



## Peterlumbo Projects

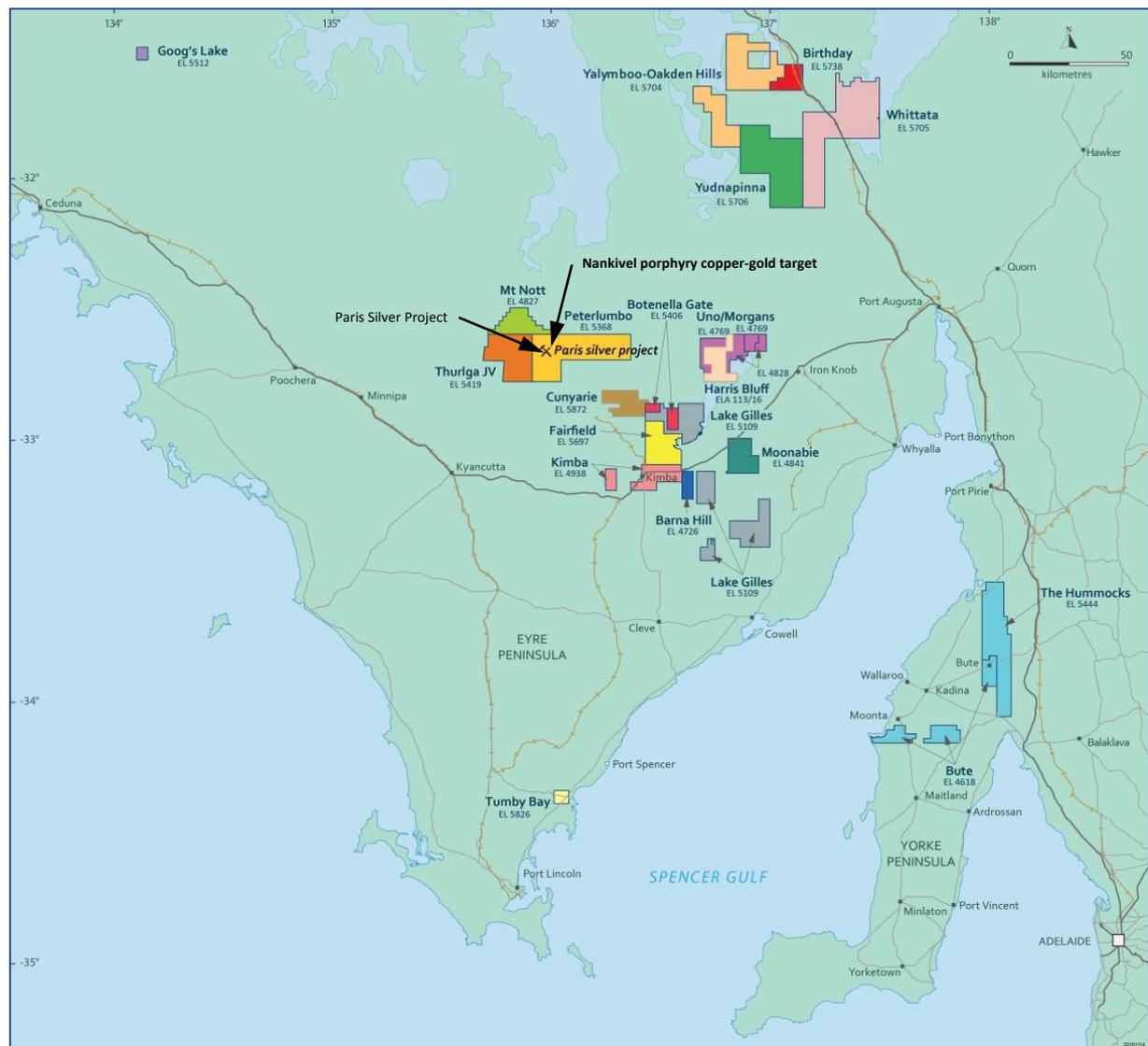
***The Peterlumbo tenement offers multiple opportunities for further silver, copper-gold and nickel discoveries to build on the Paris silver resource. The focus is to accelerate copper-gold exploration at Nankivel at the centre of the Paris silver field following the breakthrough discovery of a large porphyry system with copper-gold potential in September 2016.***

- PPDH147 was the first hole to be drilled by Investigator at the main Nankivel porphyry prospect and is subject to an A\$200,000 co-funding drilling grant by the South Australian Government under their PACE program.
- Building on the Paris resource with collaborative research and exploration of the Paris-Nankivel epithermal-porphyry field towards further silver, gold and copper-gold discoveries.
- Planning of immediate follow-up drilling, along with an Induced Polarisation survey to refine additional new drill targets at Nankivel.
- Review of past drilling identified nickel sulphide potential in widespread basement ultramafics at Diomedes near to Paris.

The Company's 100% held Peterlumbo Tenement (EL5368) (583km<sup>2</sup>) is the main tenement of focus within the Company's tenement portfolio. The tenement is located in the pastoral country of northern Eyre Peninsula district approximately 350kms north-west of Adelaide and 60km north-west of the town of Kimba (see Figure 1). As well as the Paris Silver Project, the other key project is the Nankivel copper-gold Prospect, located 5km south-east of Paris. Other Peterlumbo targets include the Diomedes nickel and Ares silver prospects.

### **Nankivel copper-gold Prospects**

Investigators understanding of the potential for copper-gold skarn and porphyry deposits has advanced dramatically with the breakthrough discovery of a large porphyry system by drill hole PPDH147 in August/September 2016. This was the first hole to be drilled at the new Nankivel prospect with co-funding assistance of up to A\$200,000 under the South Australian Government's Plan for Accelerating Exploration ("PACE") program.



**Figure 1:** Regional map showing Investigator Tenement holdings

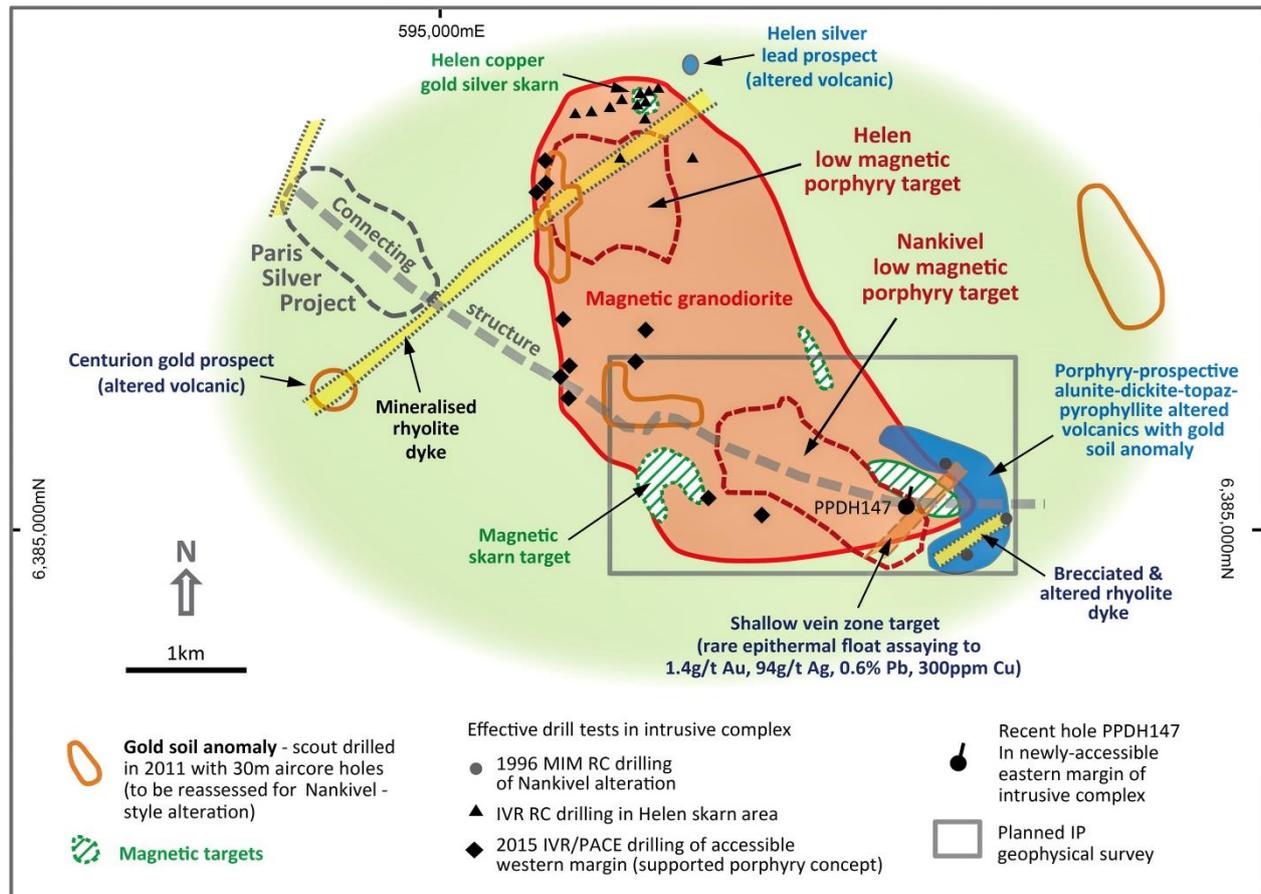
Diamond drill hole PPDH147 intersected a mineralised monzonite porphyry down the entire 600m length of the hole. Sporadic and low-level copper sulphide is visible from 200m downhole depth. The drill result represents the discovery of a new porphyry copper district in Australia and, following the Paris epithermal silver discovery, is the second new deposit style to be uncovered by Investigator Resources in the past five years.

The result prompted an immediate review of Investigator's extensive geological, geophysical and drill data in the new context of the verified porphyry target model. The review identified two new porphyry copper target areas (Figure 2); Nankivel, extending 1.5km west of PPDH147, and Helen, 3km north of Nankivel at the opposite end of the large magnetic granodiorite intrusive, with the target zones delineated by areas of low magnetics.

The full 3km by 2km area of the Nankivel porphyry system will be surveyed in November 2016 with Induced Polarisation, used commonly for porphyry targeting. The results will determine subsequent exploration tactics and further drilling at Nankivel and Helen.

The porphyry discovery by PPDH147 built on drilling by Investigator in 2014 that had already discovered a copper-gold-silver skarn at Helen at the northern end of the intrusive complex. The Helen skarn is now interpreted to be on the margin of the second magnetically-depleted zone of similar size to the Nankivel porphyry copper target. Although drilling suggests the Helen skarn is small, it significantly supports the newly identified and large Helen porphyry target area.

The Nankivel and Helen porphyry targets are also enhanced by interconnection with the Paris silver deposit by mineralising structures and rhyolite dykes (Figure 2).



**Figure 2:** Paris-Nankivel mineral system - Summary target plan.

### Ares silver Prospect

A geophysical review of the 2014 airborne electromagnetic VTEM data was undertaken with particular focus on the Ares prospect, 3km north-west of the Paris Silver Project. The VTEM data was integrated with other target indicators such as spectral data to build a new target with initial similarities to the Paris deposit signature.

In late October 2016, four inclined 'reverse circulation percussion' holes to 170m maximum depth, tested the electromagnetic anomaly on a single line, with the assay results still pending.

### Diomedes nickel Prospects

The Diomedes nickel Prospect is 6km north-east of the Paris Silver Project. Investigator's data collection and research methodology also uncovered exciting new nickel potential for the region. On-going work within the Diomedes Prospect, including petrology, remapping and further review of past Investigator scout drill results, firmed up the potential for shallow nickel sulphide mineralisation. The age of the ultramafics has not been determined, however in 2010, meso-Archaeoan granites were dated 100km to the east.

The 2011 and 2014 scout drilling in the Diomedes area recognised nickel intersections in nine widely spaced holes with initial petrology identifying a metamorphosed ultramafic host in one hole, PPRC274. Additional consultant petrology was undertaken for other nickel anomalous holes and this expanded the extent of confirmed basement ultramafics to another four holes in a 2km by 1km area. Traces of nickel sulphide (pentlandite), was tentatively recognised with iron sulphide (pyrrhotite) and copper sulphide (chalcopyrite), in two holes. Although some secondary nickel enrichment is usually expected at shallow depths, the presence of sulphides at 54m depth is very encouraging for nickel sulphide targets at Diomedes. Intersections in older drilling (with no petrological material currently available) and magnetics indicate the

area of the prospective ultramafic enclave to be at least 4km by 8km and potentially up to 5km by 10km in area.

In the northern half of the enclave, soil geochemistry has delineated about 5km-strike of nickel anomalies in which the majority of the scout drilling has intersected ultramafics and elevated nickel. Shallow scout drilling of around 30m depth in 2011 also intersected nickel, demonstrating the southern half of the enclave is prospective under thin cover.

The presence of pyrrhotite and magnetic associations with the nickel mineralisation in the northern part of the enclave warrant particular investigation of two moderate-intensity magnetic anomalies in the covered southern area.

Drilling of the Diomedes nickel targets will be held over until the priority silver and copper-gold targets are tested.

### **Collaborative Research**

The breakthrough Paris Project discovery, the surrounding minerals system and the Company's interpretation of potential for new target styles in the Uno Province is attracting significant interest from research institutions and government agencies. Investigator is leveraging its Paris Project, data assets and Paris Project camp infrastructure as a research platform for these parties. Considerable collaborative research has commenced, or is proposed with the Geological Survey of South Australia ("GSSA") and University of Adelaide.

Investigator has signed a *Memorandum of Understanding* with the South Australian Department of State Development for the GSSA to undertake and fund collaborative research on the company's Paris Project drill core. Access will also be provided to the Paris Project and the surrounds, and also to Investigator's related datasets to facilitate the research. The primary research techniques that have already commenced and are being funded by GSSA are HyLogger™ scanning of representative drill cores, age dating and biogeochemical trials across the Paris Project deposit. The new information will be publicly available after short confidentiality periods.

The collaborative research is expected to provide valuable information on the nature and target signatures of the breakthrough Paris Project discovery that will assist Investigator and the wider exploration community towards discovering more resource and development opportunities for South Australia.

The information presented here has been previously released to the market and can be found in the 'News and Reports' on the Company's website, [www.investres.com.au](http://www.investres.com.au). Further information about Investigator Resources can also be found at the website.

**About Investigator Resources**

**Investigator Resources Limited** (ASX code: *IVR*) combines original geological concepts, the latest research and its deep exploration experience to make high-value greenfield discoveries for shareholders. The Company is focused on silver-lead, copper-gold and nickel discoveries offered by the resurging minerals frontier of the southern Gawler Craton on South Australia's northern Eyre Peninsula.

The Company has applied a consistent and innovative strategy that has developed multiple ideas and quality targets that has given Investigator first-mover status.

The Paris silver deposit is the first discovery in South Australia of an epithermal deposit style. In the past quarter, the Company found the state's first large porphyry system with copper-gold potential at Nankivel.

In November, 2015, the Company upgraded its estimation for the Paris Silver Project Inferred Mineral Resource to 8.8Mt at 116g/t silver, containing 33Moz silver (at a 50g/t silver cut-off).

**Competent Person Compliance Statement**

The information in this report that relates to Exploration Results is based on information compiled by Mr John Anderson and Mr Jason Murray who are full time employees of the company. Mr John Anderson is member Australasian Institute of Mining and Metallurgy and Mr Murray is member of the Australian Institute of Geoscientists.

The information in this report that relates to Mineral Resource estimation is based on information compiled by Mr Simon Tear, Director and Consulting Geologist - H & S Consulting Pty Ltd. Mr Tear is a member of the Australasian Institute of Mining and Metallurgy and a full time employee of H & S Consulting Pty Ltd, a mining consultancy which has been paid at usual commercial rates for the work which has been completed for Investigator Resources Limited.

Mr Anderson, Mr Murray and Mr Tear have sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as Competent Persons 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, Mr Murray and Mr Tear consent to the inclusion in this report of the matters based on information in the form and context in which it appears.