



19 April 2016

#### **Investigator Resources: SAREIC conference presentation**

Attached is presentation to be given by IVR Managing Director, John Anderson at the South Australian Resources and Energy Investment Conference tomorrow Wednesday, 20 April 2016.

Web: www.investres.com.au

#### For further information contact:

Mr John Anderson Managing Director Investigator Resources Limited

Phone: 08 7325 2222

# Building on the robust Paris silver project: New opportunities for silver, copper-gold and nickel discovery in South Australia

INVESTIGATOR RESOURCES LIMITED



**ASX: IVR** 

John Anderson – Managing Director

SAREIC 2016, Adelaide 20<sup>th</sup> April 2016

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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 "Upgraded Paris resource estimate: 60% increase to 33Moz silver" dated 9 November 2015 and is available to view on the Company website <a href="https://www.investres.com.au">www.investres.com.au</a>. 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.



## Exploration focus on the southern Gawler Craton of SA where geological resets are revitalising the discovery potential





TIVR tenements

Recent tenement applications (key tenements granted; others withdrawn)

#### COVER DEPOSITS (Remobilised Hiltaba metals?)



Lead, Zinc

Copper

#### HILTABA DEPOSITS







Gold

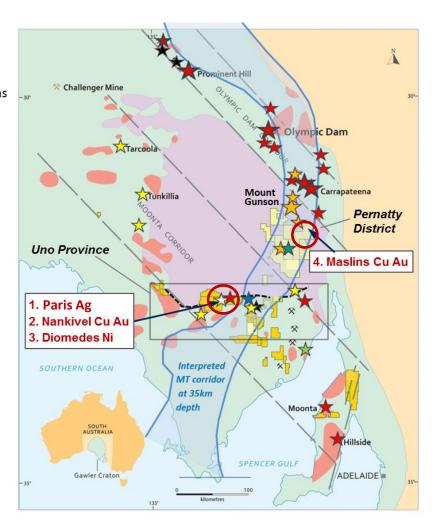


IOCG/skarn/lode Copper



Gawler Range Volcanics Hiltaba Granite

Basement



Four key projects in Uno **Province & new connection** with Olympic Dam IOCG belt:

- 1. Paris 33Moz silver project plus surrounding silver potential
- 2. Nankivel skarn/porphyry copper targets 5km from Paris
- 3. Diomedes nickel targets in ultramafic basement 7km from **Paris**
- 4. Maslins IOCG target in revitalised extension of OD belt

The new targets are mostly drill-ready & shallow; deeper Maslins drilling warranted by the "size of the prize".

9,000m proposed for drilling in 2H 2016 under PACF applications for government co-funding.

## Corporate Overview — well positioned for the next upturn



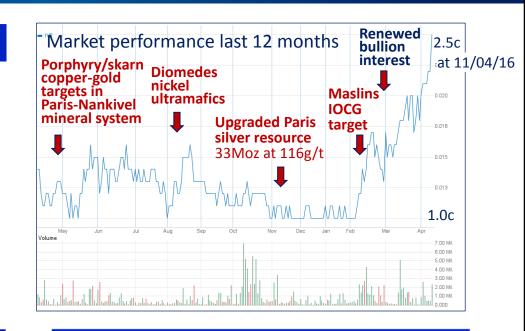
## **Capital Structure**

ASX listed since 2007	IVR
Shares (ordinary)	462.3M
Options (Listed)	114.2M
Options (unlisted)	19.9M
Share Price (11 April 2016)	<b>2.5</b> c
Options Price " " "	0.6c
Market Cap (A\$m)	\$11.6M
Cash (29 February 2016)	\$2.3M

## Share Register as at 11 April 2016

CITIC Australia	14.5%
<b>Board &amp; Management</b>	2.3%
Top 20	36.3%
Total shareholders	3,2749

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### **Board & Management**

Roger Marshall OBE	Chairman
Bruce Foy	Non Exec Director
David Jones	Non Exec Director
John Anderson	<b>Managing Director</b>
<b>Angelo Gaudio</b>	<b>CFO/Company Secretary</b>

# Investigator's Approach – focus on greenfields discoveries in the southern extensions of the world-class Gawler Craton



### Experience







# Collaborative research & monitoring research for step-change exploration developments

e.g. GSSA micro-dating
MT mapping of metal corridors

## New minerals system data

e.g. IVR regional soil geochem
Spectral imaging
Scout/prospectivity drilling
as a research platform

#### Iteration of old data

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e.g. SARIG drilling dataset & library

# Innovative concepts including challenge of dogma

e.g. Paris-Nankivel epithermalporphyry system - indicates subduction tectonics of Olympic Dam age?

Archaean or Hiltaba nickel in Uno Province.

IOCG targeting vectors within the associated Gawler Range Volcanics.

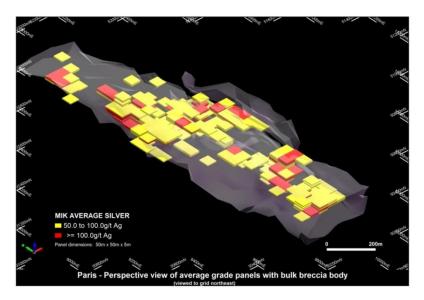
The southern Gawler Craton is a geological & exploration frontier offering the next level of exploration challenges and opportunities. IVR is participating in revitalising discovery opportunities in the region.

# 1. Paris silver deposit – positive attributes for development



Revised Paris silver Inferred Resource (November 2015)

8.8Mt @ 116g/t silver for 33Moz using 50g/t silver cut-off



Oblique perspective view looking grid northeast representing distribution of >50g/t average silver grade blocks Long axis of deposit is about 1.5km; up to 400m width & generally lies between 50m & 120m depth with some mineralisation as shallow as 5m from surface.

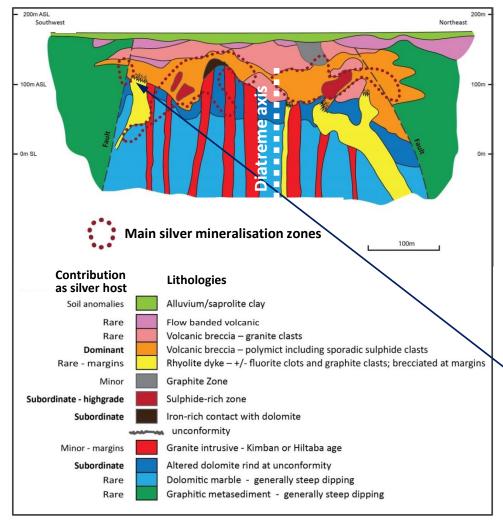
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- 33Moz contained silver
- Good open-pit grade
- Perceived mining advantages:
  - ✓ Shallow; amenable to open-pit
  - ✓ Bulk mining of breccia host
  - ✓ Soft dig in altered host
  - ✓ Early high-grading options
  - ✓ Location
- Good preliminary metallurgy
- Potential for deeper higher-grade (e.g. Imiter-style) deposits near Paris

Investigator's 2016 Priority is converting the Paris resource to Indicated & development studies towards turning Paris into an operating mine.

## Paris silver deposit – a new deposit style for South Australia





Summary geological section through the centre of the Paris silver deposit

A dyke-sill & diatreme complex

Emplaced with explosive peperite textures at unconformity base of volcanics

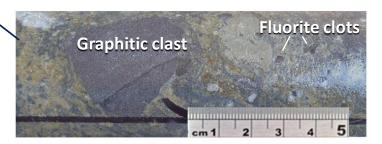
Multiple breccia phases with relict highgrade sulphide-rich cores

Main host is a flat apron of polymict volcanic breccia around a central collapsed diatreme

**Epithermal alteration with intermediatesulphidation attributes** 

Likely same age and geological position as for IOCG deposits in the Olympic Dam belt

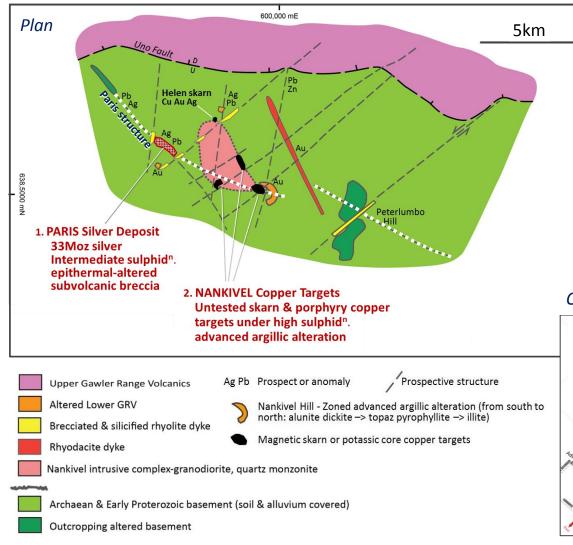
Potential for other diatreme and faultrelated (e.g. Imiter-style) silver targets in the area.



Drill core PPDH001 -peperite breccia

## 2. Paris-Nankivel mineral system – strong evidence for skarn & porphyry copper-gold targets of likely Olympic Dam age





#### Advancing porphyry setting

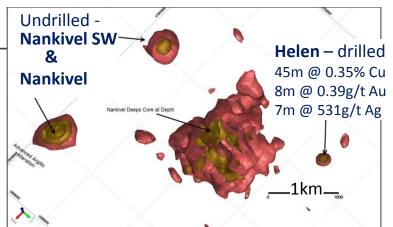
1991-1996: High-sulphidation epithermal altered breccia recognised at Nankivel Hill 2011 – 2013: Paris discovery & identification as IS epithermal 2014: Cu Au Ag skarn verified at Helen on minor structure

2015: PACE scout drilling confirms porphyry-prospective intrusive complex

2016: Access gained to larger & betterplaced Nankivel magnetic targets

PACE applications for drilling of priority Nankivel targets in 2H 2016

Oblique view to SW of modelled magnetic targets



# Nankivel copper gold target – upgraded as potential porphyry by geological evidence from limited outcrop & past shallow drilling



#### **Outcrop** geology

Nankivel Hill (south): Silica alunite dickite haematite altered volcanic breccia



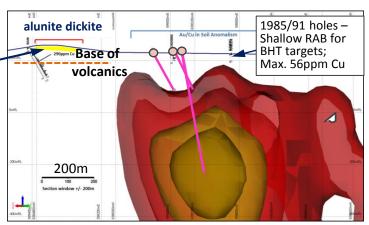
Nankivel Hill (north): Epithermal sulphide vein in pyrophyllite zone

Maxima - 1.38g/t Au 94g/t Ag 1.5% Pb 1% As 303ppm Cu



#### Nankivel magnetic target -Copper skarn or

Copper potassic porphyry core

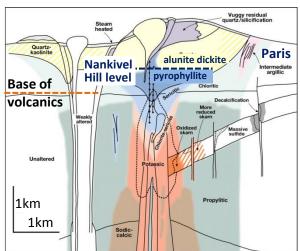


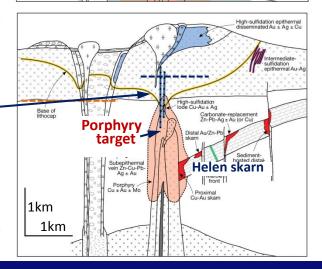
# Proposed drill tests 1996 hole - Highly altered (including fluorite) volcanics Pb Zn anomalous; 520ppm Cu near bottom of hole

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#### Standard porphyry model

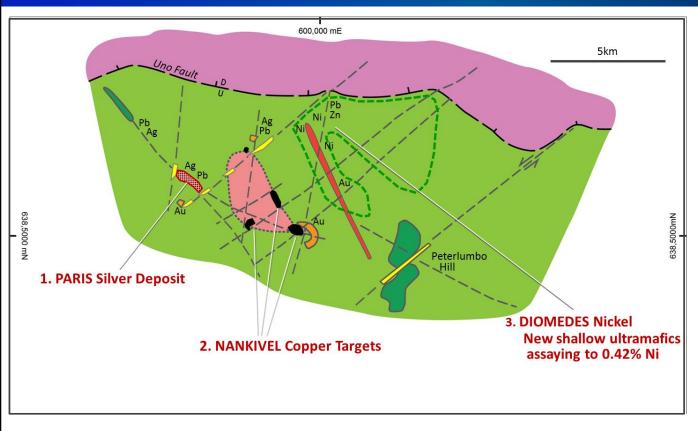
(sections from Sillitoe Economic Geology 2010)

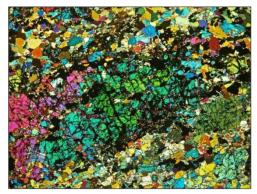




# 3. Diomedes nickel ultramafics – limited shallow scout drilling intersected widespread nickel & chrome anomalous ultramafics

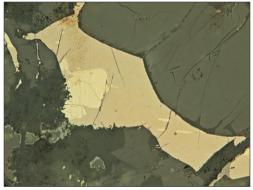






1 mm

Fresh olivine ultramafic (above) & sulphides (below) at 54m depth including probable nickel sulphide pentlandite



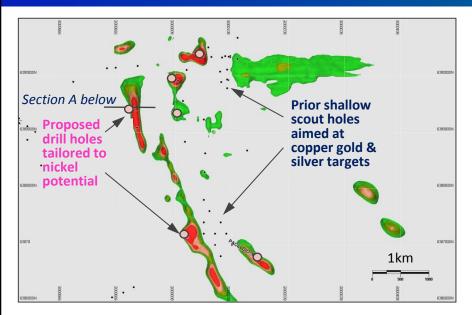
0.05 mm

Enclave of metamorphosed ultramafics in basement delineated by anomalous nickel soil geochemistry & magnetics

Possibly Archaean age & highly prospective for nickel & gold

# Diomedes – the next step is re-aligned drilling, still quite shallow, to determine nickel prospectivity & further exploration tactics





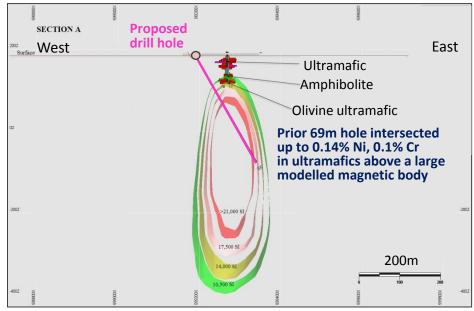
 At least 6 holes proposed for PACE application & drilling in 2H calendar 2016

**Example section A** 

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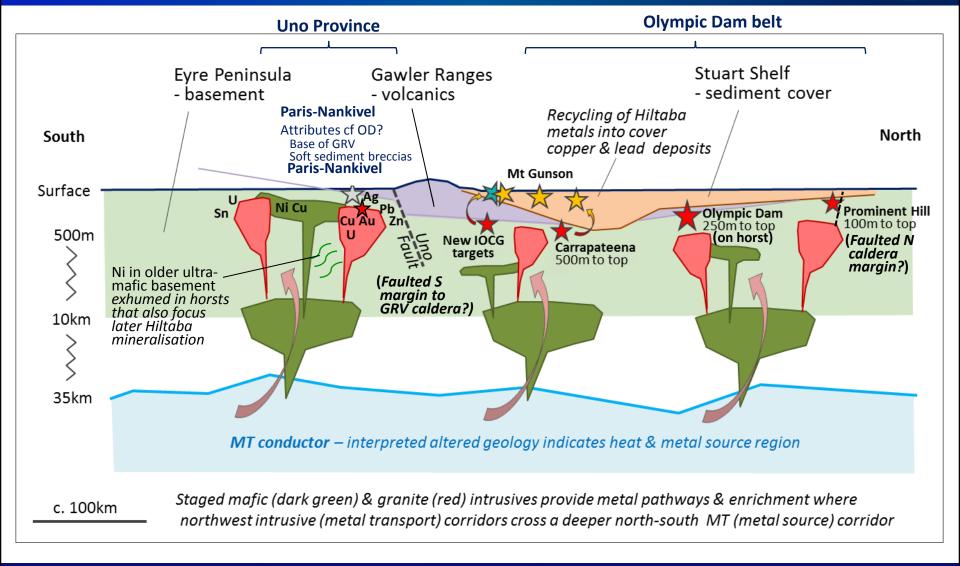
#### Plan of modelled magnetic ultramafics

- Provides first pass targets for assessing ultramafic type & nickel potential
- This will determine follow-up targeting tactics such as EM for the wider prospective area



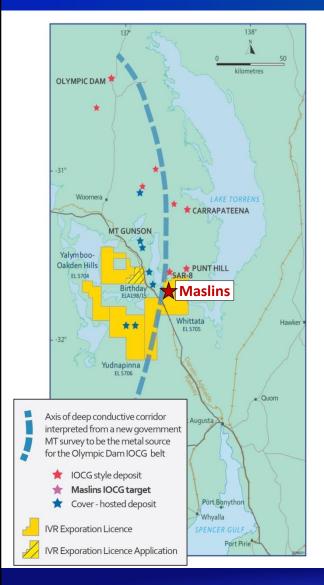
# New concepts provide new targeting opportunities: Regional long section connecting IOCG & Uno provinces

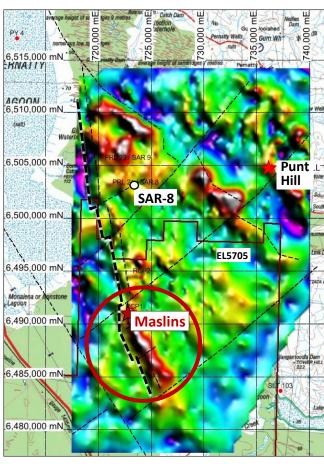




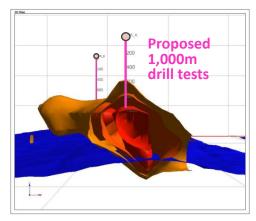
# 4. Maslins IOCG Gravity Target – well located in new corridor







**Gravity plan -** Filtered Bouquer gravity



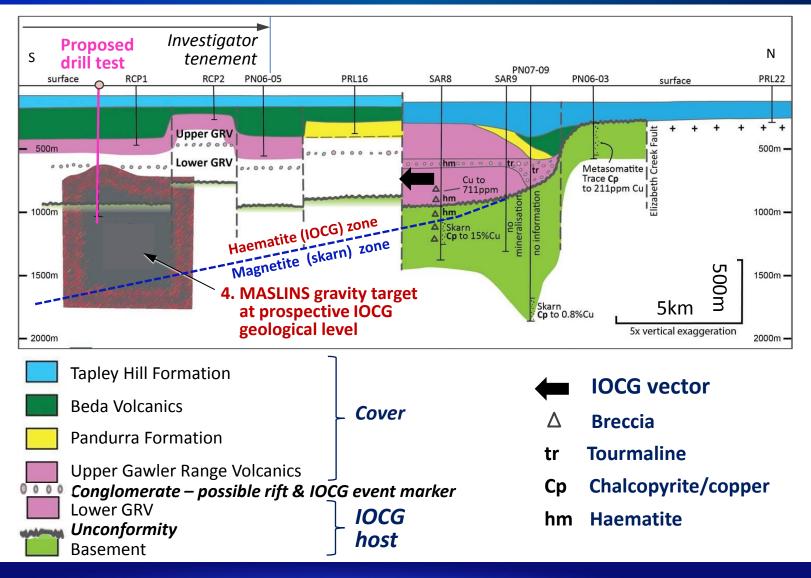
**3-D model of Maslins gravity target** Viewed from the south end.

#### **Maslins IOCG Target**

- Gravity anomaly
- Modelled as 6km long x 1km diameter horizontal body
- 600-700m depth to top
- Good density contrast
- Underlain by magnetic zone (modelled top in blue).
   Possibly a deeper skarn zone as expected under the standard IOCG target model.

# Maslins IOCG Gravity Target – further upgraded by review of past drilling showing favourable geology & IOCG vectors





## Investigator over the next 6 months Striving, not just surviving!

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# Maintaining momentum to grow into the next cycle:

Complete move of corporate office to Adelaide to facilitate the Company's focus on its South Australian opportunities

Progress development studies for Paris to build on the renewed interest in bullion

Seek government PACE funding for step-change, largely drill-ready targets

Aim to recommence drilling of Nankivel copper targets in September with flow on drilling of silver targets near Paris, Diomedes nickel & Maslins IOCG targets.

