statistics Regional | Holes | Metres | Holes | Metres |
| Auger Drilling | 1,490 | 4,369 | 1,045 | 3,139 |
| RAB | 244 | 4,542 | 69 | 2,485 |
| Other Percussion | 174 | 9,898 | | |
| Reverse Circulation | 158 | 16,113 | 8 | 829 |
| Diamond Drilling | 5 | 1,403 | | |
| Total | 2,071 | 36,324 | 1,123 | 6,454 |



Sorpresa Today - still growing



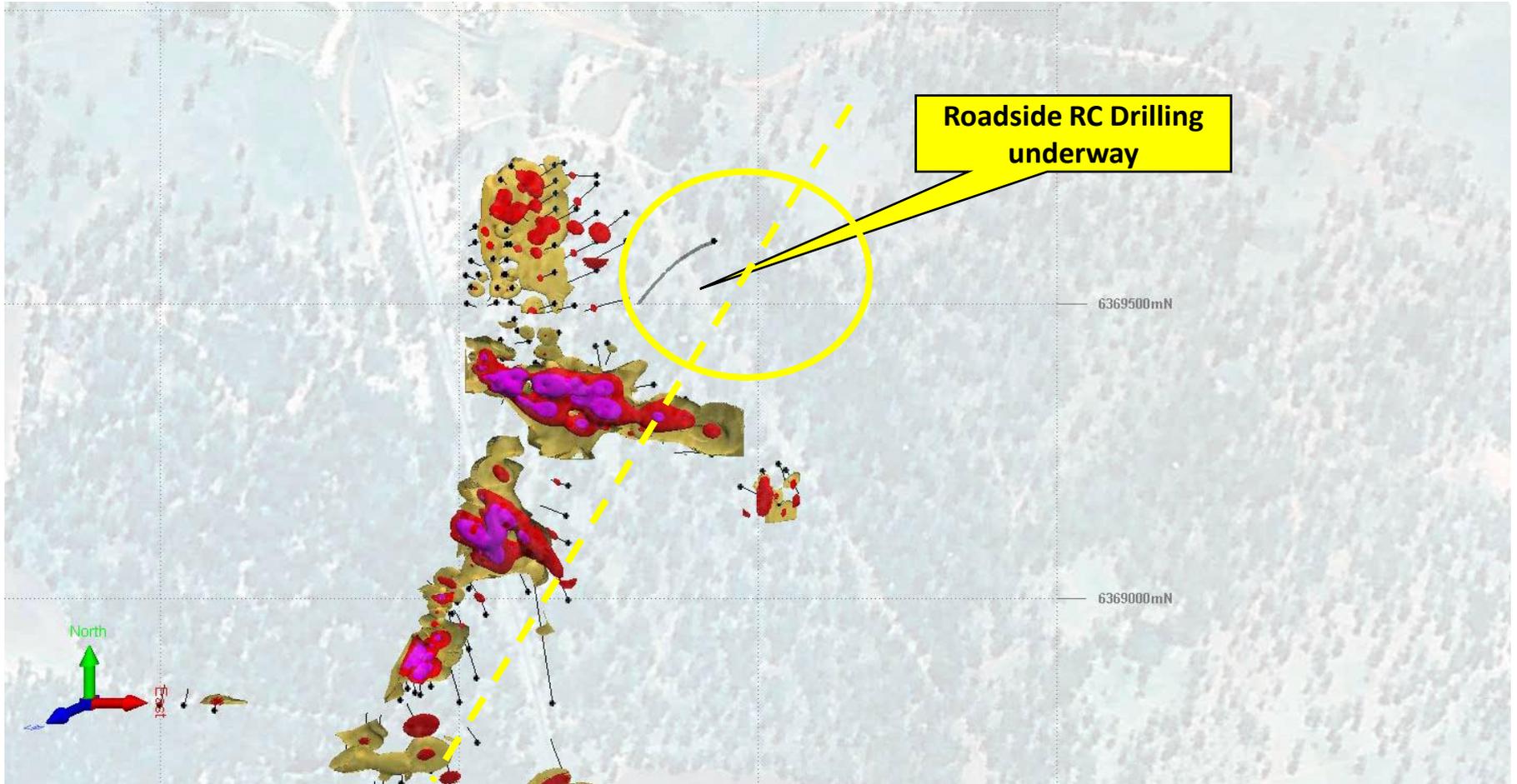
3D Exploration Model Au > 0.2g/t

- ❑ RC Drilling is targeting extensions down dip, and down plunge
- ❑ Looking to define the controls on high grades
- ❑ Exciting Targets – Discovery Growth



3D Exploration Model

(Gold Only Shown)

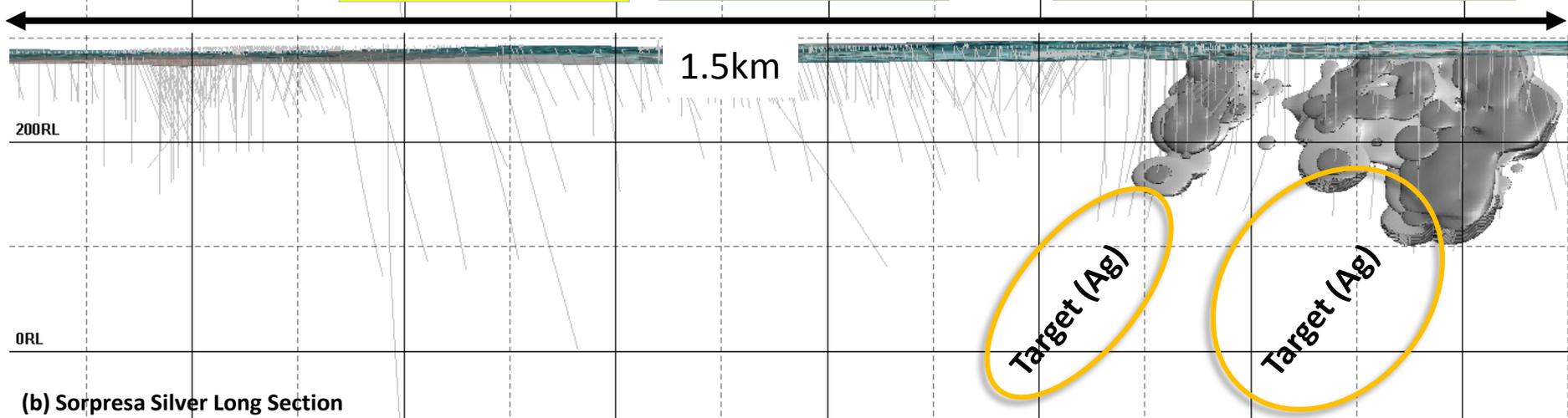
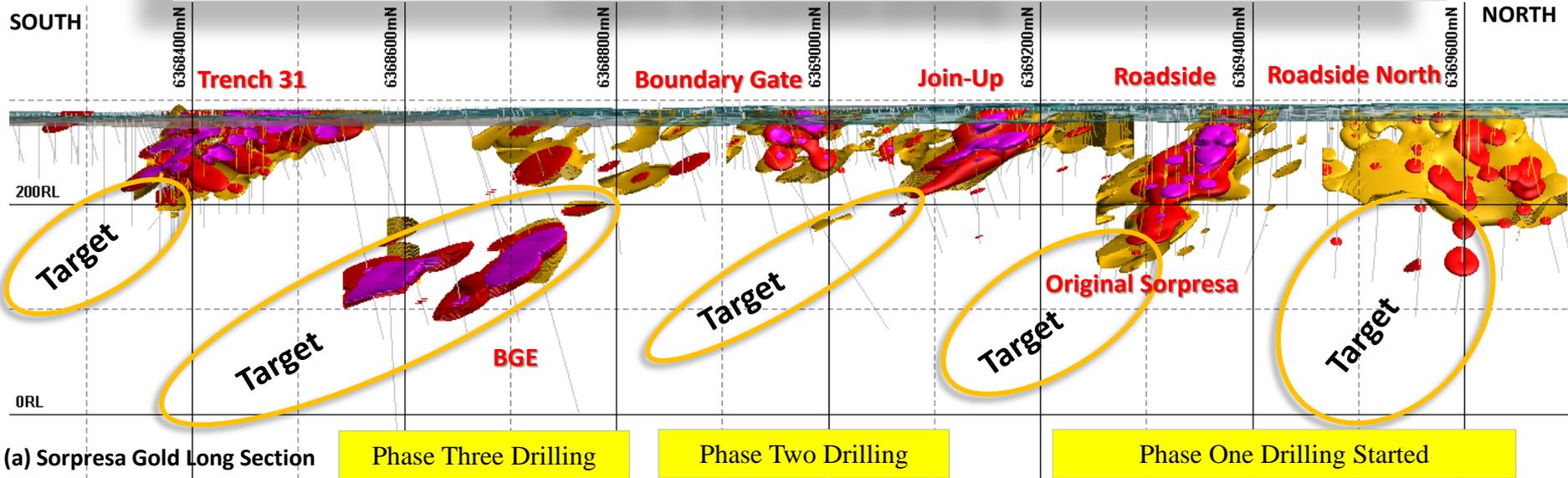


Sorpresa Implicit Model illustrating higher grade Gold mineralisation (Implicit Model is an interpretive exploration model imaging (a) Gold: yellow >0.2g/t Au, red >0.5g/t Au, purple >2g/t Au) – 500m grid lines



Sorpresa – Long Section Looking West

Targets for Current Drilling

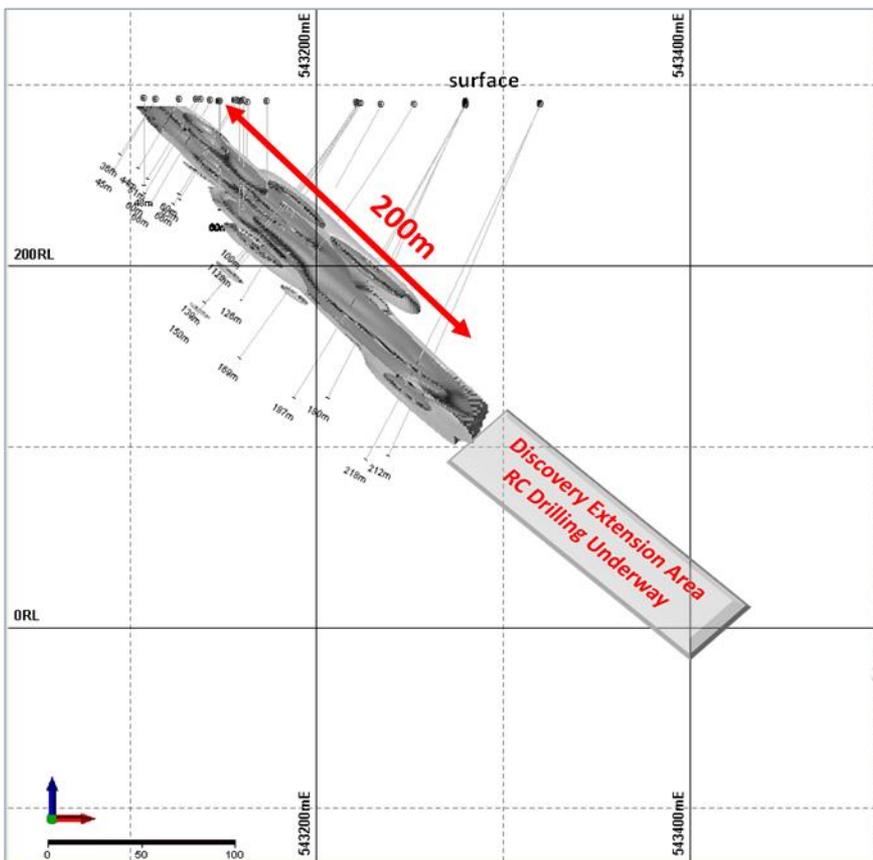


Sorpresa Implicit Model Long Section looking west illustrating higher grade (a) Gold and (b) Silver mineralisation and new down dip and down plunge extensional targets ready for RC and Diamond tail drilling. (Implicit Model is an interpretive exploration model imaging (a) Gold: yellow >0.2g/t Au, red >0.5g/t Au, purple >2g/t Au, (b) Silver: Light Grey > 31g/t Au, Dark grey > 62g/t Ag).

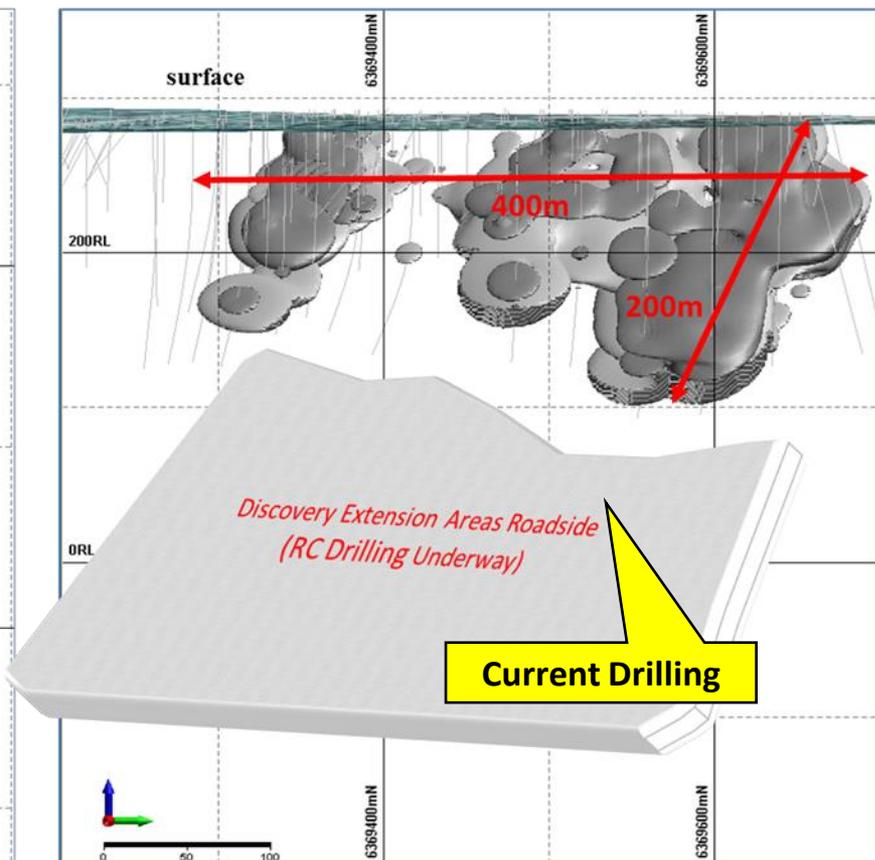


Sorpresa – Roadside Current Drilling

(a) Cross Section Looking North



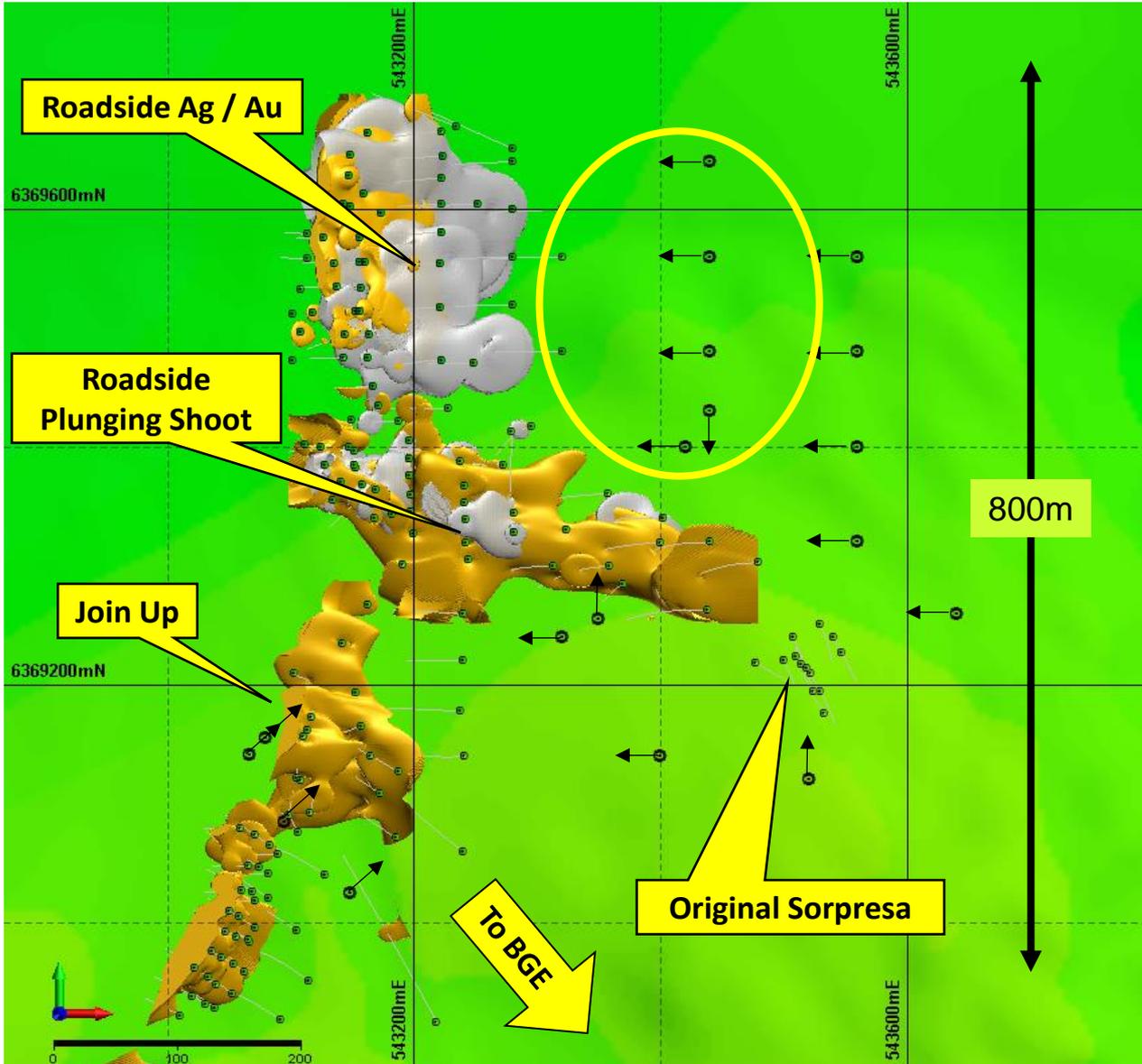
(b) Long Section Looking West



Roadside Area - Sorpresa Implicit Model illustrating higher grade Silver mineralisation and new down dip and down plunge extensional targets ready for RC and Diamond tail drilling. (Implicit Model is an interpretive exploration model imaging Silver: Light Grey > 31g/t Au, Dark grey > 62g/t Ag). Gold is not shown in this model.



Sorpresa - 4,000m Drilling Commenced



- RC Drilling commenced
 - Roadside, then
 - Join-Up
 - Original Sorpresa
 - BGE

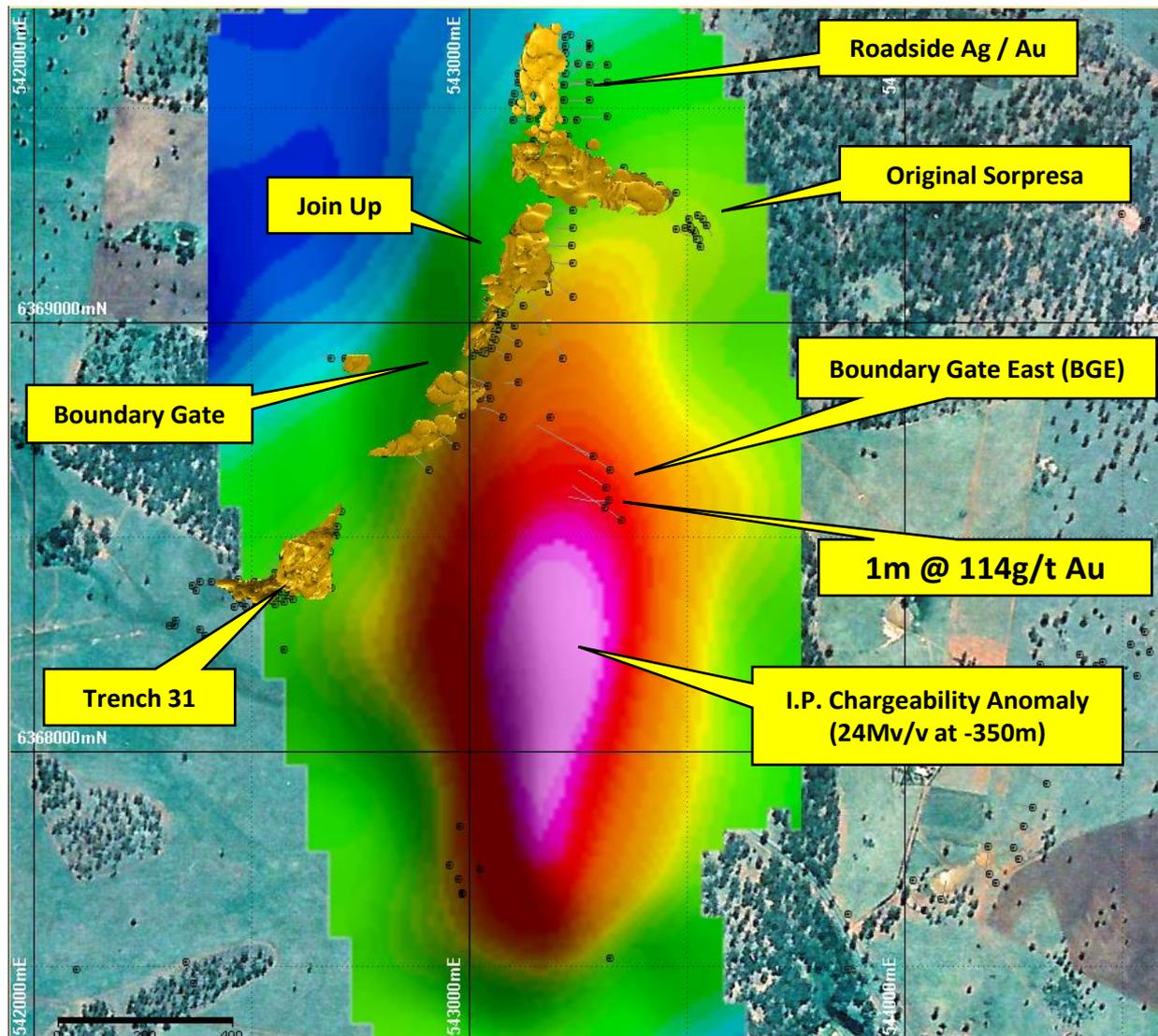
Drilling is targeting extensions down dip, and down plunge

Looking to define the controls on high grades.

❖ Note holes may change according to needs



Sorpresa - IP Chargeability Anomaly



- Important Geophysics Association
- IP and Gravity
- BGE Special Case
 - High grades 4/6 holes
 - Contact position?
 - Visible Au in RC



Implicit Model is an interpretive exploration model imaging Au > 0.2g/t



Sorpresa - Current Drilling Objectives

- ❑ *Roadside North*
 - ❑ Understand and extend the down dip and down plunge position

- ❑ *Roadside*
 - ❑ Re-engage with the plunging gold shoot

- ❑ *Original Sorpresa*
 - ❑ Determine the mineralization source feeding surface expression

- ❑ *Join-up*
 - ❑ Resolve the high grade gold plunge position & its relevance to BGE

- ❑ *BGE*
 - ❑ Expand the high grade gold position

- ✓ *The program has the potential for a large impact*





Sorpresa – Preliminary Oxide Metallurgy

❑ 3 composite Oxide Zone Samples across Sorpresa

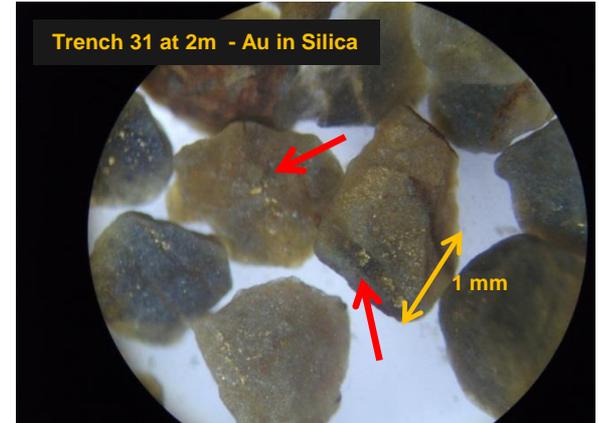
- ❑ 3 locations, 130m of mineralization, 30 drill holes
- ❑ Standard 24 hr CIL test at 75 micron

❑ Additional Test on Met1 - Silver Roadside*

- ❑ 48 hour CIL, finer grind, improved recoveries
- ❑ Improved recoveries to 89.1% for gold and 72.3% for silver

❑ No problems with clays or carbon/graphite

✓ Very Good Metallurgical recoveries

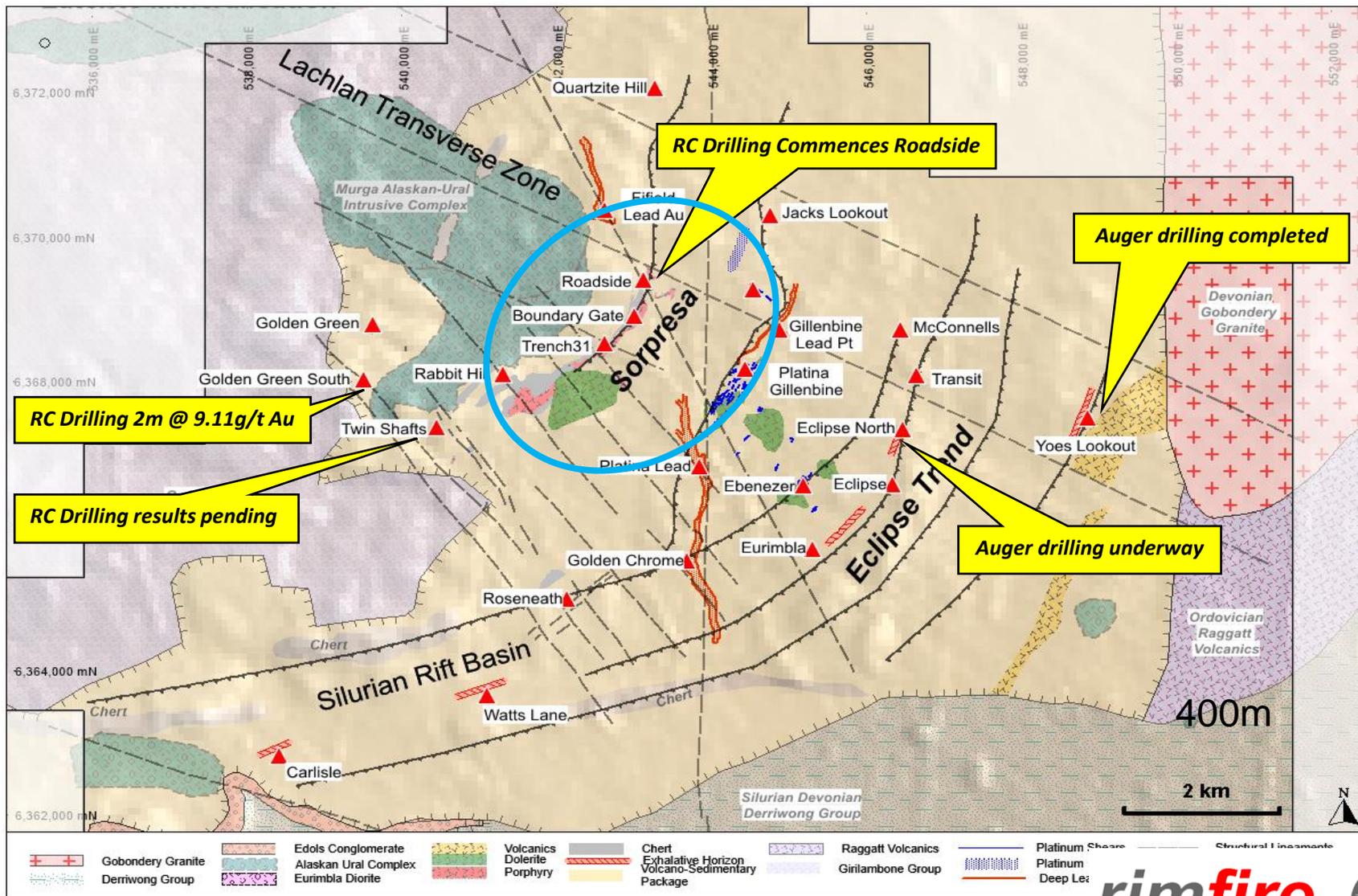


Sorpresa is “native gold”

| Sample ID and Location | Number of 2m interval samples used for composite sample | Head Assays, g/t | | Recovery % (Standard CIL) | |
|------------------------|---|------------------|-----|---------------------------|------|
| | | Au | Ag | Au | Ag |
| Met1 – Roadside * | 24 | 1.22 | 73 | 84.3 | 68.9 |
| Met2 – Trench 31 | 21 | 2.82 | 7.3 | 96.8 | 72.6 |
| Met3 – Trench 31 SW | 20 | 2.54 | 7.9 | 94.5 | 78.5 |

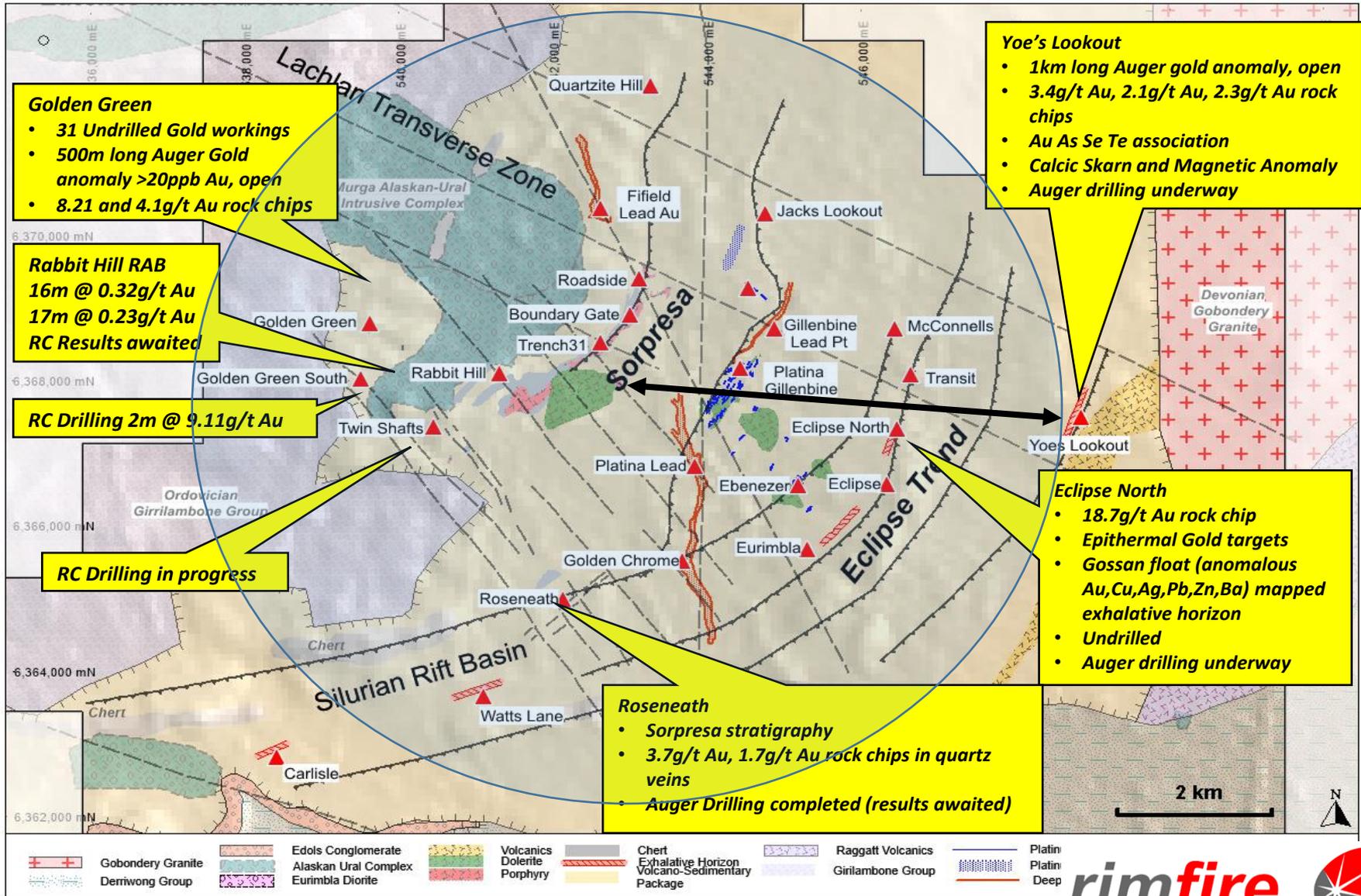


Regional Concept & Prospect Map





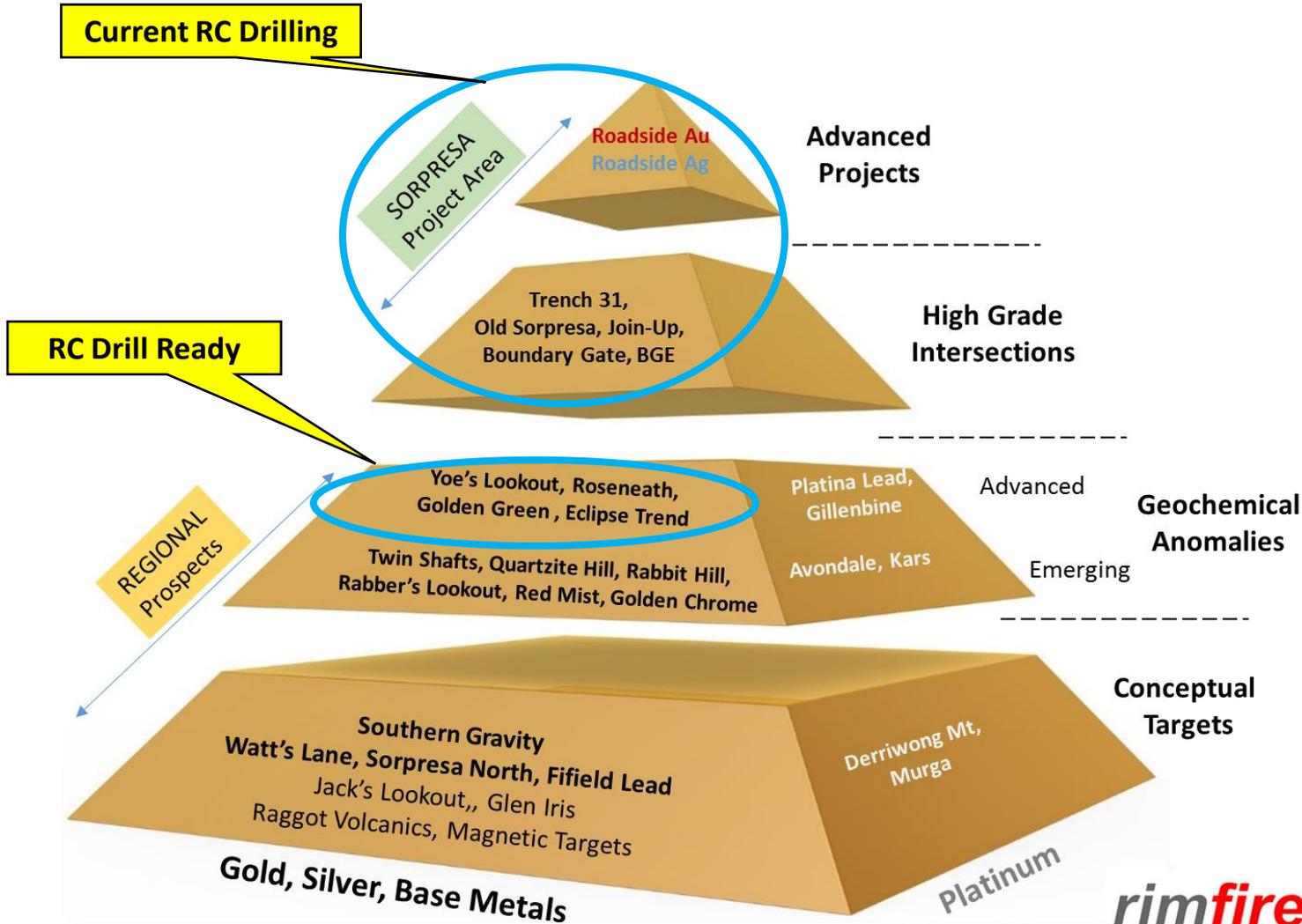
Regional - Within 6km Radius of Sorpresa





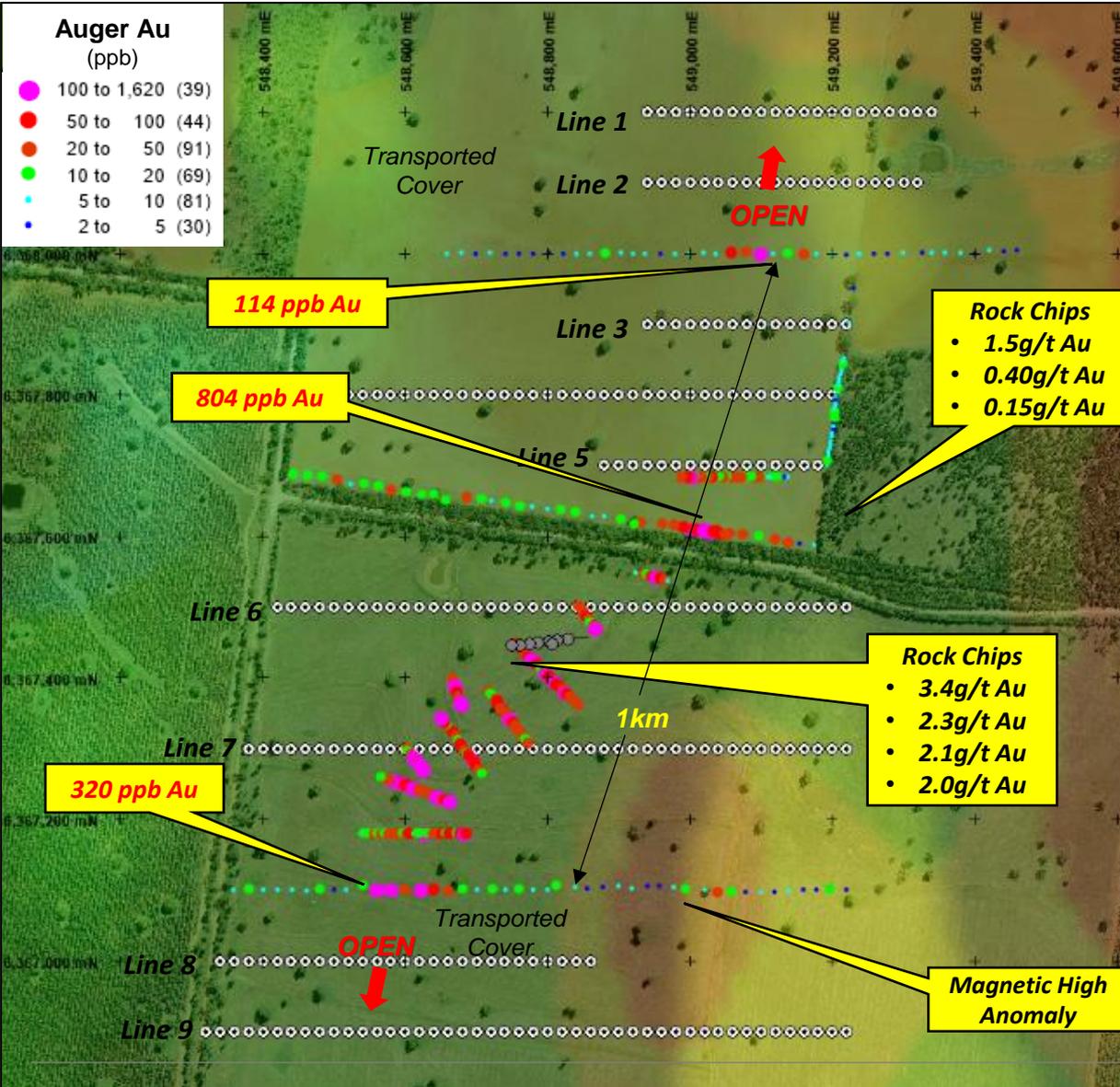
Prospect Pyramid

within 6km radius of Sorpresa



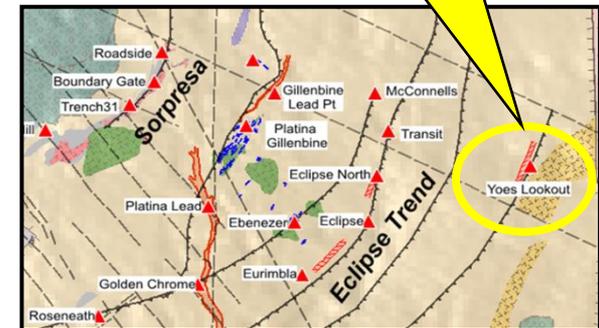


Regional – Yoe’s Lookout



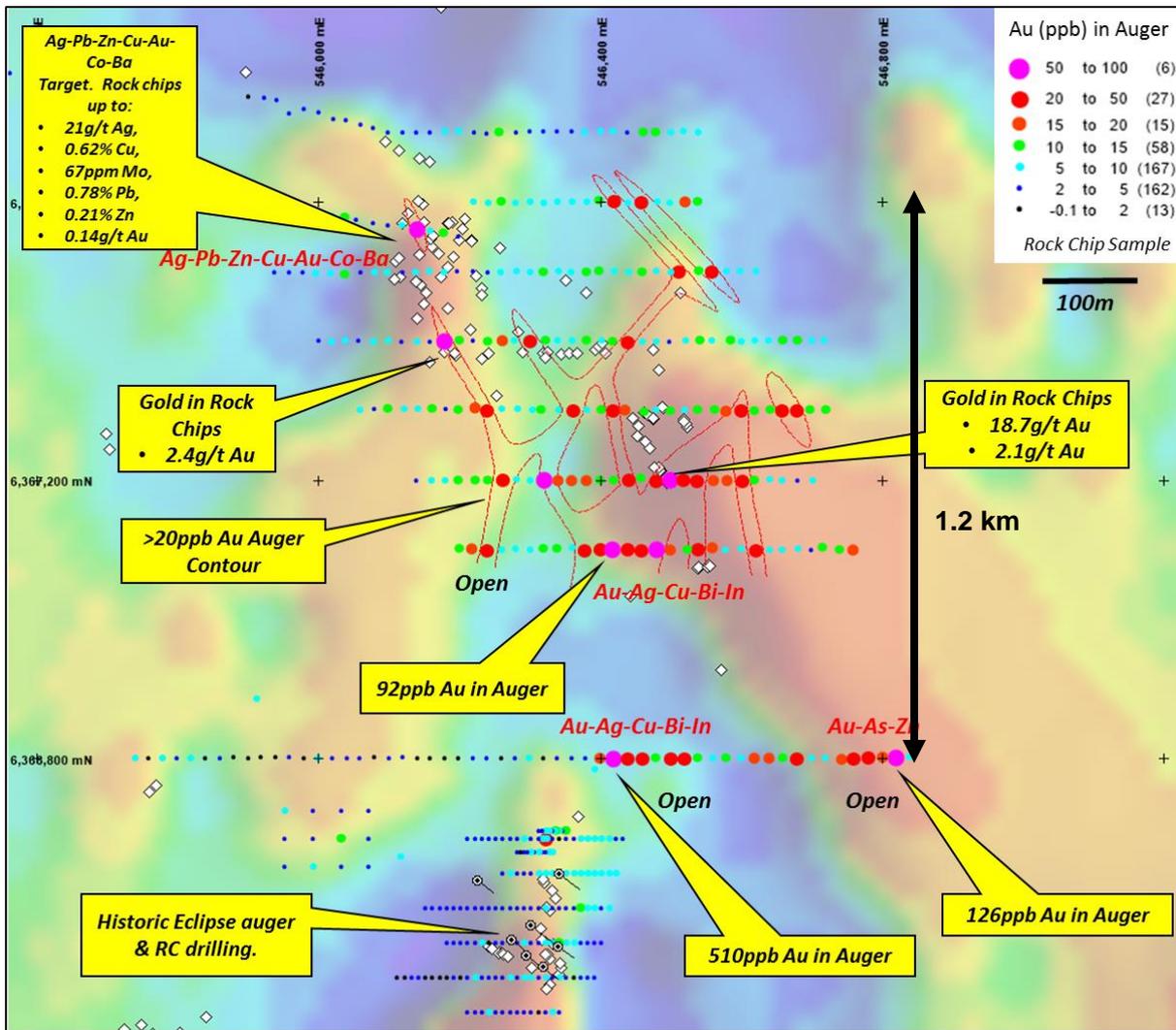
- ❑ >1 km strike auger anomaly @ 20 ppb Au to 1g/t Au, open
- ❑ Rock Chips 3.4g/t, 2.3g/t Au
- ❑ 2 Targets defined
 - Greenstone and BIF Hosted Structurally controlled Orogenic Au
 - Plus Au-Cu Calcic Skarn (Porphyry?)
- ❑ Significant Target!
 - Scale, grade, setting
- ❑ Auger lines now completed

**Yoe's Lookout
6km East**

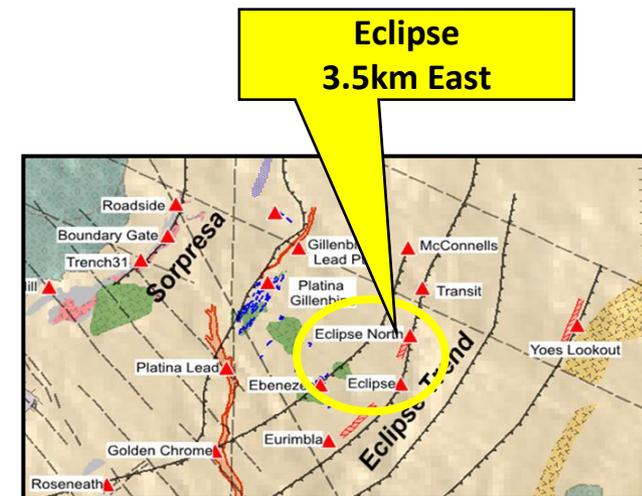




Regional - Eclipse



- ❑ > 1km open auger anomaly Au & polymetallic, @ 20ppb Au up to 0.51g/t Au
- ❑ Rock Chips 18.7g/t, 2.4g/t Au, 21g/t Ag, 0.62% Cu
- ❑ Significant Prospect
 - scale, zonation, grade, polymetallic, deposit type
- ❑ More Auger, then RC Drill ready



Eclipse North Au – Ag – Base Metal (Cu-Pb-Zn) prospect, illustrating Gold (ppb) in auger drilling, >20ppb Au auger contour & significant Gold rock chip results annotated on RTP 1VD aeromagnetic image.



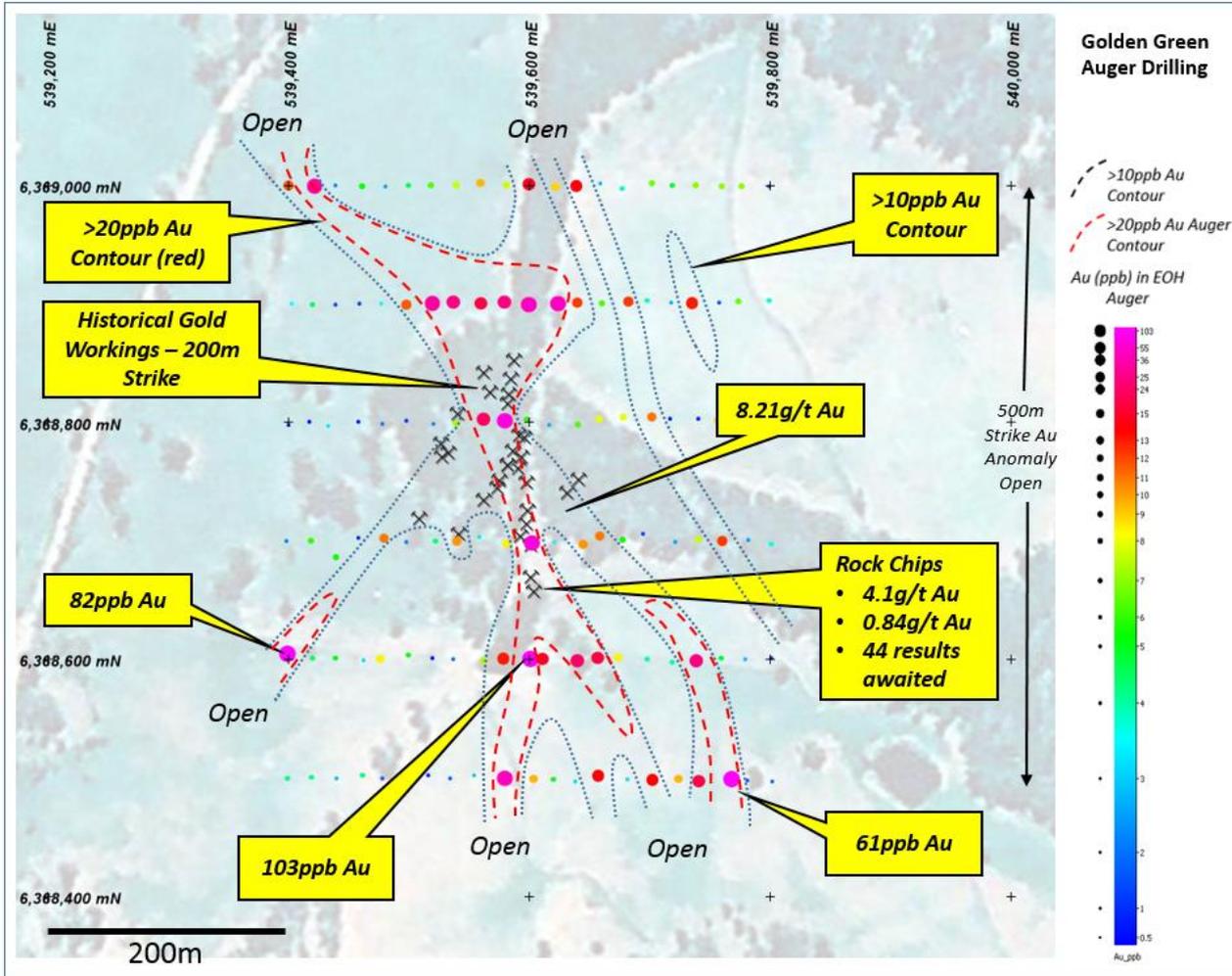
Eclipse North



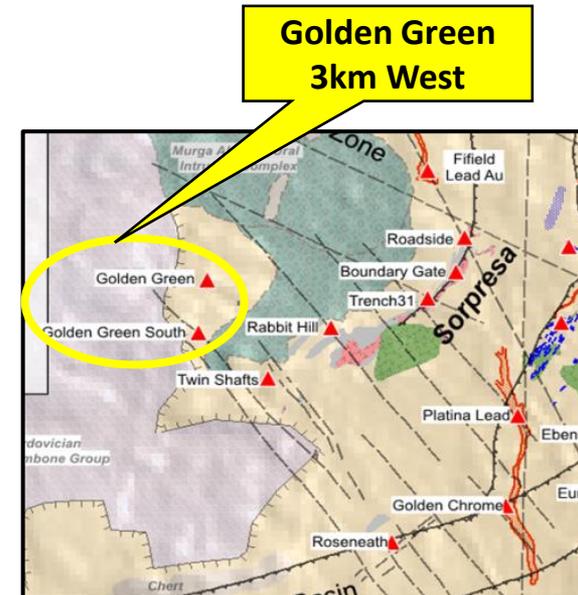
- ❑ Low Sulphidation Epithermal Gold and Base Metal system defined within a quartz – feldspar porphyry sub-volcanic intrusive centre
- ❑ At least three target styles within this zoned system
 - ❑ (1) Au-Cu-Bi-Ag rich banded epithermal veins & breccia's
 - ❑ (2) Au-As-Zn rich banded epithermal veins & breccia's
 - ❑ (3) Ag-Pb-Zn-Cu-Au-Co-Ba rich breccia & semi-massive sulphide – NW magnetic target



Regional - Golden Green Group



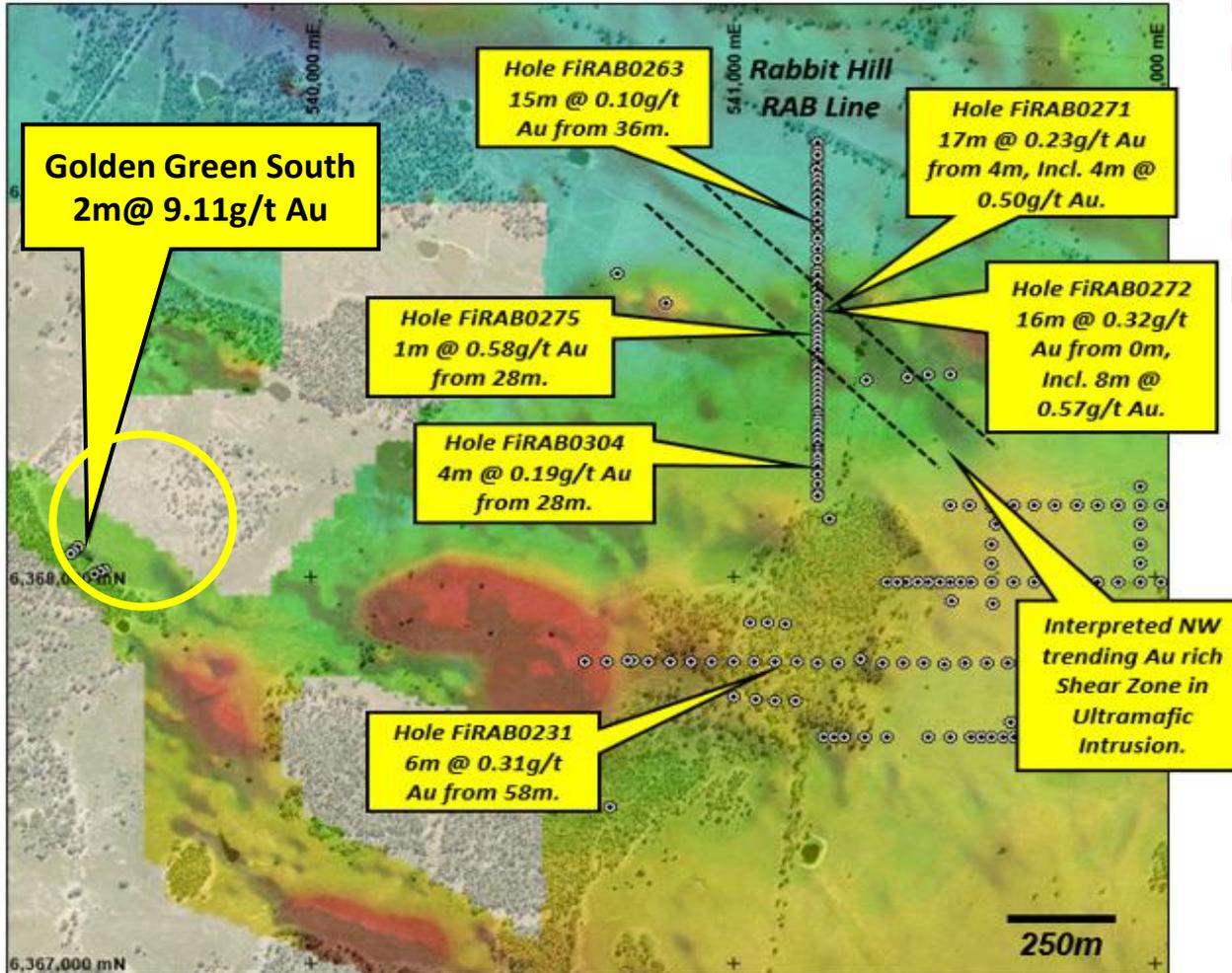
- 0.5km strike auger anomaly @ 20 ppb Au
- Old workings
- Rock Chips 8.21g/t, 4.1g/t Au
- Structurally controlled, sediment – Greenstone hosted Orogenic Gold target
- Drill Ready



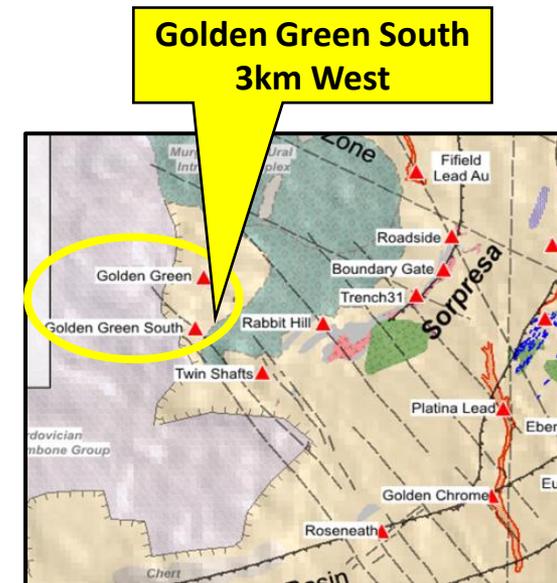
Golden Green Auger Drilling Gold results illustrating >10ppb Au and >20ppb Au contours



Regional - Golden Green South Area



- ❑ Old workings
- ❑ Sub-vertical, quartz & sulphide veined shear zone
- ❑ 2m @ 9.11g/t Au – RC Hole
- ❑ Further Context Au in RAB line
- ❑ Bigger System in ultramafic host?





Regional Comparison

| Location | Rock Chip g/t Au | Typical Soil ppb Au | Typical Auger ppb Au | Anomaly Length | RC Drill Au g/t | Open | Other | Workings |
|-----------------------|---------------------|---------------------------|----------------------------|-------------------|--------------------|------|---------------------|----------|
| Sorpresa | 8.8 | 10~50 | 20~1,000 | 1.5km | 14 @ 24.4 | yes | IP/Gravity | Minor |
| Yoe's Lookout | 3.4 | 10~300 | 20~1,000 | 1.0km | N/A | yes | Magnetic Feature | No |
| Eclipse | 18.7 | N/A | 20~500 | 1.2km | 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 |
| | | | | | | | | |

Strong portfolio of regional prospects to work in parallel with Sorpresa



Regional Activity Direction

- Emerging Prospect portfolio of 25 variably defined Regional targets***
- Mixture of grassroots and walk-up drill targets multiple deposit styles
- Soil Sampling
- Auger Drilling
- Geological Reconnaissance & Rock Chip Sampling
- Modelling Gravity and IP targets***
- RC Drilling on tuned prospects
- Additional IP survey
- Airborne Magnetics (Yoe's Eclipse, Carlisle)***
- Wildcat RC Holes***





Why invest in Rimfire ...

- ❑ Fifiel District – The Right Address for Discoveries LTZ
 - ❑ Structure, Geology
 - ❑ Mineral Style Diversity (Gold, Silver, Platinum and Base Metal)
 - ❑ Large Scale of Mineralization Footprint around Sorpresa (6km radius)
 - ❑ Multimillion Ounce gold equivalent potential
- ❑ Totally Under Explored and Underestimated– High Grades at Grass Root
 - ❑ Rimfire has redefined the Fifiel District
 - ❑ Systematic and staged approach on multiple fronts
- ❑ Game Changers Abound – Current and future Drill programs
 - ❑ Potential for discovery growth extension of Sorpresa
 - ❑ Regional Prospect Pipeline growth in Gold and Base Metal, “high order anomalies”
 - ❑ Repeat structures similar to Sorpresa?
 - ❑ Platina Lead Bulk Sampling potential cash target?
 - ❑ JV opportunities?



Why invest in Rimfire...

- ❑ Ongoing programs at Sorpresa – “discovery growth” towards a resource
- ❑ A track record of High Grade intersections, keeps us on the radar
- ❑ Favourable Geological Model Direction, Carbonate Base Metal Epithermal Au
- ❑ Knowledge gained on the Platinum system – via Sorpresa work
- ❑ Countercyclical Strategy – Do more work in tough times – Stand out
 - ❑ Excellent team assembled at Fifield
 - ❑ Respectable financial position

“Quality assets well managed with high growth potential”



Thank You





Appendix

Sorpresa – Fifield Gold-Silver Characterization

- ❑ Sorpresa sits above an exceptional fault system that has channelled Gold-silver and platinum associated intrusives from great depth to near surface
- ❑ Mineralisation at Sorpresa consists of Au, Ag, As, Zn, Pb, and Copper
- ❑ Expressed as carbonate-sulphide-gold veinlets and crackle breccia infill
- ❑ Native Gold is present as small grains ~2-50 micron
- ❑ The underlying structural setting is mantle tapping and at the intersection of two crustal scale structures. ***This is a proven address for large ore bodies in the East Lachlan Fold Belt.***

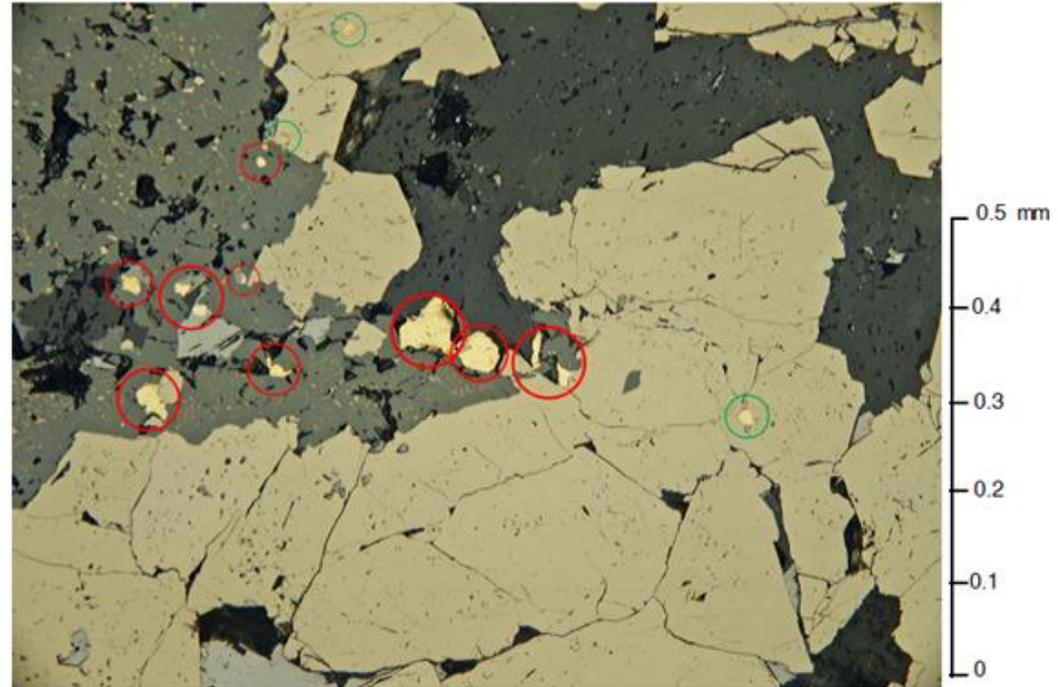


FIG. 2: SAMPLE F1328, 90.3-90.4m (Reflected plane polarised light, Obj. x20, Image P5055019)
Native gold (bright pale yellow) occurs as small circled grains hosted by sphalerite (medium grey clouded by tiny yellowish chalcopyrite inclusions; gold enclosed by red circles) and by pyrite (cream; gold enclosed by green circles). Most of the Au appears to be hosted by sphalerite or near sphalerite grain boundaries. Galena occurs as minor small angular grains (pale bluish grey) in sphalerite (centre left) and in pyrite (bottom, bottom left, bottom right). Carbonate forms dark grey non-opaque gangue (upper right).