

# HIGHLIGHTS: Advancing the Paris silver project and nearby copper-gold & nickel targets into the next upturn

#### **Corporate:**

- Consolidation of the Corporate office with Adelaide Operations office to facilitate effective focus on the Paris silver project & associated quality precious and base metal targets in South Australia.
- Good cash position of A\$2.12million after 2015 government rebates received during the quarter.
- Seeking additional government co-funding for four drill programs on breakthrough silver, copper-gold and nickel targets arising from the new geological knowledge of the Paris area.

#### Planning a Project Development Path for the standout Paris silver deposit:

- Building on the robust attributes for the 33Moz Paris silver project of:- good grade (116g/t silver), shallow likely open-pit geometry and positive preliminary metallurgy.
- Discussions with consultants on pathways for:- a) advancing the resource from Inferred to Indicated; b) hydrological studies of groundwater sources; c) further metallurgical studies on leaching or flotation processing; and d) establishing development scenarios.

#### Further step-change discovery opportunities in the southern Gawler Craton:

- Additional and conceptually larger silver deposits in the Paris system.
- Nankivel skarn and porphyry copper-gold targets also located within the Paris system.
- Diomedes nickel sulphide-bearing ultramafics, recently recognised in the shallow basement near Paris.
- Maslins IOCG target near Carrapateena in the revitalised extensions of the Olympic Dam belt.

### **OVERVIEW AND OUTLOOK SUMMARY**

Investigator actively advanced its assets during a period of subdued market interest by:- a) consolidating its corporate and operational offices in Adelaide to facilitate the Company's focus in South Australia; b) progressing the understanding of development avenues for its cornerstone 33Moz Paris silver project; and c) undertaking office studies of the Company's extensive datasets supplemented by follow-up field work to upgrade its four key exploration opportunities for copper-gold, nickel and further silver arising from major geological re-interpretations of the southern Gawler Craton (Figure 1):

- 1. The 33Moz Paris silver deposit & surrounding silver exploration potential.
- 2. Nankivel skarn and porphyry copper gold targets of near Olympic Dam age.
- 3. Diomedes nickel sulphide-bearing ultramafics of possible Archaean age.
- 4. Maslins IOCG (iron-oxide copper gold) target at the south end of the Olympic Dam belt.

Investigator considers the **Paris silver deposit**, with strong grade for a potential open-pit operation, is one of the best undeveloped silver projects in Australia. Development scenarios are being investigated with resource, metallurgical and processing consultants. Investigator aims to move the Paris resource from Inferred to Indicated classification as soon as possible. The extent of new drilling required to achieve this may be modest. Water supply is another key factor with prior drilling intersecting substantial palaeochannel aquifers nominated for more investigation. Processing options have been identified for further metallurgical investigations. As an alternative for leaching to produce silver doré, production of a silver-lead concentrate by flotation will also be considered in view of the project's proximity to the upgraded Port Pirie silver-lead smelter.

Significant new potential at the **Nankivel copper-gold prospect** about 5km east of Paris is recognised as a major breakthrough for South Australian geology and discovery opportunities. Research, remapping and integration of Investigator's extensive datasets firmed the Company's view that the Paris silver-lead and the prior Helen copper-gold-silver intersections are leads into a central Nankivel copper-gold skarn/porphyry system. During the quarter remapping and magnetic remodelling refined three high-priority magnetic targets at Nankivel. Drill access for the new Nankivel copper-gold targets was also finalised during the quarter.

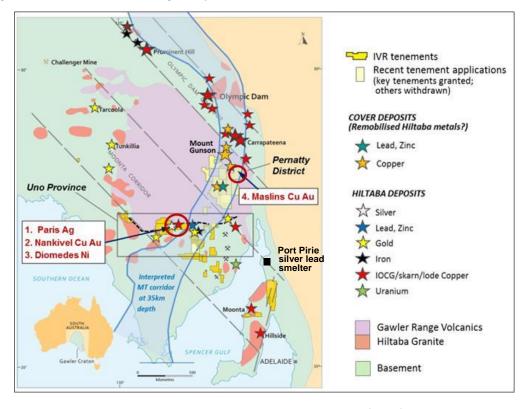


Figure 1: Gawler Craton summary plan with locations of the four key projects

## **OVERVIEW AND OUTLOOK SUMMARY**

Remapping and magnetic remodelling also refined the **Diomedes nickel targets** about 7km north-east from Paris. Prior scout drilling of copper and gold geochemical targets intersected extensive nickel-bearing ultramafics with up to 0.42% nickel and hosting fresh sulphides at shallow depths around 50m. A 2015 review of prior magnetics and nickel soil geochemistry delineated a 5km by 5km area of a possible ultramafic basement enclave of which drilling to date has only tested a small portion at shallow depths. Six holes are proposed to test a variety of magnetic profiles under the prior shallow intersections and are also subject to an application for PACE co-funding. Characterisation of the nickel prospectivity of the fresh ultramafic and nickel sulphide distributions will be the key inputs sought. Electromagnetic geophysics will then be considered over the wider target area.

The Maslins IOCG target is a strong undrilled gravity anomaly with the dense source modelled as a horizontal cylindrical body with dimensions of about 6km length and 1km diameter. The top of the target is generally modelled at 700m depth with the shallowest part at 600m depth below surface. The area was pegged and the target selected as having a revitalised priority along the southern extension of the Olympic Dam belt. This extension was highlighted by a recent national magneto-telluric survey undertaken by State and Federal government agencies. The Maslins target was upgraded by Investigator during the quarter by the grant of the tenement application, modelling of the gravity target and re-interpretation of past surrounding drilling. The latter showed the target is likely to be at the same geological level as the local IOCG deposits with positive lateral vectors including recent state-of-the-art hyperspectral research by the South Australian Geological Survey.

Expenditure for the March Quarter comprised A\$0.42million spent on exploration and A\$0.24million spent on corporate and administration costs. The Company held A\$2.12million in cash at the end of the March 2016 Quarter.

During November to April, in a period of reduced field activity, the Paris camp became self-funded through lease to the large contingent of government and CRC-Deep Exploration Technologies researchers working nearby on their Minerals Systems Drilling Project.

The Company received A\$952,137 as a tax concession for the 2014/15 year under the Federal Government's Research and Development ("R&D") Tax Incentive program. Another A\$100,000 was received during the quarter as drill cofunding by the State Government for the 2015 PACE scheme. These rebates recognise Investigator's on-going experimental work and expenditure on advancing the Industry's understanding of the geology and mineral systems in the southern Gawler Craton of South Australia.

Investigator proposes to make applications for government drill co-funding for silver targets near Paris, the Nankivel copper-gold targets, Diomedes nickel targets and Maslins IOCG/copper-gold targets under the upcoming 2016 PACE scheme. A total of 9,000m of aircore, RC and diamond drilling is planned for these targets in 2016/17. Drilling will commence in September 2016 after the successful PACE applicants are announced in June.

Investigator Resources Managing Director John Anderson said "Investigator is well positioned to launch into the next upturn with the established Paris resource that has claim to being one of the best undeveloped silver deposits in Australia, along with our breakthrough discovery opportunities for greenfields copper-gold and nickel also in South Australia.

Signs of an upturn may be here with Investigator's share price improving significantly since early February in parallel with other companies offering advanced bullion projects.

Although sufficiently funded to maintain the initial start-up of these exciting projects, Investigator is endeavouring to source other funds to undertake the level of drilling warranted by our opportunities. We welcome the incentive to apply for drill co-funding under the State Government's PACE scheme. Joint ventures remain real options to further increase drill exposure to Investigator's innovative ideas." Mr Anderson added.

#### Paris Silver Project:

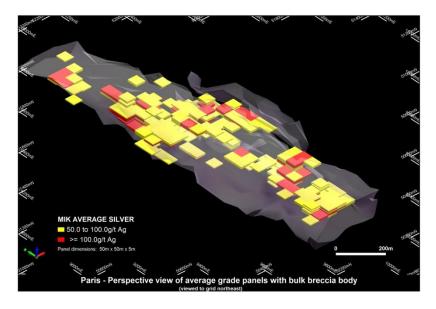
**Peterlumbo Tenement** (EL5368) (IVR 100%) [Refer to Figures 1 to 6 and 10]:

Following the release of the upgraded Paris Silver Inferred Resource to 8.8Mt @ 116g/t silver containing 33Moz silver (at a 50g/t silver cut-off) (Investigator ASX Release: 9 November 2015), the main focus in the March Quarter has been looking at potential development scenarios to progress Paris into an operating mine. The deposit has positive attributes of grade (116g/t silver), open-pit mining, metallurgy and location, plus surrounding potential for additional silver deposits.

The Paris silver mineralisation is largely hosted within a flat elongate clay-altered breccia body that extends over nearly 1.5km in length (Figure 2). The mineralisation is generally situated between 50m to 120m depth with some parts reaching within 5m of the surface. Investigator considers the dominant soft host rock and shallow depth of the Paris deposit offers attributes for an open-pit mining operation.

The Company's first objective is to advance the Paris Silver Project to an Indicated Mineral Resource. The drilling and requirements to do this are being scoped. A modest drill program in a select area may quickly advance the confidence in the grade continuity for the wider deposit. In parallel, the Company is looking at various development options and scenarios.

Mining options including higher-grade starter pits are being considered with resource consultants. A likely water source was earlier identified in large palaeochannel aquifers near Paris. These were delineated through collaborative airborne electromagnetic surveying by CSIRO and prior Company drilling. Hydrological studies of the palaeochannels will be an important aspect of progressing the Paris project.



Preliminary discussions are underway with metallurgical and processing consultants to scope the processing pathways and further metallurgical work in follow up to the prior favourable metallurgical tests. This includes the possibility of producing a silver-lead concentrate utilising flotation processing methodology, as opposed to a leach extraction method to produce silver doré bars. Producing a Paris concentrate may open up synergies with the upgraded Port Pirie lead-silver smelter.

# **Figure 2: Paris Silver Project**Perspective view of MIK average grade block model panels (50m x 50m x 5m) above 25mRL with wire framed bulk breccia body (grey shade) looking grid north-east.

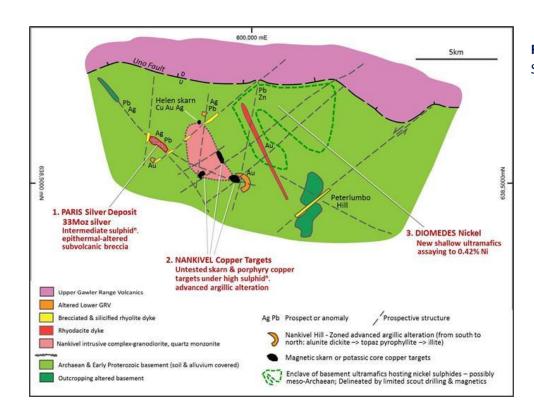
#### Nankivel Copper-Gold Targets:

Peterlumbo Tenement (EL5368) (IVR 100%):

The Paris discovery firmed up the concept of the Paris-Nankivel mineral system centred on the Nankivel granodiorite complex (Figure 3).

The system's architecture has been modelled after Investigator's mapping significantly revised the published government geology, and by using detailed Hymapper, magnetics, gravity and soil surveys. Key mineralising structures and dykes plus metal zoning provide vectors to deposits and multiple targets.

The Paris-Nankivel system not only has potential for further epithermal (e.g. Imiter-style) silver deposits, but also for skarn and porphyry copper. The skarn copper-gold potential was previously demonstrated by the small but significant Helen copper-gold-silver discovery (intersections:- 46m @ 0.35% copper, 7m @ 531g/t silver, 8m @ 0.39g/t gold).

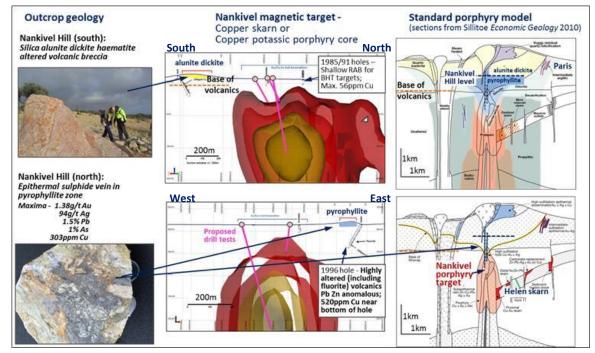


**Figure 3: Paris-Nankivel mineral system** Summary target plan

Work during the quarter focussed on untested and high-priority skarn and porphyry targets situated in a newly-accessible part of the Nankivel complex. The porphyry setting to these targets is supported by outcropping advanced argillic alteration of high-sulphidation epithermal character including alunite, pyrophyllite and topaz around Nankivel Hill. Quarterly activities included re-mapping and an extensive review of past drilling and data in the context of the new porphyry model. The revised target model for the main Nankivel target is shown in Figure 4.

Final approval for drill access to these new targets was received in January 2016 following field surveys in October 2015.

The Company has submitted an application for South Australian State Government co-funding to drill the copper-gold targets under the 2016 PACE scheme.



**Figure 4: Sections of the modelled Nankivel magnetic target** – showing outcrop and historic drill evidence for a porphyry association

#### **Diomedes Nickel Targets:**

#### Peterlumbo Tenement (EL5368) (IVR 100%):

Investigator's silver-copper exploration also uncovered exciting new nickel potential for the region. Scout drilling intersected metamorphosed ultramafic rocks with disseminated pyrrhotite, chalcopyrite and likely pentlandite in the basement at Diomedes about 7km north-east from Paris (Figure 3). The age of the ultramafics has not been determined, however in 2010 meso-Archaean granites were dated 100km to the east.

Nickel-anomalous soils and magnetics are interpreted to map a 5km by 5km enclave of the prospective ultramafics. Limited scout drilling on the western side of the target area intersected anomalous chromium and nickel up to 0.42% nickel with little evidence of secondary enrichment. Modelling indicates the shallow drilling just reached the top of large vertical magnetic bodies interpreted to be the extensions of the prospective ultramafics.

The focus of work during the March Quarter has been further review and analysis of magnetic anomalies associated with the nickel targets. Further drilling re-aligned to the nickel targets is highly warranted and applications will be made for co-funding of scout drilling under the 2016 PACE Scheme to investigate the magnetic bodies (Figures 5 and 6) with tops as shallow as 30m depth from surface. The drilling will investigate the character and prospectivity of the ultramafics plus the extent of nickel sulphides.

The Diomedes area is largely cleared for drilling by prior heritage surveying.

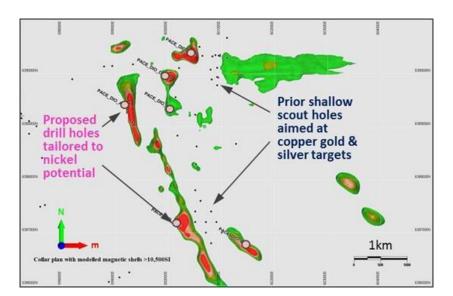
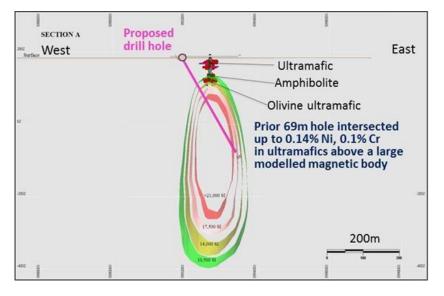


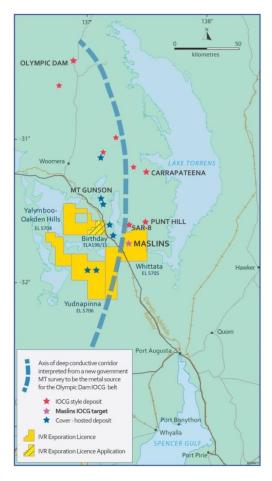
Figure 5: Diomedes Plan of modelled magnetic ultramafics, past scout drilling and planned deeper drillholes under prior ultramafic and nickel intersections

Figure 6: Diomedes Example Section showing prior shallow drilling with nickel anomalous ultramafics and proposed drill test of deeper modelled magnetic body likely to be fresh ultramafic



#### **Maslins IOCG Target**

Whittata (EL5705) [Refer to Figures 1, 7, 8 and 10]:



**Figure 7:** Plan showing the location of the Maslins IOCG target in relation to mineral deposits, the new MT corridor & IVR tenements

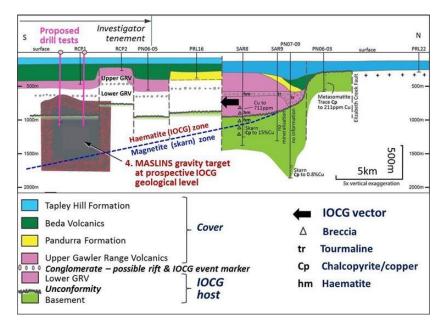
The top of the modelled body is at the preferred position between the marker and the base of the GRV extrapolated from the shallow overlying drillholes and deeper drilling to the north. The base of the Maslins gravity target is also favourably positioned at the top of a modelled deeper magnetic body as predicted by the standard IOCG deposit model.

The Company is finalising documentation to submit an application for government cofunding under the 2016 PACE scheme for two proposed 1,000m holes at the Maslins Target.

Negotiations will be required with the Native Title group to arrange agreements and a heritage survey for drill access. Maslins is a high-priority IOCG gravity target in an under-explored and revitalised extension to the Olympic Dam IOCG belt. During the March Quarter four tenement applications were granted in the Pernatty district to Investigator that included the Maslins target and other ground along the newly-recognised magneto-telluric ("MT") corridor extending southwards from the Carrapateena area (Figures 1 & 7).

Modelling of the geophysical data by a consultant and review of the surrounding historic drill holes upgraded the undrilled Maslins target. The results show that the IOCG target is a strong gravity anomaly modelled as a horizontal cylindrical body of about 0.5g/cc density contrast, 6km in length and 1km diameter. The top of the target is generally modelled at 700m depth with the shallowest part at 600m depth below surface (Figure 8) (Investigator ASX Release: 15 February 2016).

The Maslins gravity target has several attributes that strongly support its IOCG copper potential:- size and density; shape and structural position along the margin of an interpreted horst block; favourable geological position beneath the Gawler Range Volcanics ("GRV") at a newly-recognised mid-GRV conglomerate that may mark the geological time and level of IOCG mineralisation; and the right basement rocks, brecciation and mineralising processes demonstrated by lateral vectors showing increasing IOCG characteristics in prior drilling towards the Maslins target.



**Figure 8: Pernatty IOCG mineral system** - long section showing the geophysical & geological support for the Maslins IOCG target

#### **Regional Eyre Peninsula Projects**

**Thurlga Joint Venture** (Gawler Resources Limited, earning to 75% and Manager, Peninsula Resources/Adelaide Resources) Thurlga (EL5419) [Refer to Figures 9 and 10]:

In the Quarter, data interpretation has focussed on the geochemical targets at Wide, Starburst, Swinger and Yorker Prospects (Figure 9).

Consideration is being given for government drill co-funding of these prospects, under the 2016 PACE scheme, as part of a possible 2016/2017 Thurlga JV scout drilling program to seek truckable additions for the Paris silver project about 15km to the east.

The proposal will include testing the Uno Fault and adjacent Jaffa soil anomalies for large fault-hosted and replacement-style silver and coppergold deposits.

Prospective for SUNSET IRONSTONE STARBURST ORTH JELLYFISH STARBURST Outcrop LONGHOP WIDE YORKER Tin Hut Well lver, Zinc, Lead SWINGER FULL TOSS BEAMER Mineralising Dyke & Structure Altered Magnetic Pattern Fault Thurlga JV Tenure Hutchison Carbonate / Graphitic Sedimen IVR Tenure Older Archaean

Figure 9: Thurlga JV - Target Plan

#### Fairfield (EL5697) (IVR 100%) [Refer to Figure 10]:

During the March Quarter the Fairfield tenement was granted. The application was made for the nickel opportunity in possible Hiltaba mafic intrusives now being recognised across the Uno Province. The area is covered with little response in Investigator's prior soil geochemistry; however the magnetic and gravity patterns indicating possible inter-intruded granites and mafic bodies, along with the coincidence with the new MT corridor, prompted the application for this tenement. Initial reviews of existing gravity and magnetic data indicate the Fairfield gravity anomaly could also be a Hiltaba age intrusion with IOCG related mineralisation.

Further analysis will be undertaken to progress the possible exploration opportunities.

#### **Uno/Morgans** (EL4769 & 4828) (IVR 100%) [Refer to Figure 10]:

Though limited work has been undertaken during the March Quarter, nickel and lithium potentials of the district around the Uno/Morgans area are being assessed as further significant developments for the Uno Province that may quickly add value.

#### **Corporate**

Effective of mid-April 2016, Investigator closed the Brisbane Corporate Office and relocated to Adelaide, consolidating all Corporate and Exploration activities in one location. The move is one of the measures undertaken to reduce costs by the Company along with enabling better focus on the Company's South Australian opportunities.

As a result of the Corporate relocation, Peter Harding-Smith resigned as the Company's Chief Financial Officer and Company Secretary. The Board and Management thank Peter for his contribution to the Company and wish him well in the future. The Board is pleased to announce that Angelo Gaudio has been appointed the Chief Financial Officer and Company Secretary, based in Adelaide. Angelo is an experienced CFO and Company Secretary with significant experience in senior financial positions within the resource sector.

#### **TENEMENT QUARTERLY STATUS**

Table 1 summarises the changes to Investigator Resources Limited tenement holding during the March 2015 Quarter. Figure 10 shows the location of the Investigator tenements.

Table 1: Summary of Investigator Resources Limited tenement changes during the March 2015 Quarter.

Tenement Number	Tenement Name	Registered Holder	Note
Project: East Eyre Peninsula (IVR 100%)			
5109	Lake Gilles	GRL	Current
4841	Moonabie	GRL	Current, renewal pending Ministerial approval
4860	Moseley Nobs	GRL	Current
5406	Botenella Gate	GRL	Current
4726	Barna Hill	GRL	Current
4827	Mt Nott	GRL	Current
4938	Kimba	IVR	Current
5697	Fairfield	IVR	Current
Project: Peterlumbo (IVR 100%)			
5368	Peterlumbo	Sunthe	Current
Project: Uno/Morgans (IVR 100%)			
4769	Uno Range	GRL	Current
4828	Morgans	GRL	Current
Project: West Eyre Peninsula (IVR 100%)			
5388	Mt Centre	IVR	Surrendered, pending Ministerial approval
5389	Scrubby Peak	IVR	Surrendered, pending Ministerial approval
5512	Googs Lake	IVR	Current
Project: Northern Yorke Peninsula (IVR 100%)			
5444	The Hummocks	GOY	Current
5713	Bute	GOY	Current
Project: Thurgla JV (PRL; GRL earning to 75%)			
5419	Thurlga	PRL, GRL earning to 75%	Current
Project: Maslins (previously Central Gawler) (IVR 100%)			
5704	Yalymboo-Oakden Hills	GRL	Current
5705	Whittata	GRL	Current
5706	Yudnapinna	GRL	Current
5738	Birthday	GRL	Current
Notes:			

#### Notes:

IVR - Investigator Resources Ltd.

Sunthe - Sunthe Uranium Pty Ltd, a wholly owned subsidiary of Investigator Resources Ltd.

GRL - Gawler Resources Pty Ltd, a wholly owned subsidiary of Investigator Resources Ltd.

GOY - Goyder Resources Pty Ltd, a wholly owned subsidiary of Investigator Resources Ltd.

PRL - Peninsula Resources Ltd, a wholly owned subsidiary of Adelaide Resources Ltd.

During the Quarter; EL5704 (Yalymboo-Oakden Hills), EL5705 (Whittata), EL5706 (Yudnapinna), EL5738 (Birthday) and EL5697 (Fairfield) were granted, and EL5368 (Peterlumbo) and EL5713 (Bute) have been renewed. The renewal of EL4841 (Moonabie) is pending Ministerial approval. In addition, the following tenements have been renewed with associated tenement area reductions; EL4827 (Mt Nott) 61km² and EL4828 (Morgans) 138km². EL5388 (Mt Centre) and EL 5389 (Scrubby Peak) have been surrendered, but pending Ministerial Approval. All tenements, 100% held by IVR.

There were no other changes to the beneficial percentage interests in farm-in or farm-out agreements held or relinquished during the Quarter.

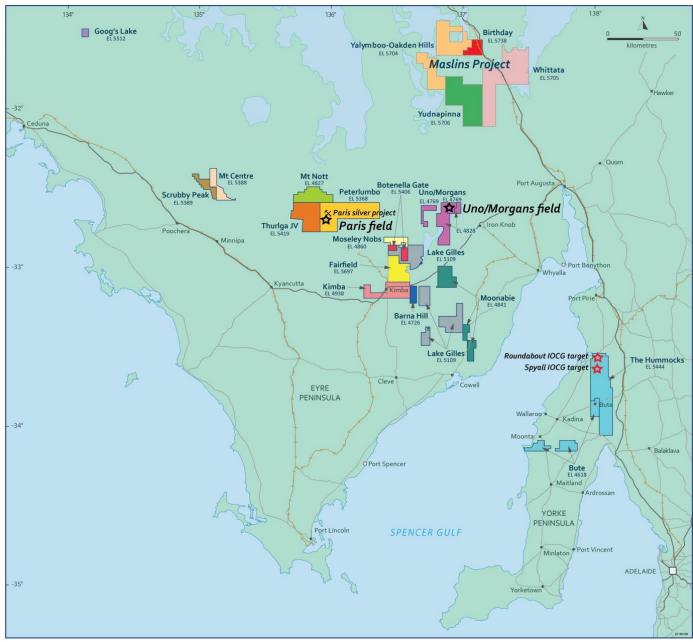


Figure 10: Investigator tenement plan

#### **CORPORATE FOCUS**

- Advance the Paris Silver Project to an Indicated Mineral Resource & seek development pathways.
- Seek additional larger silver and coppergold resources within the wider Paris field and broad Uno Province, with the potential and know-how demonstrated by the Paris discovery.
- Become a silver, lead, gold and copper developer through exploration and acquisition.

#### **KEY PROJECTS**

#### **Southern Gawler Craton:**

- 1. Paris silver project and other surrounding silver targets.
- 2. Copper-gold targets in the Paris-Nankivel field.
- 3. Diomedes ultramafic nickel targets & other nickel opportunities in the Uno Province.
- 4. Maslins IOCG target in revitalised extensions of the Olympic Dam belt.



#### **ABOUT INVESTIGATOR RESOURCES**

Investigator Resources Limited (ASX code: IVR) is a metals explorer with a focus on the opportunities for greenfields silver-lead, copper-gold and nickel discoveries offered by the resurging minerals frontier of the southern Gawler Craton of South Australia.

In November 2015, the Company announced a revised upward estimation for the Paris Silver Project Inferred Mineral Resource for its 2011 Paris silver discovery to 8.8Mt at 116g/t silver, containing 33Moz silver (at a 50g/t silver cutoff).

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

These include the Paris silver discovery, the recognition of other epithermal fields and the associated conceptual potential for porphyry copper of Olympic Dam age, along with the possibility of Archaean nickel in the underlying basement.

#### **CORPORATE**

The quarterly direct exploration expenditure was A\$0.42million, and associated corporate and administration costs were A\$0.24million. The Company held A\$2.12million in cash at the end of the report quarter.

#### CAPITAL STRUCTURE

As at 29 March 2016:

- Shares on issue 462,287,960
- Listed Options 114,179,704
- Unlisted Options 19,860,000

The top 20 shareholders at 29 March 2016 held 35.99% of the shares on issue.

Total shareholders: 3,270.

#### SUBSTANTIAL SHAREHOLDERS

As at 29 March 2016:

• CITIC Australia Pty Ltd - 14.51%.

**ASX listing code: IVR** 

#### **DIRECTORS AND MANAGEMENT**

Mr Roger Marshall OBE (Non Exec. Chairman) Mr David Jones (Non Exec. Director) Mr Bruce Foy (Non Exec. Director)

Mr John Anderson (Managing Director) Mr Angelo Gaudio (CFO and Company Secretary)

#### **COMPETENT PERSON COMPLIANCE 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 www.investres.com.au. 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.

#### FOR FURTHER INFORMATION:

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