# Competitive Paris silver project & innovative copper-gold exploration in South Australia

Presentation by: John Anderson (Managing Director) Diggers and Dealers Mining Forum Kalgoorlie 8<sup>th</sup> August 2017







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#### COMPETENT PERSONS STATEMENT

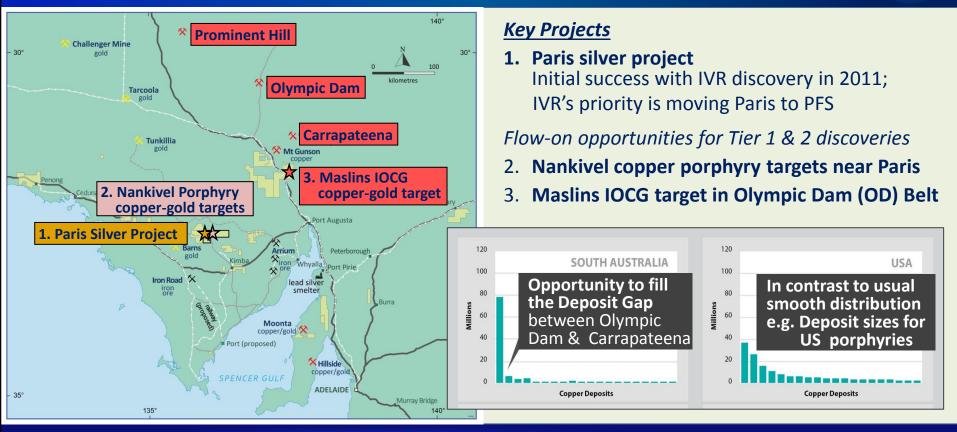
The information in this presentation relating to exploration results is based on information compiled by Mr. John Anderson who is a full time employee of the company. Mr. Anderson is a member of the Australasian Institute of Mining and Metallurgy. Mr. Anderson has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Anderson consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

The information in this presentation that relates to Mineral Resources Estimates at the Paris Silver Project is extracted from the report entitled "Significant 26% upgrade for Paris Silver Resource to 42Moz contained silver" dated 19 April 2017 and is available to view on the Company website <u>www.investres.com.au</u>. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.



# STRATEGY: Focus on greenfields extensions to pedigree Olympic Dam Belt





# STRATEGY: Junior explorer driven by new research & geological concepts





IVR is **innovative** in identifying & collaborating on research developments to create **first-mover** opportunities and **competitive advantage** in the data-rich & strong research environment of South Australia.

IVR participates in multiple university & Geological Survey research projects & national Uncover Initiative.

#### Breakthrough applications in SA

A. Multi-element pathfinder geochem



- B. Micro-dating mineral systems
- C. Magneto-Telluric (MT) geophysical remapping of Olympic Dam metallogenic corridor

#### Key disruptive concept

That the Olympic Dam IOCG belt & emerging Paris-Nankivel epithermal/porphyry province are connected & the fluorine-rich deposits formed at the same time in an Olympic Dam Mega-event.

IVR has taken a strong ground position to pursue this concept & opportunity

# IVR CORPORATE OVERVIEW: Well Positioned with a strong silver asset & significant copper-gold exploration upside



Capital Structure as at 28 <sup>th</sup> July 2017				
ASX listed since 2007	IVR			
Shares (ordinary)	584.4M			
Options (Unlisted)	11.0M			
Share Price (31 July 2017)	3.2c			
Market Cap (A\$m)	\$18.7M			
Cash (30 June 2017)	\$2.8M			

Share Register as at 28 <sup>th</sup> July 2017				
CITIC Australia	11.5%			
Old Mutual Global Investors	5.5%			
Board & Management	2.5%			
Тор 20	36.7%			
Total shareholders	3,369			

#### *IVR* – *Share price performance last 12 months*



Board Me	embers			
Dr David Ransom		Non-executive Chairman		
John Anderson		Managing Director		
Bruce Foy	/	Non-executive Director		
David Jones		Non-executive Director		
	<u>Active</u>	News flow		
July 16	- Raisec	- Raised \$5.4M @ 4.7c per share		
2H 2016	- Paris s	Paris silver infill drilling		
	- Nankiv	- Nankivel Cu porphyry drilling & II		
	- Refine	efined Maslins IOCG target		
Jan 17	- High-g	High-grade Paris intersections		
	- Dr Rar	nsom joined Board		
April 17		Paris silver resource upgraded & moving to PFS		
May on	- \$1M I	R&D/drilling rebates		
	- Nankiv	vel drilling upgrades targe		

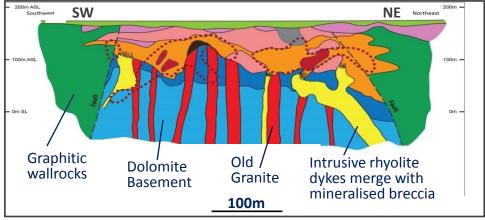
# PARIS SILVER DEPOSIT: A new deposit style for South Australia Intermediate-sulphidation (IS) epithermal in subvolcanic polymict breccia





Discovered in 2011 with soil geochemistry

Summary geological section



Main silver mineralisation zones

Standard silver sulphide plus native silver in pyrite (fully oxidised to 10m - 40m depth).

Main host is polymict breccia (*orange*) at the base of volcanics (*pink*).

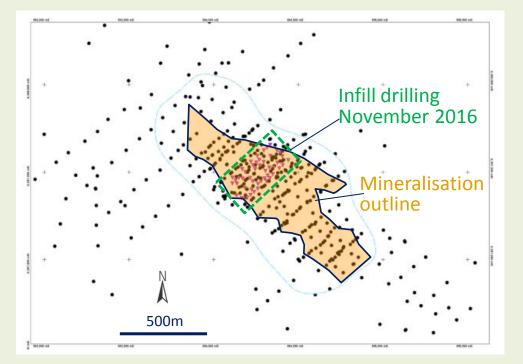
Breccia consists of fragments of all surrounding rocks including very high-grade silver zones of large sulphide clasts (*dark red*).

Pervasive clay alteration with some manganese carbonate alteration produces friable crumbly core.



Silver-mineralised polymict breccia





Drilling largely with RCP holes but also with control core holes raised confidence in the high-grade silver component & sample quality of the shallow clay rich breccias (upper photo) and corroded carbonate in the deposit (lower photo).

#### See Appendix 1

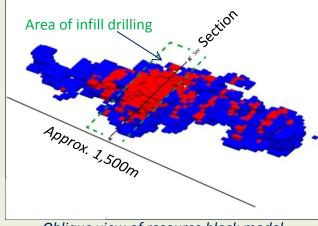




# PARIS MINERAL RESOURCE ESTIMATE: Upgraded April 2017



Category	Tonnage	Silver Grade	Contained silver	Lead Grade	Contained lead
	(Mt)	(g/t)	(Moz)	(%)	(kt)
Indicated	4.3	163	23	0.6	26
Inferred	5.0	119	19	0.6	29
Total	9.3	139	42	0.6	55



Oblique view of resource block model

Density: Indicated - 2.20t/m<sup>3</sup>, Inferred - 2.22t/m<sup>3</sup> and Average - 2.21t/m<sup>3</sup>.

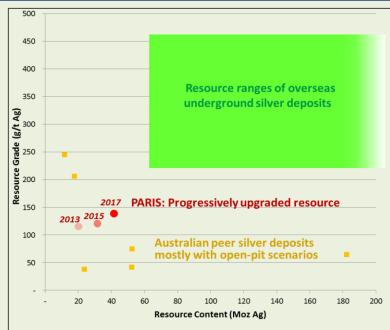
#### 2016 infill drilling produced:-

- Greater confidence in high-grade zones
- 26% increase in contained silver ounces over prior 2015 resource at same 50g/t Ag cut-off grade
- 55% of ounces converted to Indicated (red)

Anticipate Inferred component (blue) will also readily convert with possible higher grade on further drilling

# IVR considers Paris to one of the best advanced silver projects in the country due to its high-grade for an open-pittable scenario





 \* Graphical comparison of the Paris Silver Project resource grade and contained ounces with other silver deposits (as at April 2017 - No credits are added for other metals in multielement deposits)

Grade is much higher than those of other likely open-pittable projects.\*

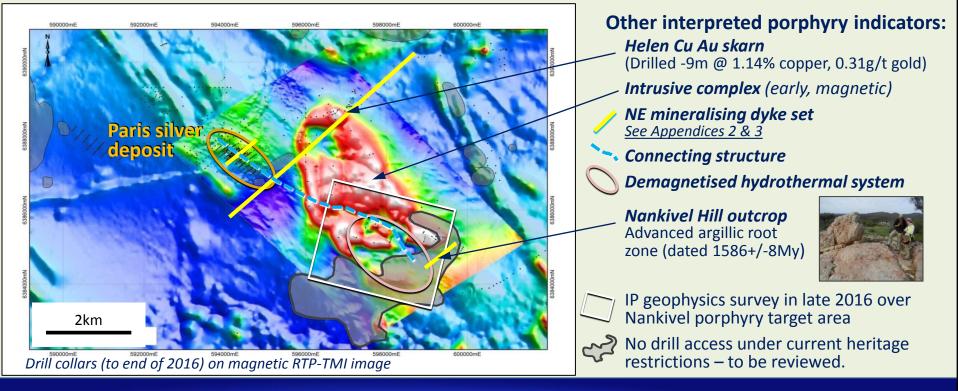
Preliminary metallurgical testing (2013) showed good leach recoveries of 65 – 97% with optimisation & flotation options. Advanced metallurgical study underway Hydrological study underway with test holes drilled in potential groundwater sources and in the resource footprint. Paris is well-positioned for a return of the silver price to relativity with gold.



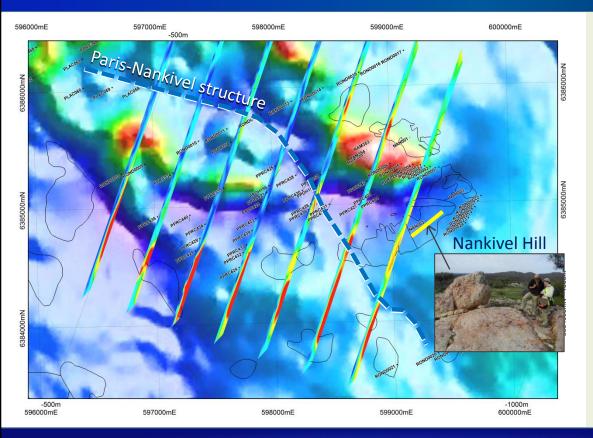
# PARIS-NANKIVEL FIELD: Potential for further & larger porphyry deposits



# The Paris style of IS epithermal deposit often goes hand-in-hand with porphyry copper systems



# NANKIVEL PORPHYRY COPPER TARGET: IP Geophysical anomaly



Large 2km by 500m chargeability anomaly (red zones on IP sections spaced at 400m intervals).

Adjacent to the outcrop on Nankivel Hill (Dyke on same orientation as the Paris mineralising dyke).

About 150m depth to top of IP target.

The combination of an IP anomaly with an advanced argillic cap is a desirable combination for porphyry targeting.

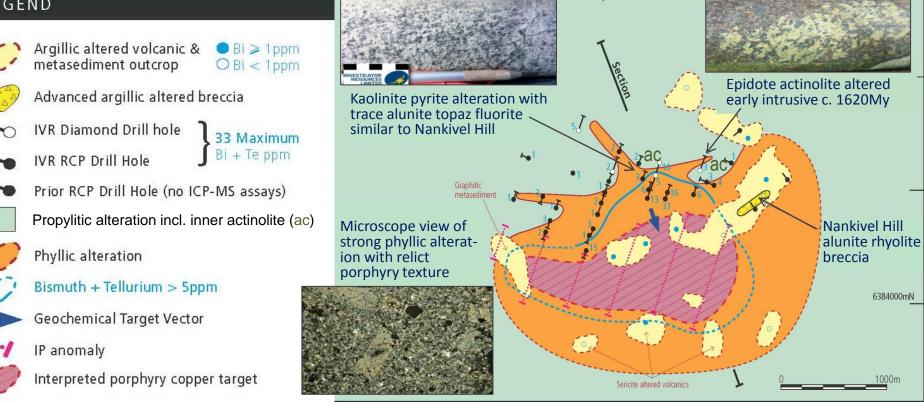
*Oblique overhead view of the Induced Polarisation (IP) chargeability profiles over the TMI:RPT magnetic image.* 

1,000m

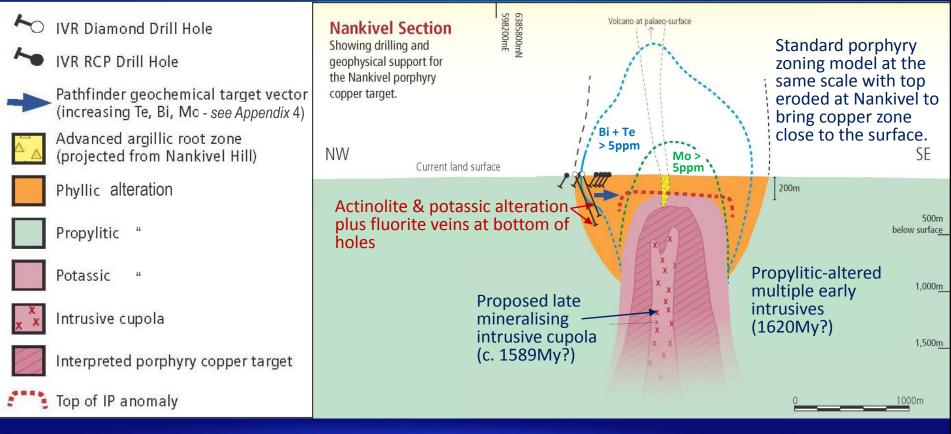
NANKIVEL PORPHYRY TARGET: Multiple supporting vectors A second new style for South Australia



### LEGEND



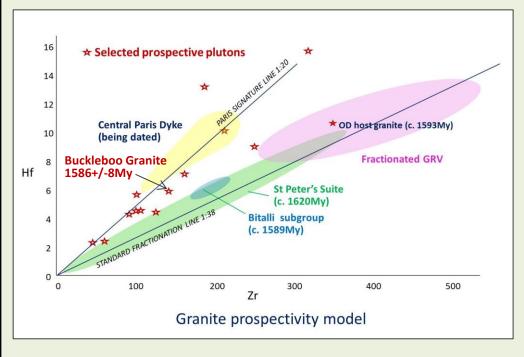
# NANKIVEL CROSS SECTION: Fits standard porphyry model Bi Mo potassic alteration increasing in strong phyllic root towards IP anomaly



# Targeting more Paris-Nankivel style mineral centres with pathfinder geochem



Prospective areas with potential for more Paris-Nankivel style epithermal/porphyry systems are identified by granites with pathfinder geochemistry signatures similar to the Central Paris Dyke & parent Buckleboo Granite.





#### PARIS SILVER PROJECT:

Advanced metallurgical testing & hydrological study towards PFS late 2017

#### NANKIVEL PORPHYRY COPPER TARGET:

Review heritage boundaries & recommence drilling by end September quarter; IP survey adjacent porphyry target areas

#### **MASLINS IOCG TARGET:**

Heritage survey; Drilling late 2017

#### **REGIONAL GRANITES:**

Ground assessment of porphyry potential

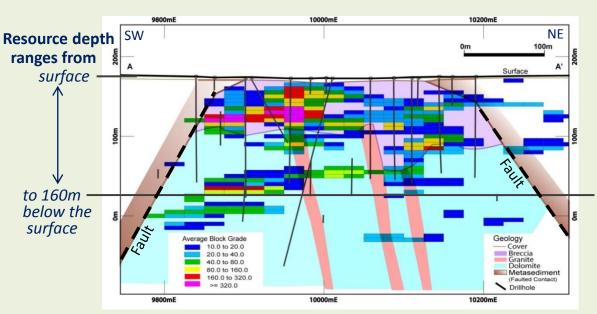
## Investigator is a Junior Explorer with Tier 1 Potential

The foundation Paris silver discovery/project is on a pathway to development. Two well-conceived copper-gold targets have potential to be major discoveries. We welcome your interest in IVR.

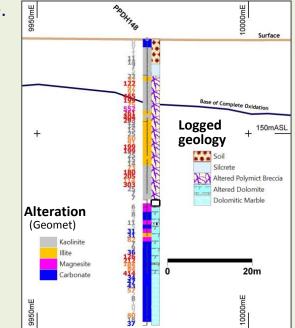
# Appendix 1: PARIS RESOURCE CROSS SECTION - Shallow, open-pittable



Silver mineralisation is flat-lying with high-grade blocks close to surface.

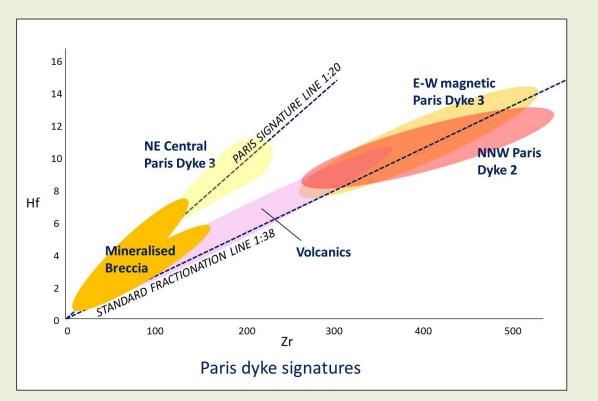


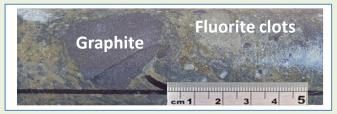
Section 51275mN looking north showing MIK resource blocks (average grade) overlaying the generalised resource geology. Blocks are 25m x 25m x 5m.



Example drill hole section with most of the mineralisation (shown as g/t silver) in the pyritic clay-altered breccia.

Appendix 2: MULTI-ELEMENT PATHFINDER GEOCHEMISTRY - Distinguishing the Paris dykes with targeting applications at field & regional scales





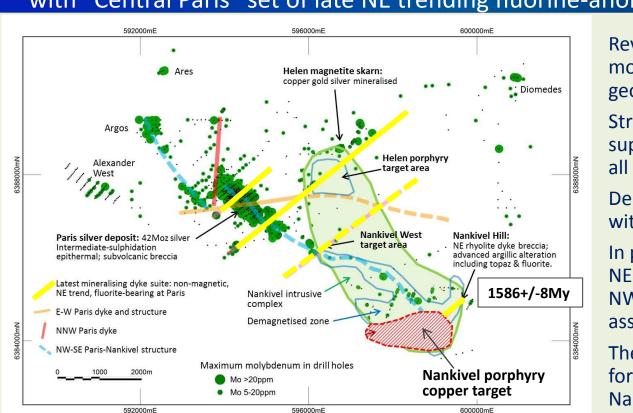
#### **Central Paris Dyke**

Is the likely mineraliser, as it is the latest dyke & is fluorite-bearing.

Plus the mineralised breccia shows a mix of dyke & volcanic input in the Hf:Zr chart.

The dyke is being dated by collaborative researchers.

# Appendix 3: PARIS-NANKIVEL MINERAL SYSTEM - Deposits are associated with "Central Paris" set of late NE trending fluorine-anomalous dykes



Revised Mineral system ("Field") model incorporating new dyke geochemical data.

Structural & dyke framework supported by molybdenum values in all drill holes across the field.

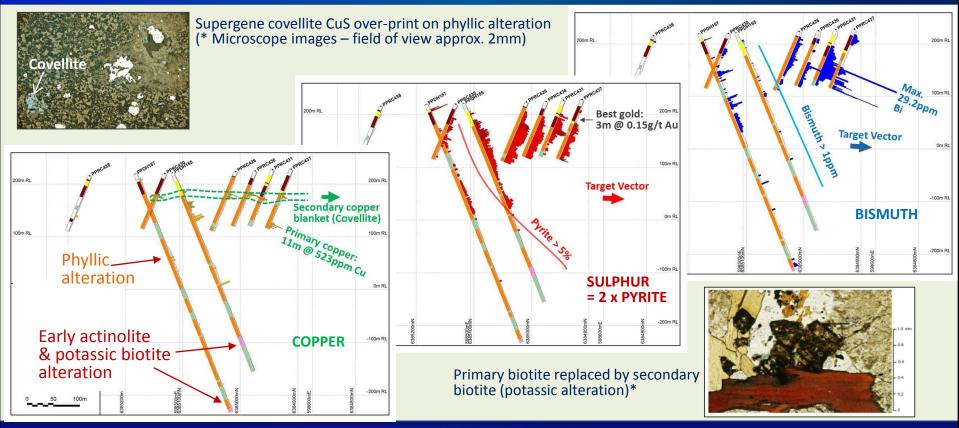
Deposits & prospects correspond with dyke/structure intersections.

In particular Paris and Nankivel lie at NE dyke intersections along the same NW-SE structure & have a similar association with fluorine minerals.

The Central Paris dyke is being dated for comparison with the new Nankivel date.

### Appendix 4: NANKIVEL SECTION - Pathfinder alteration & geochemistry *Provide porphyry vectors towards the IP target*





# Appendix 5: MASLINS IOCG TARGET - At the right place under new targeting concepts; And right size & depth under current mining economics

### A large gravity target with a modelled density of 3.2g/cc similar to Olympic Dam

Using adjacent past drill holes & regional micro-dating, the target is at the preferred geological level and vector direction. Size potential is between Olympic Dam and Carrapateena & at depths suitable for modern bulk underground mining.

